Department of Education (School Infrastructure) NSW
Liverpool Boys and Girls High School
Site Contamination Assessment

7 November 2019

To find the
smartest
solutions
sometimes
you need
to dig
deeper

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Liverpool Boys and Girls High School – Site Contamination Assessment

Prepared for
Department of Education (School Infrastructure) NSW

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Site Contamination Assessment

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Executive Summary

Coffey Service Australia Pty Ltd (Coffey) was commissioned by the NSW Department of Education (DOE) School Infrastructure to carry out a Site Contamination Assessment for the Liverpool Boys and Girls High School site located in Liverpool, NSW. The site redevelopment is part of a wider Liverpool Education Precinct Development initiated by NSW DOE and an assessment was required to assess the potential site contamination risks to the project.

Coffey undertook a desktop study which comprised a range of regulatory record reviews, historical maps, historical aerial photograph review and a site walkover. The resulting desktop study identified that historical land use was largely limited to the presence of up to 3 homesteads prior to the construction of the school around the early 1950's. Contaminants of potential concern (COPC) and areas requiring investigation identified included areas of fill material, impacts from historical use of pesticides or herbicides and potential asbestos or lead contamination is soil resulting from poor demolition practices/weathering of building materials.

Following the desktop study, Coffey carried out an intrusive site investigation involving the drilling of 10 boreholes, 3 hand augered boreholes , excavation of 11 test pits, and 5 surface grab samples. Sampling locations were largely selected on a grid like pattern but also targeted areas on potential concern. Selected samples collected were submitted to the laboratory for the analysis of identified COPC.

Analytical results of the soil sampling were assessed against relevant criteria within the NEPM (2013) with the following key points noted:

- All samples results reported concentrations of BTEX, TRH, SVOCs, PAHs, PCBs, OCPs and OPPs below the laboratory LOR.
- Detectable concentrations of heavy metals were reported at most locations, however all were below respective assessment criteria, except for:
  - Copper (A08570) and zinc (A08509) which exceeded the ecological investigation levels for urban residential and public open space for aged soils.
  - Arsenic (TP07_0.1-0.2) which exceeded the HIL for residential soils.
- Asbestos was reported at sample location A08570 (beneath Block A floor within the Boys School), although it was below the detection limit of 0.01 %w/w. The material was described by the laboratory as brown coarse-grained soil, rocks concrete cement like material and glass fragments with weathered fibre cement fragments.

Based on these results, Coffey concluded the following:

- No odours, ACM or staining were observed within the soil or on the ground surface during the site investigation. The ACM reported in sample A08570 would be described as friable asbestos in accordance with the NEPM guidelines, and presents a potential health risk, if disturbed. For current students, the risks of exposure is considered to be reduced, given access to the sub-floor is restricted via a locked doorway. Maintenance workers with access to the sub-floor area could be exposed to asbestos, if soils were disturbed.
- A localised hotspot of arsenic is present in shallow soil located on the school oval. The preferred development concept shows this area would be retained as playing fields. Arsenic in soil has the potential to pose health risks via the soil ingestion/inhalation and dermal contact exposure pathways. The extent of arsenic in soil warrants further investigation and assessment.

Exceedances of the EIL for copper and zinc were obtained within surface soils beneath the existing buildings. It is likely the metal concentrations reported are a result of residual metals wastes from building maintenance/construction. Corroded metal was reported to be within the location where a zinc exceedance. At present these exceedances are not be expected to present an ongoing risk to ecology due to the location within the sub floor void beneath the buildings. The current development concept does not describe the proposed use of this area of the site. However, it is assessed that risks to planting introduced as part of the development could be mitigated through establishing landscaping in clean, imported topsoil.

The following key recommendations were made based on the conclusions made above:

- Further characterisation and systematic sampling to assess the extent of arsenic contamination within surface soils adjacent to sample location TP07. This will determine the level of remediation and/or management required prior to development.
- Further characterisation and systematic sampling of the subfloor soils beneath Block A to be undertaken to further assess the potential risks to site users and contractors from asbestos. This should include sieving of soils to allow for assessment against relevant land-use NEPM criteria.
- Current risks associated with asbestos materials reported beneath Block A in the Boys High School can be managed through access restriction and appropriate signage. It is also recommended the asbestos register for the site(s) be updated following the additional sampling.

Table of contents

Tables in Text

Figures in Text

Appendices

1. Introduction

1.1. General

Coffey Services Australia Pty Ltd (Coffey) was engaged by Schools Infrastructure NSW (SINSW), a division of the NSW Department of Education (DoE), to carry out a site contamination assessment in relation to the proposed redevelopment of Liverpool Boys and Girls High School that is located at Forbes Street, Liverpool, NSW (the 'site').

It is understood that the DoE propose to redevelop the site as part of a wider Liverpool Education Precinct development and that the investigations are required to inform the concept design of these works.

It should be noted that the Liverpool New Primary School is proposed to be constructed on the Girls and Boys High School site. At present this is assumed to be within the north-eastern corner of the site but may change dependent on confirmation of the preferred Master concept design.

The location and boundaries of the school site are shown on the Location Plan in Figure 1 (below).

1.2. Background

Concept masterplans for the development comprising the various layout options were provided to Coffey on the day of intrusive investigations commencing. This does not impact our investigations which were largely based off a desktop review of information, site walkover and objective of understanding site-wide contamination status without an emphasis on future building footprints. It would appear from a review of a short list of development options the majority of development would involve construction of new buildings (multi story) along the northern boundary with most of the existing buildings being removed. This provides more open space throughout the majority of the site.

The development concept masterplans provided by SINSW are provided in Appendix A.

1.3. Objectives

The objective of this report is to characterise the ground contamination conditions to support the design of the proposed redevelopment.

GENERAL AREA MAP

REGIONAL AREA MAP

© ArcGIS Online

0 0.5 1 1.5 2
SCALE 1:50,000 (A3) KILOMETRES

LOCAL AREA MAP

© Nearmap (capture date 05-09-2019)

0 50 100 150 200
SCALE 1:5,000 (A3) METRES

LEGEND

- Major road
- Minor road
- Track
- Railway
- Watercourse
- Indicative location of the proposed new Liverpool Primary School
- Site boundary
- Cadastre

SOURCE:
Site boundary and proposed new Liverpool Primary School boundary from Coffey.
Cadastre, roads, rail and watercourses from NSW LPI.

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Projection: GDA 1994 MGA Zone 56

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scale	AS SHOWN
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client: DEPARTMENT OF EDUCATION: SCHOOL INFRASTRUCTURE NSW

project: SITE CONTAMINATION ASSESSMENT
LIVERPOOL BOYS AND GIRLS HIGH SCHOOL
LIVERPOOL NSW

title: SITE LOCALITY

project no: 754-SYDEN231101-R02 | figure no: FIGURE 1 | rev: A

2. Site Information

2.1. Site description

Liverpool Boys and Girls High School currently contains staff car parking, school buildings, demountable classrooms, a sports oval, multi-purpose court and bitumen-surfaced play areas. It is fronted by Forbes Street to the west, Lachlan Street to the north and Burnside Road to the east.

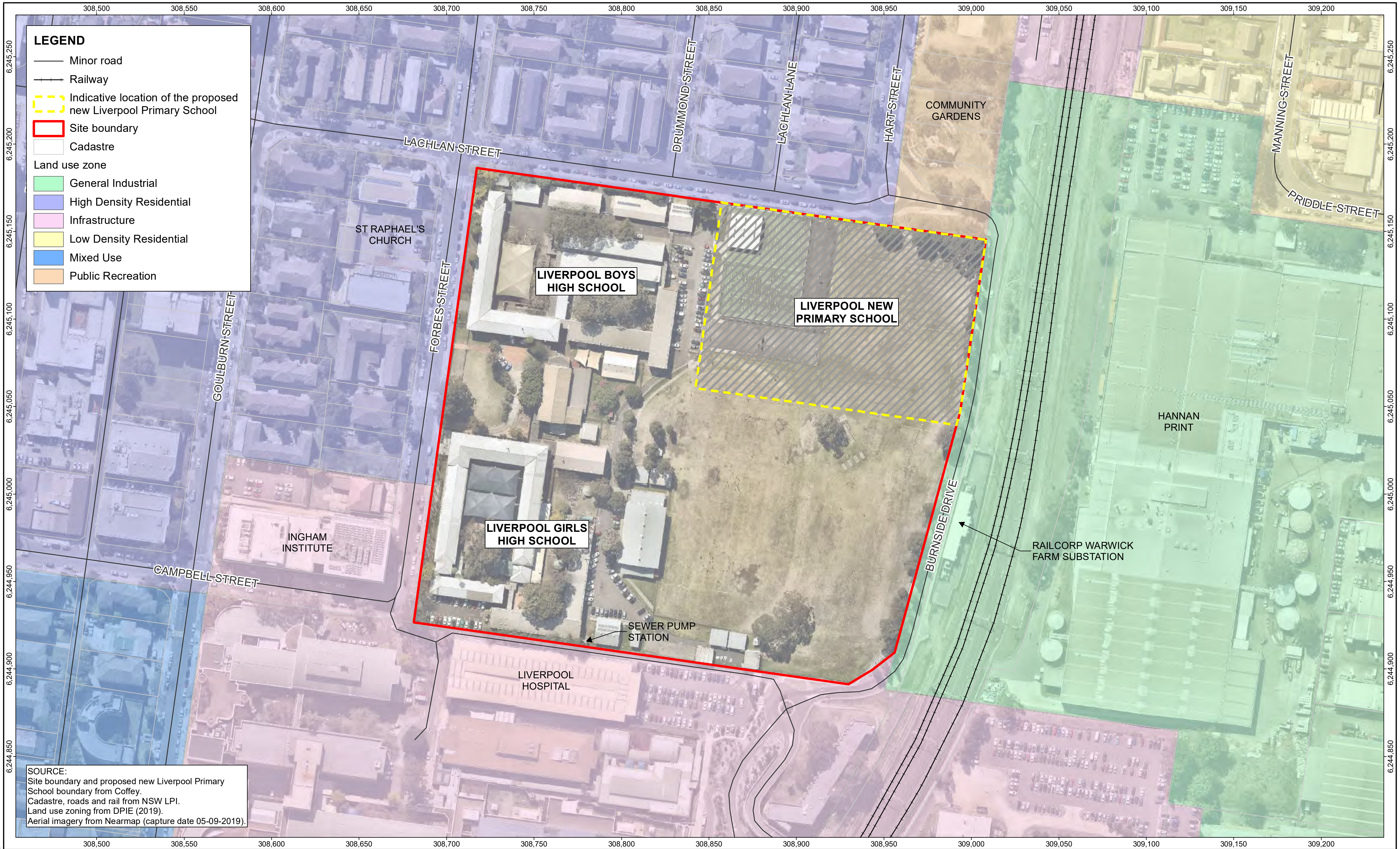
The location of the site, site features and site boundaries are shown in Figure 2 (below). Additional site information is provided in Table A below.

Table A: Site Information

Site Address:	Forbes Street, Liverpool, NSW, 2170
Approx. Total Land Area:	75,000 m^2
Title Identification Details:	Lot 1 DP1137425
Current Land Use:	High School
Historical Land Use:	Historical records indicate the grounds have been used as a school since 1953.
Adjoining Site Use:	North and west: High-density residential housing. South: Liverpool hospital and commercial land use further to the south. East: Railway with commercial properties further to the west.
Site Coordinates:	The approximate UTM Zone 56 H grid coordinates for the centre of the site are: 308894.34 m E, 6245034.73 m S

A site walkover was carried out by a Coffey environmental engineer on 2 October 2019 with the following observations made summarised below:

- The site was noted to be relatively flat with a slight incline in the north western corner of the site.
- Multiple buildings were observed at the site and appeared to vary in age of construction with the majority of the buildings comprising two-storeys.
- A heritage listed building was noted to be within the Girls High School.
- Some buildings were noted to be constructed using cut and fill techniques within the Boys High School where the elevation increased slightly towards the norther western corner of the school.
- The eastern portion of the school comprised open space and recreational sports fields and was level.
- Suspected asbestos-containing materials (ACM) were identified in exterior portions of building fabric (building awnings and eaves) of several buildings but appeared to be in good condition.
- Multiple bitumen surfaced play areas were present between each of the buildings.
- The site was characterised by different types of ground surfaces including concrete, bitumen, grass and bare earth.
- No evidence of contamination including stained ground surfaces, odorous soil, or suspected ACM impacts to soil were observed during site works.
- No access was provided to observe whether chemicals are stored on-site.



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client: DEPARTMENT OF EDUCATION: SCHOOL INFRASTRUCTURE NSW

project: SITE CONTAMINATION ASSESSMENT
LIVERPOOL BOYS AND GIRLS HIGH SCHOOL
LIVERPOOL NSW

title: SITE FEATURES

project no: 754-SYDEN231101-R02 figure no: FIGURE 2 rev: A

MXD ref: SYDEN231101_R02_GIS002_v0_2

2.2. Site Setting

2.2.1. Topography

NSW Survey marks around the boundary of the site, indicates that ground elevations at the site range between RL 9 and 12 m AHD increasing in a north-westerly direction. The regional topography slopes downwards to the southwest towards the railway and the Georges River further to the southwest.

2.2.2. Regional Geology

The Penrith 1:100,000 Geological Sheet 9030 indicates the western portion of the site is underlain by Bringelly Shale of the Wianamatta Group, which is characterised by shale, carbonaceous claystone, laminite, fine to medium-grained lithic sandstone, rare coal and tuff. The geology anticipated in the east of the site is clayey quartzose sand and clay. Appendix A provides the site location in relation to these geological units.

2.2.3. Groundwater

A search of groundwater bores registered with NSW Office of Water revealed a number of registered groundwater bores located within a 500 m radius of site. The closet groundwater bore is located over 200 m to the north-east of the site with the remainder of bores being located from 370 m to the south-east of the site and generally associated with monitoring. It is expected groundwater follows the regional topography and flows towards the Georges River to the south south-east. The groundwater bore search results are included in the Land Insight and Resources report in Appendix A.

2.2.4. Soil Landscapes Map

Reference to the Soil Landscapes Map for Penrith (scale 1:100,00 Sheet 9030) and report indicates the soil landscape of the site and its surrounds to be classified as 'Blacktown Residual Soil. These soils are generally brown-black clay and loam residual soils derived from the underlying Wianamatta Group. They typically range from slightly acid (pH 6.5) to strongly acid (pH 4.0), increasing acidity with depth.

Blacktown residual soils are slightly to moderately reactive and moderately to highly plastic. The potential for erosion hazard is considered low to high.

2.2.5. Acid Sulfate Soils and Salinity Risk Map

Reference to Atlas of Australian Acid Sulfate Soil and Salinity resource indicates the site has "no known occurrences of acid sulfate soils".

The Sydney Metropolitan Western Study Area Hydrogeological Landscapes Map indicates the site is situated in a very high salinity hazard area.

3. Site History Review

3.1. Previous Reports

No previous environmental reports are known to exist for the site except for asbestos registers for each of the Boys and Girls schools which details the location and condition of of asbestos containing materials within the site structures only.

3.2. Aerial Photography

Coffey conducted a review of available historical aerial photography for the site, observations of which are summarised in Table B**.** Aerial photos are attached within the Land Information Resources (LIR) report within Appendix A.

Table B: Historical Aerial Photography Review

Year of Photo	Site	Surrounding Area
1930	The site appears to be largely cleared with only a homestead located on the western boundary of the site bordering Forbes Street.	The surrounding areas are characterised by undeveloped land comprising homesteads with potentially grazing lands to the north. To the west of the site, the development of low density residential appears to be commencing along Forbes and Goulburn Street. To the south is a development assumed to be associated with the Liverpool Hospital. The railway appears to be present to the west of the site. Beyond the railway, the land is relatively undeveloped.
1943	The site has remained relatively unchanged since the 1930 aerial except for two new homesteads having been constructed on the eastern boundary of the site.	The surrounding areas remain relatively unchanged except for an increase in residential housing along Forbes and Goulburn Streets.
1953	In the 1953 aerial photograph, it appears construction of the school buildings has commenced in the eastern portion of the site. The homesteads still appears to be present except for one located on the eastern boundary.	The surrounding area appears to be relatively unchanged except for an increase in the number of residential houses to the north of the site.
1961	In the 1961 aerial photograph the site appears to have become a school with an increased number of buildings now present and as they currently appear today. The eastern portion of the site has been cleared and now comprises sporting fields.	The surrounding areas have now appear to have been developed with low-density residential properties to the north and west. Some further development of the Liverpool Hospital site has occurred with an increase in the number of buildings now present.
1965	In the 1965 aerial photograph no significant changes have occurred at the site except the addition of some smaller buildings located along the northern boundary.	The surrounding area appeared to be relatively unchanged.
1970	In the 1970 aerial photograph the site appeared to be relatively unchanged.	The surrounding areas were largely unchanged, however some high density residential buildings are now appearing to the north of the site. To the east of the railway, some earthworks appear to have commenced associated with the development of the commercial properties now present.

Year of Photo	Site	Surrounding Area
1975	In the 1975 aerial photograph the site remains largely unchanged except for the potential construction of the multipurpose courts to the north of the site.	The surrounding area appeared to be relatively unchanged except for further increases in density of residential dwellings. This is evident to the north and the east. Further construction on the Liverpool Hospital site has commenced to the south.
1982	In the 1982 aerial photograph the site appears relatively unchanged.	The surrounding areas appeared relatively unchanged except for the Liverpool Hospital site has now been developed and a carpark is now visible along the southern boundary of the site. Another building structure assumed to be commercial/industrial is now located to the south east of the site.
1986	In the 1986 aerial photograph the site appears relatively unchanged.	The surrounding areas appeared to be relatively unchanged.
1994	In the 1994 aerial photograph no significant changes have occurred at the site except for some small sheds or buildings located across the site.	The surrounding areas appeared relatively unchanged except some further construction works are apparent on the Liverpool Hospital site. The commercial/industrial properties located to the east of the railway have also increased in footprint.
2002	The site appears to be relatively unchanged except for some small buildings now present along the southern boundary of the site.	The surrounding areas appeared relatively unchanged.
2008	The site appears relatively unchanged except the multipurpose court appears to have been relayed.	The surrounding areas appeared relatively unchanged.
2010	The site appears to be relatively unchanged except for the construction of a new building directly adjacent to the oval within the Girls School.	The surrounding areas appeared relatively unchanged except for the construction of a pedestrian railway overpass to the south east of the site.
2013 - 2019	The site appears to be relatively unchanged.	The surrounding areas appeared relatively unchanged.

4. Public Records and Registers

4.1. Public register search

List of Contaminated Sites Notified to the EPA

A search of the NSW EPA online Contaminated Land: Record of Notices was undertaken by LIR on 19 September 2019. The search did not identify any notices that have been issued by the NSW EPA under the Contaminated Land Management Act (1997) for the site, or properties within 1,000 m of the site.

NSW EPA Contaminated Land Record

A search of the NSW EPA contaminated land record undertaken by LIR on 19 September 2019 did not identify notices relating to the site, and only listed one property located with 1,000 m of the site.

Protection of the Environment Operation Public Registers

A search of the NSW EPA POEO Public Registers was undertaken by LIR on 19 September 2019 for:

- Activities licensed by the NSW EPA under Schedule 1 of the POEO Act 1997.
- Unlicensed premises regulated by the EPA.

The search indicated there are no current licenced activities for the site and the site is not listed as an unlicensed premise regulated by the EPA.

NSW Government PFAS Investigation Program

A search of the NSW Government Per and Poly Fluoroalkyl Substances (PFAS) Investigation Program was undertaken by LIR on 19 September 2019. The search did not identify any notified sites within 2000 m of the site.

Given the site has functioned as a school since approximately 1953, it is considered unlikely that PFAS has been stored or used within the site.

Former Gasworks

A search of NSW EPA List of Former Gasworks was undertaken by LIR on the 19 September 2019. The search did not identify any former gasworks within 1,000 m of the site.

Waste Management Facilities

A search of the National Waste Reporting Mapping Tool undertaken by LIR on 19 September 2019 indicated there are no operational landfills, waste transfer stations or waste reprocessing facilities at, or within 500 m of the site.

Liquid Fuel Facilities

A search of the National Liquid Fuel Facilities was undertaken by LIR on 19 September 2019 and identified 3 service station sites within a 500 m buffer of the site. A BP Service Station is located 227 m to the north-west of the site. No liquid fuel depots, refineries or terminals were identified within 1,000 m of the site.

Known James Hardie Waste Disposal Sites

A review of the report on 19 September 2019 indicated that the site is not listed as a known James Hardie Waste Disposal Site nor are there any sites within 1000 m of the site.

5. Conceptual Site Model (CSM)

5.1. Data Reliance

The following sources of data were relied upon for this assessment:

- Public records searches and maps maintained and provided by LIR.
- Observations and information garnered during the site walkover.
- Aerial photographs (approximately one per decade between 1930 and 2019) reviewed from the aerials provided by LIR.

The observations made during the site walkover including anecdotal information indicating portions of the site had functioned as a school since at least 1953 were generally consistent with the recent aerial photographs. The period between aerial photographs reviewed ranged between 2 and 13 years, however in consideration that the land use and structures on-site remained relatively consistent, this is not considered to present a significant data gap.

Suspected ACM in the form of fibre cement sheeting was not identified on the ground surface during the site walkover.

Coffey considers the information reviewed was adequate, reliable and suitable with regard to the assessment objectives.

5.2. Preliminary Conceptual Site Model (CSM)

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

Contamination, if not managed appropriately could pose a potential risk to human health and/or the environment. For contamination (i.e. the hazard) to give rise to a risk, there must be a plausible pollutant linkage between a contamination source and a receptor by means of a transport mechanism (pathway).

5.2.1. Sources of Contamination and Chemicals of Potential Concern

Based on the information reviewed and observations made during the site walkover, the potential contaminating activities/sources identified, associated contaminants of potential concern (CoPC), and the likelihood for contamination to exist at the site are summarised in Table C.

Table C: Potential sources of contamination and contaminants of potential concern

Potential Source/Activity	Comment	Likelihood (low/moderate/high) for contamination to exist at the site.	CoPC
Importation of uncontrolled fill	Evidence of filling was limited across the site but may be present in small quantities where cut and fill activities have been used during construction of buildings onsite.	**Low/Moderate**: Based on the observations made during the site walkover, a potential for isolated areas of potential imported fill to be present beneath buildings. Based on the on the topography of the site which sloped down to the south-east and given that many of the vast majority of school buildings have been constructed on raised foundations indicating the potential for historical fill to have been imported to site as low.	TRH, BTEX, heavy metals, phenol, PAH, OCP/OPP, PCB & asbestos
Historical Pesticides/ Herbicide Use	The use of pesticides or herbicides on the sports oval or in and around buildings.	**Low/Moderate**: Based on conversations with the GA, spraying for weeds is undertaken and particularly on the sports oval to control weeds.	OCP & OPP
Presence of asbestos-containing materials or lead contamination due to poor demolition practices or deterioration of buildings	Buildings materials suspected to contain asbestos did not exhibit noticeable signs of damage or excessive weathering, although the presence of asbestos within structures is apparent. An asbestos register exists for the site and Coffey have undertaken a separate pre-demolition survey for site under a separate engagement.	**Moderate:** Based on the appearance of the buildings present which were generally noted to be in good condition it is considered unlikely for contamination of soils in the form of asbestos or lead paint residues to have occurred due to deterioration of the buildings present. However, based on the review of the aerial photographs there is potential for building debris to be present within soils resulting from poor demolition practices. Building debris may contain hazardous materials from former structures including asbestos and lead-based paint.	Asbestos & lead

Notes:

Heavy Metals = arsenic, cadmium, chromium, copper, lead, nickel, mercury, OCP = Organochlorine Pesticides; OPP = Organophosphorus Pesticides, BTEX = Benzene, Toluene, Ethylbenzene, Xylenes, PAH = Polycyclic Aromatic Hydrocarbons, PCB = Polychlorinated Biphenyls, TRH = Total Recoverable Hydrocarbons,

5.3. Summary of the Conceptual Site Model

Table D summarises the potential for contamination to present a constraint on the proposed development based on the potential sources of contamination identified and likelihood of contamination.

Table D: Summary of potentially affected media, key receptors and transport mechanisms

Potential Source	Potentially Affected Media	CoPC	Likelihood of Contamination (Refer to Table 3)	Potential Receptors and Exposure Routes
Uncontrolled Fill	Soil	TRH, BTEX, heavy metals, PAH, OCP/OPP, PCB & asbestos	Low/Moderate	▪ Current/future site users from dermal contact, ingestion and inhalation. ▪ Construction workers from dermal contact, ingestion, inhalation. ▪ Intrusive maintenance workers from direct contact (dermal contact and ingestion) and inhalation of dust and asbestos fibres. ▪ Adjacent site users from inhalation of dust and asbestos fibres during construction.
Historical Pesticides/ Herbicide Use	Soil	OCP & OPP	Low/Moderate	▪ Current/future site users from dermal contact, ingestion and inhalation. ▪ Construction workers from dermal contact, ingestion, inhalation. ▪ Intrusive maintenance workers from direct contact (dermal contact and ingestion).
Poor demolition practices or deterioration of buildings present	Soil	Asbestos & lead	Moderate	▪ Current and future site users, construction workers via inhalation (asbestos and lead), ingestion and dermal contact pathways (lead). ▪ Adjacent site users from inhalation of dust or asbestos fibres during construction.

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6. Intrusive Investigations

6.1. Scope of Intrusive Works

The sampling assessment works were undertaken by Coffey on 3 and 4 October 2019.

In summary, the fieldworks comprised the following:

- Location and clearance of underground services and set out of proposed soil bores and test pits at cleared locations.
- Drilling of 10 shallow boreholes using a truck mounted push-tube drill rig.
- Advancement of 3 hand augered boreholes.
- Excavation of 11 test pits.
- Collection of 5 sub building surface soil samples.
- Collection of samples from each sample location with a selection representative samples from each location submitted for chemical analysis.
- Re-instatement of investigation locations following completion of sampling.

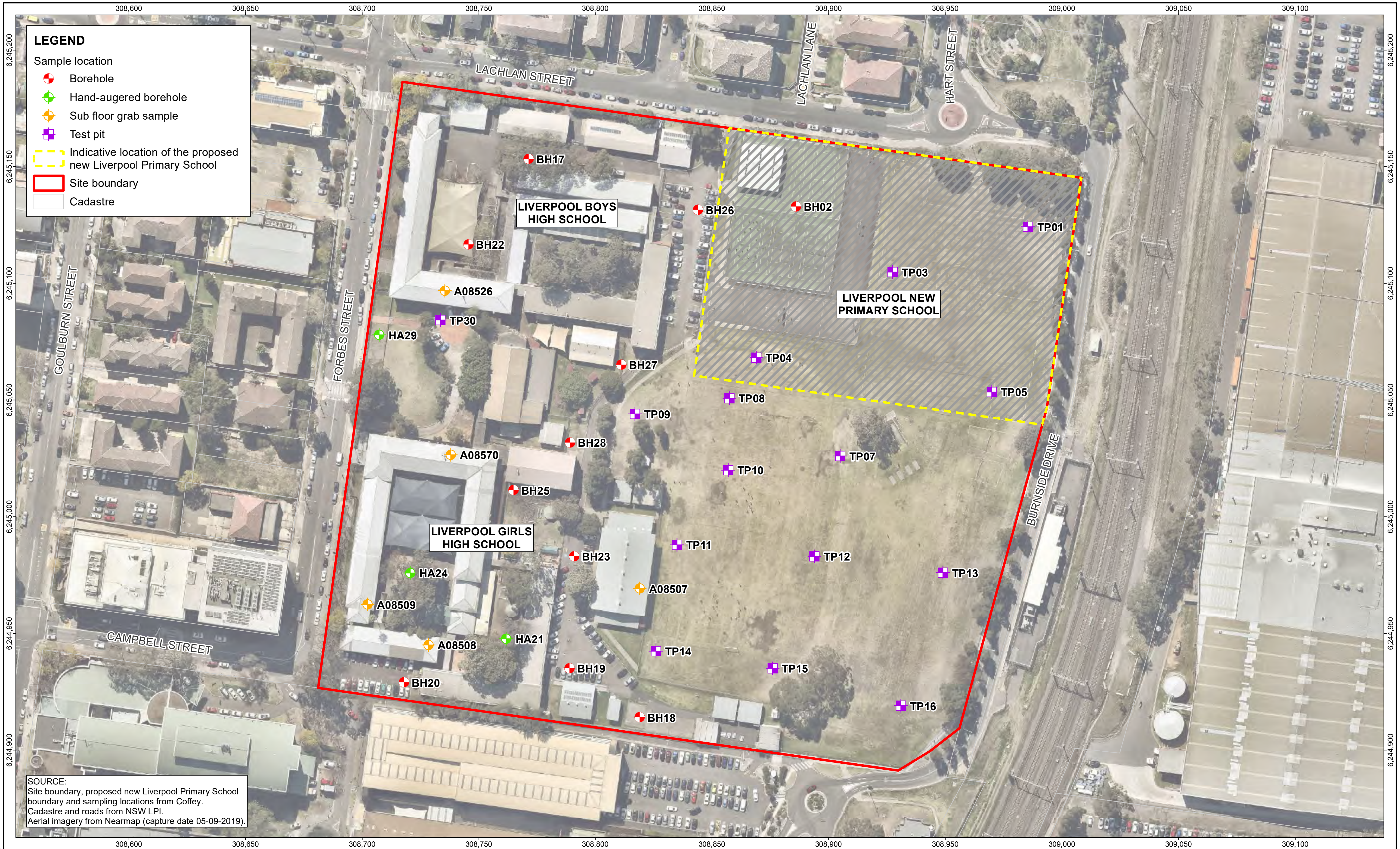
The sample locations are shown in Figure 3 below.

6.2. Sampling Rationale

The intrusive investigation was carried out using a combination of systematic and targeted sampling patterns, which is consistent with the Sampling Design Guidelines 9NSW EPA, 1995). In summary, the following sampling rationale was adopted:

- Sampling locations were positioned on an approximate systematic sampling grid to characterise potential contamination within fill. Sample locations were positioned locally to targeted areas where potential fill material may be present on the site.
- The investigation method was determined based on access restriction and surface material type. Test pits were the preferred methodology, however where hardstand material was encountered, a borehole was utilised.
- Where restrictions prevented a drilling rig/excavator accessing a sample location, a hand auger was utilised.
- Targeted soil samples were also collected from sub-floor voids (i.e. crawl spaces) using a hand trowel or clean disposable nitrile gloves to collected soil directly from the ground surface.

Sample locations were not selected to target proposed building locations as informed by SINSW as this information was not available at the time the investigation sampling plan was developed. However, some locations (ie north-western corner) are within the footprint of the proposed buildings which are presented within Appendix A.



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project: SITE CONTAMINATION ASSESSMENT
LIVERPOOL BOYS AND GIRLS HIGH SCHOOL
LIVERPOOL NSW

title: SAMPLING LOCATION PLAN

project no:	figure no:	rev:
754-SYDEN231101-R02	FIGURE 3	A

MXD ref: SYDEN231101_R02_GIS003_v0_3

6.3. Sampling Methodology

In general, the sampling methodology performed are outlined in Table E below.

Table E: Summary of Investigation and Soil Sampling Methodology

Activity	Detail / Comments
Below Ground Service Clearance	A DBYD Underground Services Check was carried out prior to commencement of works. Investigation locations were also scanned by an underground service clearance sub-contractor to check for the presence of below ground services. Sampling locations were set up in areas cleared for below ground services.
Borehole Drilling	Boreholes were drilled using a truck mounted rig equipped with solid flight augers and push tubing apparatus with samples collected from the push tube.
Test Pitting	Test pits were excavated using a 5-tonne excavator to a depth of at least 0.5 m into residual soils. Samples were collected from within the centre of the bucket.
Hand Augers	Hand augers were utilised where the drill rig or excavator could not access. Soil cuttings were placed onto plastic sheeting prior to sample collection and logging.
Surface Sampling	Surface sampling comprised collection of surface samples using a hand trowel.
Soil Logging	Soil logging was undertaken by suitably qualified and experienced Coffey engineer/scientists in accordance with Coffey's Standard Operating Practices (SOP), which is consistent with AS 1726-2017, Geotechnical Site Investigations and AS 4482.1-2005 Guide to the investigation and sampling of sites with potentially contaminated soil. The ground conditions encountered and logged are presented borehole and test pit logs included in Appendix B.
Soil Sampling	All works were directed by the Coffey scientist/engineer supervising the works. All soil logging, field screening and sampling were carried out by the Coffey scientist/engineer. Soil samples collected targeted different horizons within fill materials and then at approximately half or one metre intervals thereafter or at changes in soil horizon or where indications of potential contamination were noted. Soil samples collected from the push tube sleeve, excavator bucket or hand auger were placed as quickly as practicable into laboratory supplied sample jars, filled to the top to minimise headspace and sealed. Visual, olfactory, and field screening data were recorded (refer to borehole logs in Appendix B). Separate samples for soil asbestos analysis (approximately 50g mass) were collected and placed in zip lock bags.
Sample Handling and Transportation	Sample collection, storage and transport were conducted in general accordance with the relevant Coffey SOP. Soil samples were immediately placed into an ice chilled cooler. The samples were dispatched to the contracted laboratories under chain of custody control.
Decontamination of sampling equipment	Non-disposable sampling equipment was decontaminated by scrubbing with Decon 90 solution and rinsed with potable water between samples.
Disposal of soil cuttings	The boreholes were backfilled with drill cuttings and packing sand and cold mix asphalt when over hardstand. Test pits were backfilled by returning the material in the order of excavation and compacted using the bucket. The existing grass was reinstated, and loose soil raked to achieve a smooth finish.

6.4. Data Quality Objectives

Systematic planning and verification were deemed critical for the successful implementation of the contamination assessment to ensure that the data collected is reliable and representative. A process for establishing data quality objectives (DQOs) for an investigation has been adopted from AS 4482.1-2005 and referenced in NEPM 2013.

The DQO process is a seven-step iterative planning approach used to plan for environmental data collection activities. It provides a systematic approach for defining the criteria that a data collection design should satisfy, including when, where and how to collect samples or measurements, determination of tolerable decision error rates and the number of samples or measurements that should be collected.

The seven-step process for this investigation and data quality indicators adopted are discussed and summarised in Appendix D.

6.5. Data Validation Assessment

A data validation assessment was undertaken to assess whether the laboratory data generated met the accuracy, precision, comparability, representativeness and completeness and whether the data is suitable assessing the site contamination conditions. A standalone Data Validation Assessment is presented within Appendix E. The results of the Data Validation Assessment conclude that the data is directly usable for the purposes of this assessment.

6.6. Laboratory Details

Analysis of primary and blind duplicate soil samples were carried out by Eurofins MGT who hold NATA accredited analytical methods for the analysis performed. Blind triplicate soil samples were analysed by Australian Laboratory Services (ALS) who also hold NATA Accredited analytical methods.

7. Assessment Criteria

To assess the significance of contaminant concentrations in soil, reference was primarily made to *NEPM 2013, specifically 'Schedule B1 Guideline on Investigation Levels for Soil and Groundwater'* (Schedule B1) for assessment criteria, where available. Schedule B1 provides a framework for the use of investigation and screening levels based on human health and ecological risks. In the absence of relative criteria in NEPM 2013, reference was made to other nationally or state endorsed guidelines.

Schedule B1 states that '*the selection and use of investigation levels should be considered in the context of the iterative development of a Conceptual Site Model*'. Given the proposed development and continued use as a school, Coffey has assumed that development of the investigation area will introduce a number of different receptor groups, including:

- Construction workers during site development.
- Current and future site users – children attending the school, and adult workers.
- Workers conducting future subsurface maintenance works.
- Neighbouring property owners.

As the site is a primary school, the assessment adopted criteria consistent with a low-density residential land-use (Residential A) applied as described in ASC NEPM. Soil health investigation levels (HILs), soil health screening levels (HSLs) and petroleum hydrocarbon management limits were adopted from Schedule B1 of NEPM 2013. Direct Contact criteria for petroleum hydrocarbons were adopted from CRC CARE 2011.

A criterion of 0.1 g/kg for asbestos identification in soil and non-detection for trace analysis was adopted.

In accordance with Section 2.9 of Schedule B1 of the ASC NEPM, consideration of Management Limits for petroleum hydrocarbons has been included to assess the potential for accumulation of explosive vapours, the potential risk to buried infrastructure, or the formation of phase separated hydrocarbons (PSH).

Given the only a small percentage of the proposed development will comprise multi-storey school buildings, it is anticipated that landscaping will be provided as part of the development (e.g. grassed areas, planter boxes etc.). As such, consideration has been given to the Urban Residential/Public Open Space ecological investigation levels (EIL) and ecological screening levels (ESL) outlined within ASC NEPM.

Site specific ecological investigation levels relevant to an urban residential and public open space land use were adopted from ASC NEPM.

An indicative waste classification was also carried out which involved assessing soils against the NSW EPA Waste Classification Guidelines - Part 1: Classifying Waste (2014). Soils were assessed against CT1 and CT2 criteria listed in Table 1. No leaching TCLP was carried out during this investigation.

A summary of the adopted criteria are presented in the summary tables in Appendix H and the rationale for selection is provided in Appendix F.

8. Investigation Findings

8.1. Subsurface Profile

The majority of the non-developed site is surfaced with asphalt except for the school oval and areas of garden beds. The asphalt, where present, was typically measured at 50 to 100 mm and was underlain by a 50 mm thick layer of road base material. All other locations comprised either grassed or bare ground surface with up to 200 mm of topsoil present typically reported as fine to medium grained brown sands.

Fill material comprising clay and clayey sands with some ash material was reported within the base of some fill horizons (BH27, TP07, TP12 and TP13) which may have been associated with the former homesteads. The depth of fill material varied across the site but was reported to be a maximum of 0.6 mBGL (BH23, BH27 and TP11).

Natural material was identified immediately below the fill material and pavement material. The depth of natural soils varied from 0.1 to 0.6 mBGL and generally comprised medium to high plasticity grey/red/orange mottled clays, which are expected to be residual soils derived from the weathering of shale bedrock. All sample locations were terminated following achieving target depths with bedrock not being encountered. All locations were terminated within natural soils, except for the sub-floor surface soil samples.

Sample location depths across the site ranged from between 0.7 mBGL (TP08) and 2.6 mBGL (BH18, BH19 and BH25).

All sampling locations were noted as dry with no groundwater inflow noted.

Suspected asbestos containing materials (ACM), stained or malodourous soils were not observed during soil sampling.

8.2. Analytical Results

Analytical laboratory certificates are provided in Appendix I and are summarised and assessed against adopted site assessment criteria in Appendix H. In summary the following was noted:

- All samples results reported concentrations of BTEX, TRH, SVOCs, PAHs, PCBs, OCPs and OPPs below the laboratory LOR.
- Detectable concentrations of heavy metals were reported at most locations, however all were below respective assessment criteria, except for:
  - Copper (A08570) and zinc (A08509) which exceeded the ecological investigation levels for urban residential and public open space for aged soils.
  - Arsenic (TP07_0.1-0.2) which exceeded the HIL for residential soils.
- Asbestos was reported at sample location A08570 (beneath Block A floor within the Boys School), although it was below the detection limit of 0.01 %w/w. The material was described by the laboratory as brown coarse-grained soil, rocks concrete cement like material and glass fragments with weathered fibre cement fragments.
- In regards to providing an indicative waste classification, the fill material at the site is generally classified as general solid waste (GSW). Analysis of some samples reported elevated concentrations of arsenic, lead and nickel which classify soils in these locations as restricted solid waste (RSW). It is recommended that further analysis of these samples via the Toxicity Characteristic Leaching Procedure (TCLP) is carried out to optimise the waste classification of these materials.

9. Conclusions and Recommendations

9.1. Conclusions

Based on a review of publicly available information, site walkover and intrusive investigations, Coffey concludes the following:

- A review of historical aerial photographs identified that the majority of the site was occupied by the school since at least 1953 prior to which the land use was a homestead with potential grazing. Aerial photographs suggest the structures within the site have remained largely unchanged since this time with the exception of addition of some buildings over time.
- The site walkover identified some potential for fill material to be present at the site at locations of cut and fill, particularly at the Boys High School site where the topography is slightly steeper.
- No odours, ACM or staining were observed within the soil or on the ground surface during the site investigation. The ACM reported in sample A08570 would be described as friable asbestos in accordance with the NEPM guidelines, and presents a potential health risk, if disturbed. For current students, the risks of exposure is considered to be reduced, given access to the sub-floor is restricted via a locked doorway. Maintenance workers with access to the sub-floor area could be exposed to asbestos, if soils were disturbed.

  A localised hotspot of arsenic is present in shallow soil located on the school oval. The preferred development concept shows this area would be retained as playing fields. Arsenic in soil has the potential to pose health risks via the soil ingestion/inhalation and dermal contact exposure pathways. The extent of arsenic in soil warrants further investigation and assessment.
- Exceedances of the EIL for copper and zinc were obtained within surface soils beneath the existing buildings. It is likely the metal concentrations reported are a result of residual metals wastes from building maintenance/construction. Corroded metal was reported to be within the location where a zinc exceedance. At present these exceedances are not be expected to present an ongoing risk to ecology due to the location within the sub floor void beneath the buildings. The current development concept does not describe the proposed use of this area of the site. However, it is assessed that risks to planting introduced as part of the development could be

mitigated through establishing landscaping in clean, imported topsoil. A building contamination assessment (ie Hazmat survey) has been carried out by Coffey under a separate engagement.

- Indicative waste classification for the fill material is GSW (non-putrescible) subject to TCLP testing for some heavy metals. At these exceedance locations, soils are currently classified as RSW. Soils beneath Block A within the Boys High School would need to be classified as GSW or RSW (Asbestos).

In summary, the desktop study and site contamination assessment did not identify contamination triggering the need for significant further investigation and/or remediation except for the presence of ACM material beneath Block J. No ACM was observed during the sampling but was reported by the laboratory, however limited light was present at the time of sampling as it was within the confined space beneath the building. Subject to the further assessment and remediation of arsenic contamination within surface soils and the careful management of the demolition of potentially asbestos containing materials within and beneath school buildings, the site can be made suitable for the proposed redevelopment.

9.2. Recommendations

Coffey recommends the following:

- Further characterisation and systematic sampling to assess the extent of arsenic contamination within surface soils adjacent to sample location TP07. This will determine the level of remediation and/or management required prior to development.
- Further characterisation and systematic sampling of the subfloor soils beneath Block A to be undertaken to further assess the potential risks to site users and contractors from asbestos. This should include sieving of soils to allow for assessment against relevant land-use NEPM criteria.
- Current risks associated with asbestos materials reported beneath Block A in the Boys High School can be managed through access restriction and appropriate signage. It is also recommended the asbestos register for the site(s) be updated following the additional sampling.
- Prior to development/construction, a Construction and Environmental Management Plan (CEMP) should be prepared which includes an Unexpected Finds Protocol (UFP).
- This report does not represent classification of wastes (including spoil) that may be generated during the proposed redevelopment . Surplus soil generated from the development should comprise either an insitu assessment of the excavated material or exsitu assessment of stockpiles. Given fill material was not observed in significant quantities, excavated natural material may meet the definition of Virgin Excavated Material (VENM) although this will require further assessment and certification by a qualified scientist/engineer once excavation location/depths are known. Materials such as asphalt or concrete are pre-classified.

10. Limitations

It is the nature of contaminated site investigations that the degree of variability in site conditions cannot be known completely and no sampling and analysis program can eliminate all uncertainty concerning the condition of the site. Professional judgement must be exercised in the collection and interpretation of the data.

It is noted that a portion of the sampling undertaken as part of this assessment has relied on observations made from vertical boreholes, which are less conducive to identify inclusions within soil material that may present such as ACM.

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

This report was prepared for SINSW to provide a Site Contamination Assessment at the subject site. No warranty, expressed or implied, is made as to the information and professional advice included in this report. Anyone relying this document with reference to a particular development concept does so at their own risk and should satisfy themselves concerning its applicability and, where necessary, should seek expert advice in relation to the particular situation. Any use of information in this report must consider the uncertainties outlined in *Important Information about your Coffey Environmental Report*, which is attached to this report.

11. References

Bannerman S.M. and Hazelton P.A. (1990) Soil Landscapes of the Penrith 1:100,000 Sheet map and report, Soil Conservation Service of NSW, Sydney.

Clark N.R. and Jones D.C. (1991) Penrith 1:100 000 Geological Sheet 9030, 1st edition. Geological Survey of New South Wales, Sydney.

Contaminated Land Management (CLM) Act, 1997 (CLM Act 1997)

NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (2014)

National Environment Protection Council, National Environment Protection (Assessment of Site Contamination) Measure, 1999 (April 2013) (ASC NEPM 2013)

NSW Office of Environment and Heritage (OEH), Guidelines for Consultants Reporting on Contaminated Sites, 2011 (OEH 2011)

NSW Work Health and Safety Act 2011 (WHS Act 2011)

NSW Work Health and Safety Regulation 2011 (WHS Regulation 2011)

Protection of the Environment Operations (POEO) Act 1997 (POEO Act 1997)

Appendix A – Land Insight Report

Fast, Accurate and Comprehensive Environmental and Development Risk Information

LAND INSIGHT & RESOURCES

ENVIRO-SCREEN

Property Details

Lot 1 DP1137425

Liverpool Boys and Girls High School, Liverpool West NSW

Search Date: 19 September 2019

Understanding your Report

Your Report has been produced by Land Insight and Resources (LI Resources).

Your Report is based on information available from public databases and sources at the date of reporting. The information gathered relates to land that is within a 200 to 2000 m radius (buffer zone) from the boundaries of the Property. A smaller or larger radius may be applied for certain records (as listed under records and as shown in report maps).

While every effort is made to ensure the details in your Report are correct, LI Resources cannot guarantee the accuracy or completeness of the information or data provided.

The report provided by LI Resources includes data listed on page 3 (table of contents). All sources of data and definitions are provided on the report maps and as listed in the Product Guide (Attached). For a full list of references, metadata, publications or additional information not provided in this report, please contact LI Resources at info@liresources.com.au.

The report does not include title searches; dangerous good searches or; property certificates (unless requested); or information derived from a physical inspection, such as hazardous building materials, areas of infilling or dumping/spilling of potentially contaminated materials. It is important to note that these documents and an inspection can contain information relevant to contamination that may not be identified by this Report.

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INDEX

Section 1 - Property Setting

1.1 SITE LOCATION MAP AND SENSITIVE RECEPTORS

Map 1 (500m Buffer)

Sensitive receptor	Category	Distance (m)*	Direction
Liverpool Boys High School	High School	0	onsite
Liverpool Girls High School	High School	0	onsite
Saturday School Of Community Languages Liverpool G	High School	0	onsite
Saturday School Of Community Languages Liverpool B	High School	0	onsite
Liverpool Ambulance Station	Ambulance Station	43.6	west
St Raphael's Church	Place of Worship	53.3	west
Liverpool Hospital School	Special School	84.8	south-west
Hart Park	Park	153.8	north-east
Liverpool Community Health Service	Medical Centre	175.1	west
South Western Zone Transition Aged Care Service	Community Home	181.4	south-west
Liverpool Hospital	General Hospital	181.4	south-west
Liverpool Hospital Hugh Jardine Building	Medical Centre	196.7	south-east
Sydney Southwest Private Hospital	General Hospital	242.6	west
Liverpool Tafe College	TAFE College	281.7	south-west
Berryman Reserve	Park	311.4	north-east
Bigge Park Building	Medical Centre	330.9	south-west
Bigge Park	Park	369.8	south-west
All Saints Catholic College	High School	381.5	south-west
All Saints Catholic Primary School	Primary School	430.2	south-west
The Plantation	Park	450.6	north
Tennis Courts	Sports Court	457.3	south-west
All Saints Catholic Church	Place of Worship	481.5	south-west

*Distance from the sensitive receptor point feature to the site boundary centroid.

1.2 PLANNING CONTROLS

Map 2 (onsite)

Zoning	SP2	Infrastructure

Environmental Planning Instruments

Type	Local Environmental Plan	Classification
Not identified	-	-

1.3 SOIL LANDSCAPE

Map 3a (onsite)

Soil Landscape	REbt	BLACKTOWN	Soil Group	RESIDUAL
Description	**Landscape-** gently undulating rises on Wianamatta Group shales and Hawkesbury shale. Local relief to 30 m, slopes are usually <5%. Broad rounded crests and ridges with gently inclined slopes. Cleared eucalypt woodland and tall open-forest (wet sclerophyll forests). **Soils-** shallow to moderately deep (<100 cm) Red and Brown Podzolic Soils (Dr3.21, Dr3.11, Db2.11) on crests, upper slopes and well-drained areas; deep (150-300 cm) Yellow Podzolic Soils and Soloths (Dy2.11, Dy3.11) on lower slopes and in areas of poor drainage. **Limitations-** moderately reactive highly plastic subsoil, low soil fertility, poor soil drainage.			

1.4 ACID SULFATE SOIL

Map 3a (onsite)

	On the Property?	Within Record Search Buffer?
Acid Sulfate Soil Risk Maps (ASS) *(Table 1.5.1)*	Class 5	Class 1 / Class 5

1.5 ATLAS OF AUSTRALIAN ACID SULFATE SOIL AND SALINITY

Map 3b (onsite)

ASRIS Atlas of Australian Sulfate Soils *(Table 1.5.2)*	Bn(p4)	ASS in inland lakes, waterways, wetlands and riparian zones	**Probability of Occurrence**	Low Probability of occurrence
	Cq(p4)	ASS in inland lakes, waterways, wetlands and riparian zones		Extremely low probability of occurrence
Hydrologic Soil Group *(Table 1.5.3)*	C – slow rate			
Salinity Hazard	Very high - Sydney Metropolitan Western Study Area Hydrogeological Landscapes			

Table 1.5.1. Classification scheme in the ASS Planning Maps

Class of Land as shown on ASS Planning Maps	
1	Any works
2	Works below natural ground surface Works by which the watertable is likely to be lowered
3	Works beyond 1m below natural ground surface Works by which the watertable is likely to be lowered beyond 1m below natural ground surface
4	Works beyond 2m below natural ground surface Works by which the watertable is likely to be lowered beyond 2m below natural ground surface
5	Works within 500m of adjacent Class 1, 2, 3, or 4 land which are likely to lower the watertable below 1m AHD on adjacent Class 1, 2, 3 or 4 land.

For each class of land, the maps identify the type of works likely to present an environmental risk if undertaken in the particular class of land. If these types of works are proposed, further investigation is required to determine if ASS are actually present and whether they are present in such concentrations as to pose a risk to the environment.

Table 1.5.2. Australian Atlas of Acid Sulfate Soils[1] (ASS) map (CSIRO/NatCASS)

Code	Distinguishing soil/sediment properties, vegetation, landforms, or other characteristics
	Probability of Occurrence of ASS[1]
A	**High Probability of occurrence -** (>70% chance of occurrence in mapping unit)
B	**Low Probability of occurrence** - (6-70% chance of occurrence in mapping unit)
C	**Extremely low probability of occurrence -** (1-5% chance of occurrence in mapping unit)

Code	Distinguishing soil/sediment properties, vegetation, landforms, or other characteristics
	Probability of Occurrence of ASS[1]
D	**No probability of occurrence** - (<1% chance of occurrence in mapping unit)
x	**Disturbed ASS[1] terrain -** (ASS[1] material present below urban development).
u	**Unclassified** - (Insufficient information to classify map unit)
	Zones
a	Potential acid sulfate soil material and/or Monosulfidic Black Ooze (MBO).
b, c	Potential acid sulfate soil generally within upper 1 m.
c, d, e	ASS[1] generally within upper 1 m.
f	ASS[1] generally below 1 m from the surface
g	ASS[1], generally below 3 m from the surface.
h	ASS[1] generally within 1 m of the surface.
i, j	ASS[1] generally below 1 m of the surface.
k	ASS[1] material and/or Monosulfidic Black Ooze (MBO).
l, m, n, o, p, q	ASS[1] generally within upper 1 m in wet / riparian areas.
	Subscripts to codes
(a)	Actual acid sulfate soil (AASS) = sulfuric material.
(p)	Potential acid sulfate soil (PASS) = sulfidic material.
(q)	Monosulfidic Black Ooze (MBO) is organic ooze enriched by iron monosulfides.
	Confidence levels
(1)	All necessary analytical and morphological data are available
(2)	Analytical data are incomplete but are sufficient to classify the soil with a reasonable degree of confidence
(3)	No necessary analytical data are available, but confidence is fair, based on a knowledge of similar soils in similar environments
(4)	No necessary analytical data are available, and classifier has little knowledge or experience with ASS, hence classification is provisional

[1]Acid Sulfate Soils (ASS) are all those soils in which sulfuric acid may be produced, is being produced, or has been produced in amounts that have a lasting effect on main soil characteristics (Pons 1973). Acid sulfate soil (ASS) may include PASS or AASS + PASS. Potential acid sulfate soil (PASS) = sulfidic material. Actual acid sulfate soil (AASS) = sulfuric material.

Table 1.5.3. Hydrologic Soil Group

Code	Soil Group Characteristics
A	Soils having high infiltration rates, even when thoroughly wetted and consisting chiefly of deep, well to excessively-drained sands or gravels. These soils have a high rate of water transmission.
B	Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep to deep, moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
C	Soils having slow infiltration rates when thoroughly wetted and consisting chiefly of soils with a layer that impedes downward movement of water, or soils with moderately fine to fine texture. These soils have a slow rate of water transmission.
D	Soils having very slow infiltration rates when thoroughly wetted and consisting chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

1.6 GEOLOGY AND TOPOGRAPHY

Map 4 (onsite)

Geology

Map Sheet	Symbol	Formation	Group	Era	Period	Description
Penrith 1:100,000 geological map	Rwb	Bringelly Shale	Wianamatta Group (undifferentiated)	Mesozoic	Middle Triassic	Shale, carbonaceous claystone,claystone, laminite, fine to medium-grained lithic sandstone, rare coal and tuff
	Ta	-	-	Cainozoic	Tertiary	Clayey quartzose sand, and clay

Topography

Topography	10-12mAHD

1.7 HYDROGEOLOGY AND GROUNDWATER BORES

Map 5a (500m - 2000m Buffer)

	On the Property?	Within Record Search Buffer?
Aquifer Type	Porous, extensive aquifers of low to moderate productivity	Porous, extensive aquifers of low to moderate productivity
Drinking Water Catchments	Not identified	Not identified
Protected Riparian Corridor	Not identified	Georges River Brickmakers Creek
UPSS Environmentally sensitive zone	Southern NSW area UPSS	Southern NSW area UPSS
Wetlands	Not identified	Georges River / Reservoir
Groundwater Bores	Not identified	Yes, see 1.7.1 and 1.7.2

Table 1.7.1. Groundwater Bore Details

Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL[1] (m)	Salinity[1]	Yield[1] (L/s)	Distance (m)	Direction
213404	Unknown	<Null>	0	0	-	-	-	197.53	north-east
GW113069	Monitoring	10-Jul-03	10	10	-	-	-	367.09	south-east
GW058698	Exploration	01-Jul-84	19.5	19.5	-	-	-	374.05	south-east
GW113070	Monitoring	10-Jul-03	10	10	-	-	-	375.13	south-east
GW113071	Monitoring	10-Jul-03	10	10	-	-	-	420.51	south-east
GW113068	Monitoring	10-Jul-03	10	10	-	-	-	445.67	south-east
GW113072	Monitoring	11-Jul-03	9.5	9.5	-	-	-	473.81	south-east
GW113073	Monitoring	11-Jul-03	10	10	-	-	-	477.79	south-east
GW058697	Exploration	01-Jul-84	19.2	19.2	8.5		0.13	485.56	south-east
GW113074	Monitoring	11-Jul-03	10	10	-	-	-	550.09	south-east
GW113075	Monitoring	11-Jul-03	9.5	9.5	-	-	-	608.37	south-east

Table 1.7.2. Groundwater Bore Driller Lithology Details

Groundwater Bore ID	From Depth (m)	To Depth (m)	Lithology	Description	Distance (m)	Direction
GW058698	0	11.5	CLAY	Clay black grey	374.05	south-east
	11.5	12	CLAY	Clay coarse sandy gravel	374.05	south-east
	12	19	CLAY	Clay grey sandy	374.05	south-east
	19	19.5	SHLE	Shale	374.05	south-east
GW058697	0	5	CLAY	Clay stiff	485.56	south-east
	5	6	SAND	Sand soft silty	485.56	south-east
	6	8	SAND	Sand coarse silty, wood charcoal	485.56	south-east
	8	14	SAND	Sand grey silty coarse water supply	485.56	south-east
	14	16	CLAY	Clay grey silty, some coarse sand	485.56	south-east
	16	18.3	CLAY	Clay grey silty	485.56	south-east
	18.3	19.2	SLTE	Slate clayey	485.56	south-east

1.8 HYDROGEOLOGY AND OTHER BOREHOLES

Map 5b (2000m Buffer)

	On the Property?	Within Record Search Buffer?
Groundwater Vulnerability	Not identified	Not identified
Groundwater Exclusion Zones[1,2]	Not identified	Not identified
Hydrogeologic Unit	Late Permian/Triassic sediments (porous media - consolidated)	Surficial Sediment Aquifer (porous media - unconsolidated) Late Permian/Triassic sediments (porous media - consolidated)
Other known borehole investigations (500m buffer)	Not identified	Not identified

1 - Botany Groundwater Management Zones (BGMZ): Zone 1 – the use of groundwater remains banned; Zones 2 to 4 – domestic groundwater use is banned, especially for drinking water, watering gardens, washing windows and cars, bathing, or to fill swimming pools.
2 – Williamtown Groundwater Management Zones (WGMZ): Primary Management Zone – this area has significantly higher levels of PFAS detected and therefore, the strongest advice applies. Secondary Management Zone – this area has some detected levels of PFAS; Broader Management Zone – the topography and hydrology of the area means PFAS detections could occur now and into the future

Groundwater Dependent Ecosystems

Name	On the Property?	Within Record Search Buffer?
Ecosystems that rely on the Surface expression of Groundwater	Not identified	High potential for GW interaction
Ecosystems that rely on Subsurface presence of Groundwater	Not identified	High and Low potential for GW interaction

Table 1.8.1. Other known borehole investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes) (500m buffer)

Borehole ID	Purpose	Project	Client/License	Date Drilled	Depth (m)	Distance (m)	Direction
Not identified	-	-	-	-	-	-	-

Section 2 Environmental Records Summary – Contamination and Potentially Contaminating Activities

2.1 PFAS SITE INVESTIGATIONS

Map 5b (2000m Buffer)

Site	Address	Distance (m)	Direction
Not identified	-	-	-

2.2 CONTAMINATED LAND RECORD OF NOTICES ISSUED UNDER THE CLM ACT 1997

Map 6 (1000m Buffer)

Site Name[2]	Site ID	Address[1]	Notices	Distance (m)	Direction
Not identified	-	-	-	-	-

1. Some addresses do not contain specific street numbers. Records identified as being in the surrounding area have been added for information.
2. Former NSW EPA sites. These sites have been removed from the Record of Notices and/or the Sites Notified lists and are kept here for information purposes only.

2.3 SITES NOTIFIED AS CONTAMINATED TO THE NSW EPA

Map 6 (1000m Buffer)

Site Name[2]	Address[1]	Activity that caused Contamination	EPA Site Management Class[3]	Distance (m)	Direction
Joyce Foam Products	5-9 Bridges ROAD, MOOREBANK	Chemical Industry	Regulation under CLM Act not required	575	South-east

1. Some addresses do not contain specific street numbers. Records identified as being in the surrounding area have been added for information.
2. Former NSW EPA sites. These sites have been removed from the Record of Notices and/or the Sites Notified lists and are kept here for information purposes only.
3. The EPA maintains a record of sites that have been notified to the EPA by owners or occupiers as contaminated land. The sites notified to the EPA and recorded on the register are at various stages of the assessment and/or remediation process. Table 5 outlines the possible management status that can be attributed to a registered contaminated site.

Table 2.3.1. EPA Site Management Class Explanation

EPA Site Management Class	
Under Assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Contamination currently regulated under the CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record.
Contamination currently regulated under the POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.

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

2.4 OTHER CONTAMINATION ISSUES

Map 6 (1000m Buffer)

Defence Sites (current and former)

Site name	Defence code	Description	RCIP*	Distance (m)	Direction
Not identified	-	-	-	-	-

*RCIP (Regional Contamination Investigation Program)

James Hardie Asbestos Waste Contamination Legacy

Site	Location	Type	Distance (m)	Direction
Not identified	-	-	-	-

Former Uranium Processing Site at Hunters Hill

Site	Location	Distance (m)	Direction
Not identified	-	-	-

Former Gasworks Sites

Site	Location	Distance (m)	Direction
Not identified	-	-	-

Pasminco Smelter Lead Abatement Area

Site	Location	Distance (m)	Direction
Not identified	-	-	-

2.5 POTENTIALLY CONTAMINATING ACTIVITIES

Map 7a (500m Buffer)

Aviation Fuel Depots/Terminals

Site name	Description	Status	Distance (m)	Direction
Not identified	-	-	-	-

Aviation Rescue Fire Fighting Facilities (ARFF)

Site name	Class	Status	Distance (m)	Direction
Not identified	-	-	-	-

Cattle Dip Sites

Site name	Location	Status	Distance (m)	Direction	Direction
Not identified	-	-	-	-	-

Derelict Mines and Quarries

Deposit Name	Method	Description	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Dry Cleaners

Site name	Location	Status	Distance (m)	Direction
Not identified	-	-	-	-

Landfills (Legacy)

Site name	Description	Distance (m)	Direction
Not identified	- -	-	-

Note: This is not an exhaustive list of all legacy landfills.

Liquid Fuel Depots/Terminals

Site name	Owner	Location	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Power Stations

Site name	Owner	Primary Fuel Type	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Service Stations

Site name	Owner	Location	Status	Distance (m)	Direction
BP Express Warwick Farm	BP	6 Hume Highway Warwick Farm	Operational	227	North-west

Substation / Switching Stations

Site name	Owner	Location	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Telephone Exchanges

Site name	Location	Status	Distance (m)	Direction
Not identified	-	-	-	-

Waste Management Facilities

Site name	Owner	Class	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Wastewater Treatment Facilities

Site name	Operator	Class	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Unexploded Ordnance (UXO) Sites - Department of Defence (DoD)

Site name	Site ID	Category	Description	Distance (m)	Direction
Liverpool	134	UXO Area: Other	This site is part of the Defence Liverpool area.	0	onsite

2.6 OTHER CURRENT POTENTIALLY CONTAMINATING ACTIVITIES

Map 7b (200m Buffer)

Current Commercial and Trade Data

Site name	Category	Location	Status*	Distance (m)	Direction
Ovato	Commercial printer	8 Priddle St, Warwick Farm NSW 2170	Operational	880	east

*Data is current as when this report was created. However due to the turnover of business locations, some addresses may be former.

Underground Storage Tank (UST)

Premises	Tank type	Status*	Distance (m)	Direction
Not identified	-	-	-	-

Note: This is not an exhaustive list of all UST's.

Parramatta River Catchment Land Use Areas – Zoning Changes

Land Use 1943	Land Use 2005	Distance (m)	Direction
Not identified	-	-	-

Parramatta River Catchment Land Use Areas – Reclamation Areas

	On the Property?	Within Record Search Buffer?
Reclamation Area	Not identified	Not identified

*Many areas of Parramatta river have been reclaimed, often being used as rubbish dumps.

2.7 NPI INDUSTRIAL FACILITIES

Map 8 (500m Buffer)

Facility name	Address	Primary ANZSIC Class	Latest report	Distance (m)	Direction
Hannanprint - Warwick Farm	8 PRIDDLE STREET Warwick Farm	Printing	2016/2017	70	east
Visy Board Warwick Farm	41- 51 Scrivener Street Warwick Farm	Corrugated Paperboard and Paperboard Container Manufacturing	2016/2017	204	South-east
Liverpool Sewage Treatment System	Scrivener Road Liverpool	Sewerage and Drainage Services	2016/2017	406	South-east
Joyce Foam Products Moorebank	5-9 Bridges Road Moorebank	Polymer Foam Product Manufacturing	2016/2017	453	south
Prysmian Australia Liverpool	1 Heathcote Road Liverpool	Electric Cable and Wire Manufacturing	2016/2017	453	south

2.8 LICENSING UNDER THE POEO ACT 1997

Map 8 (500m Buffer)

Licences

Licence holder	EPL Number	Location Name	Premise Address[1]	Fee Based Activity	Distance (m)	Direction
PRYSMIAN AUSTRALIA PTY LIMITED	818	PRYSMIAN AUSTRALIA PTY LIMITED	1 HEATHCOTE ROAD, LIVERPOOL, NSW, 2170	Metal coating Metal waste generation	453	south
JOYCE FOAM PTY LTD	3099	JOYCE FOAM PTY LTD	5-9 BRIDGES ROAD, MOOREBANK, NSW, 2170	Plastic resins production	453	south
CPB CONTRACTORS PTY LIMITED	20966	Moorebank Precinct East - Rail Access Land Package No.1	3 km Rail Link Between SSFL and the Proposed Import-Export Terminal, LIVERPOOL, NSW, 2170	Crushing, grinding or separating Land-based extractive activity	Not mapped	-

1. Some sites do not contain specific addresses. Records identified as being in the surrounding area have been added for information.

Delicensed Premises still Regulated by EPA, Licences Surrendered, Clean Up and Penalty Notices

Licence holder	Nº	Name	Premise Address[1]	Fee Based Activity	Status	Distance (m)	Direction
SYDNEY SOUTH WEST AREA HEALTH SERVICE	11355	LIVERPOOL HEALTH SERVICE	ELIZABETH STREET, LIVERPOOL	Hazardous, Industrial or Group A Waste Generation or Storage	Delicensed	0	south
HEALTHSCOPE LIMITED	12839	Sydney Southwest Private Hospital	40 Bigge St, LIVERPOOL	Hazardous, Industrial or Group A Waste Generation or Storage	Delicensed	193	west
PRYSMIAN AUSTRALIA PTY LIMITED	1565149	PRYSMIAN AUSTRALIA PTY LTD	1 HEATHCOTE ROAD, LIVERPOOL, NSW, 2170	Contravene condition of licence - not submit annual return - Corporation	Penalty Notice	453	south
LIVERPOOL CITY COUNCIL	5176	WATERWAYS OF LIVERPOOL CITY	LIVERPOOL, NSW 2170	Other activities	Surrendered	Not mapped	-
JOHN HOLLAND PTY LTD	13316	Liverpool Turnback Project	Bigge Street, LIVERPOOL, NSW, 2170	Railway systems activities	Surrendered	Not mapped	-

1. Some sites do not contain specific addresses. Records identified as being in the surrounding area have been added for information.

2.9 PUBLIC REGISTER OF PROPERTIES AFFECTED BY LOOSE-FILL ASBESTOS INSULATION

Map 8 (onsite)

Address	Match Found
Not identified	-

HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA

1932 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Not identified	-	-	-	-	-

1940 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Not identified	-	-	-	-	-

1950 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Taxis	Garard J P	33 Goulburn, Liverpool	Address	140m	West
Bags - Bag & Sack Mfrs & Merchants	Cumberland Rural Co-operative Ltd	Bigge Street, Liverpool	Street		
Produce Merchants - Retail	Cumberland Rural Co-Operative Ltd	Bigge Street, Liverpool	Street		
Taxis	Geoghegan T F	Bigge Street, Liverpool	Street		

1965 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Carriers—Heavy	Badham A C	5 Lachlan, Liverpool	Address	20m	North
Builders & Contractors	O'Mara J	14 Forbes, Liverpool	Address	65m	North
Taxis	Garard J P	25 Goulburn, Liverpool	Address	140m	West
Butchers	Jaggi W	BiggeSt, Liverpool	Street		
Chemists—Pharmaceutical	Station Chemist The	BiggeSt, Liverpool	Street		
Fruiterers & Greengrocers	Vozzo R G&Frangipane V	BiggeSt, Liverpool	Street		
Motor Service Stations	Court House Auto Port	BiggeSt, Liverpool	Street		
Produce Merchants - Retail	Cumberland Rural Co-op Ltd	BiggeSt, Liverpool	Street		
Ambulances	Macarthur District Ambulance	ForbesSt, Liverpool	Street		

Hospitals—Public	Liverpool District Hospital	GoulburnSt, Liverpool	Street		
Motor Panel Beaters	Liverpool Smash Repairs Pty Ltd	LachlanSt, Liverpool	Street		

1970 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Directio n
TAXIS	Garard, J. P.,	25 Goulburn St., Liverpool	Address	140m	West
AMBULANCES	Liverpool District Ambulance,	Forbes St., Liverpool	Street		

1974 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Directio n
Carriers Light	Johnstone TW	11 Drummond, Warwick Farm	Address	95m	North
Napkins-Baby-Mfrs. &/or W'salers	Kimberly-Clark of Aust Pty Ltd	corner Manning & Priddle Streets , Warwick Farm	Address	172m	North East
Paper Mfrs.	Kimberly-Clark of Aust Pty Ltd	Cnr Manning & Priddle Streets, Warwick Farm	Address	172m	North East
Paper Products-Disposable	Kimberly-Clark of Aust Pty Ltd	Corner Manning & Priddle Streets , Warwick Farm	Address	172m	North East
Pest Control	Preventa Pest	56 Bigge Street, Liverpool	Address	191m	South West
Weed Control Services	Preventa Pest	56 Bigge Street, Liverpool	Address	191m	South West
Civil Engineers	Amestica G	1 Drummond Street, Warwick Farm	Address	199m	North
Motor Service Stations	Court House Auto Port	Bigge Street, Liverpool	Street		
Motor Panel Beaters	Liverpool Smash Repairs Pty Ltd	Lachlan Street, Liverpool	Street		

1980 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Directio n
Carriers - Heavy	Southern Districts Carrying Co Pty Ltd	27 Goulburn St., Liverpool	Address	140m	West
Carriers - Light	Southern Districts Carrying Co Pty Ltd	27 Goulburn St., Liverpool	Address	140m	West
Carriers - Light	Southern Districts Removals & Taxi Trucks	27 Goulburn St., Liverpool	Address	140m	West
Furniture Removals & Storage	Southern Districts Removals & Taxi Trucks	27 Goulburn St., Liverpool	Address	140m	West
Taxi Truck Services	Southern Districts Removals & Taxi Trucks	27 Goulburn St., Liverpool	Address	140m	West

Concrete - sawing, drilling, grinding & breaking	B & G Concrete Services	6 Goulburn St., Liverpool	Address	157m	North West
Nursing Homes	Spanish Grandparents Refuge	11 Goulburn St., Liverpool	Address	162m	North West
Cleaning Cloth Supplies	Kimberly-Clark Australia Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Dental Supplies &/or Equipment	Kimberly-Clark Australia Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Hotel, Restaurant & Club Supplies	Kimberly-Clark Australia Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Medical Supplies	Kimberly-Clark Australia Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Paper Mfrs &/or W'salers	Kimberly-Clark Australia Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Paper Products - Disposable	Kimberly-Clark Aust Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Toilet Paper Mfrs &/or W'salers	Kimberly-Clark Australia Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Waste Merchants	Kimberly-Clark Australia Pty Ltd	Cnr. Manning & Priddle Sts., Warwick Farm	Address	172m	North East
Livestock Trasport Service	Armstrong J	14 Manning St., Warwick Farm	Address	185m	North East
Hospitals - Private	Bigge St. Private Hospital	40 Bigge St., Liverpool	Address	193m	West
Surgical Supplies	Surgical Services Pty Ltd	42 Bigge St., Liverpool	Address	193m	West
Ambulances	Central District Ambulance Transport (Liverpool Branch Station)	Forbes St., Liverpool	Street		
Clubs - Car	Suzuki 4 Wheel Drive Club of NSW	Rear 47 Goulburn St., Liverpool	Street		

1990 HISTORICAL COMMERCIAL & TRADE DIRECTORY DATA (200m Buffer)

Activity	Name	Address	Positional accuracy	Distance (m)	Directio n
Photographers - General	Bennies Photographics	1 Lachlan Street, Liverpool	Address	20m	North
Printers - General	N.K.K. Printing	Unit 3, 14 Drummond Street, Warwick Farm	Address	79m	North
Furniture Removals & Storage	Southern Districts Carrying Co Pty Ltd	27 Goulburn Street, Liverpool	Address	140m	West
Security Systems &/Or Consultants	Supreme Security Service	6 Goulburn Street, Liverpool	Address	157m	North West
Building Contractors - Alterations & Repairs	Paine S T	4 Drummond Street, Liverpool	Address	186m	North
Hospitals - Private	Bigge Street Private Hospital	40 Bigge Street, Liverpool	Address	193m	West
Pathology Laboratories	Sensitivity Testing Laborataries Pty Ltd	42 Bigge Street, Liverpool	Address	193m	West

Ambulances	Ambulance (Metropolitan) Operations	Forbes Street, Liverpool	Street		
Paper Mfrs &/or W'salers	Kimberly-Clark Aust Pty Ltd	Manning Street, Warwick Farm	Street		

Land Insight and Resources use a number of different address georeferencing methods and characterised them according to the following criteria: completeness (match rates) and positional accuracy. When address do not contain specific street numbers or a match is not found, records identified as being in the surrounding areas are included for reference.

Historical data positional accuracy and georeferencing results explanation

Positional accuracy	Georeferenced	Description
Address	Located to the address level	*When street address and names fully match.*
Street	Located to the street centroid	*When street names match but no exact address was found. Location is approximate.*
Place	Located to the structure, building or complex	*When building, residential complex or structure name match but no exact address was found. Location is approximate.*
Suburb	Located to the suburb area	*When suburb name match but no exact address was found. Location is approximate.*
Not georeferenced	Not found	*When it was not georeferenced, and address could not be found.*

Section 3 - Other Environmental Constraints

3.1 FEDERAL, STATE AND LOCAL HERITAGE

Map 9 (200m Buffer)

Local Environment Plan (LEP) Heritage

Site Name	Site ID	Significance	Type	Distance (m)*	Direction
Plan of Town of Liverpool (early town centre street layout'Hoddle 1827)	89	Local	Item - General	0	North-west
Bigge Park Conservation Area	-	State	Conservation Area - General	131	south

National Heritage List (NHL)

Site Name	Site ID	Class	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Register of the National Estate (RNE)

Site Name	Site ID	Class	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Non-Aboriginal heritage item (Local)

Site Name	Site ID	Class	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

Non-Aboriginal heritage item (SHR)*

Site Name	Site ID	Listing nº	Plan nº	Distance (m)	Direction
Not identified	-	-	-	-	-

*State Heritage Register

Commonwealth Heritage List (CHL)

Site Name	Site ID	Class	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

World Heritage Area (WHA)

Site Name	Site ID	IUCN	Status	Distance (m)	Direction
Not identified	-	-	-	-	-

3.2 NATURAL HAZARDS & COASTAL MANAGEMENT

Map 10 (500m Buffer)

Bush Fire Prone Land (BPL)

Category	On the Property?	Within Record Search Buffer?
Vegetation Buffer	Not identified	Yes

Fire History (Wildfires and Prescribed Burns)

Category	On the Property?	Within Record Search Buffer?
Not identified	-	-

Flood Hazard Area

Name	On the Property?	Within Record Search Buffer?
Not identified	-	-

3.3 STATE ENVIRONMENTAL PLANNING POLICY (COASTAL MANAGEMENT)

Map 10 (500m Buffer)

Type	On the Property?	Within Record Search Buffer?
Coastal Wetlands Proximity Area	Not identified	Yes
Coastal Wetlands	Not identified	Yes
Coastal Environment Area Map	Not identified	Yes
Coastal Use Area Map	Not identified	Yes

LAND INSIGHT & RESOURCES

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E info@liresources.com.au
W www.liresources.com.au

ATTACHMENT A

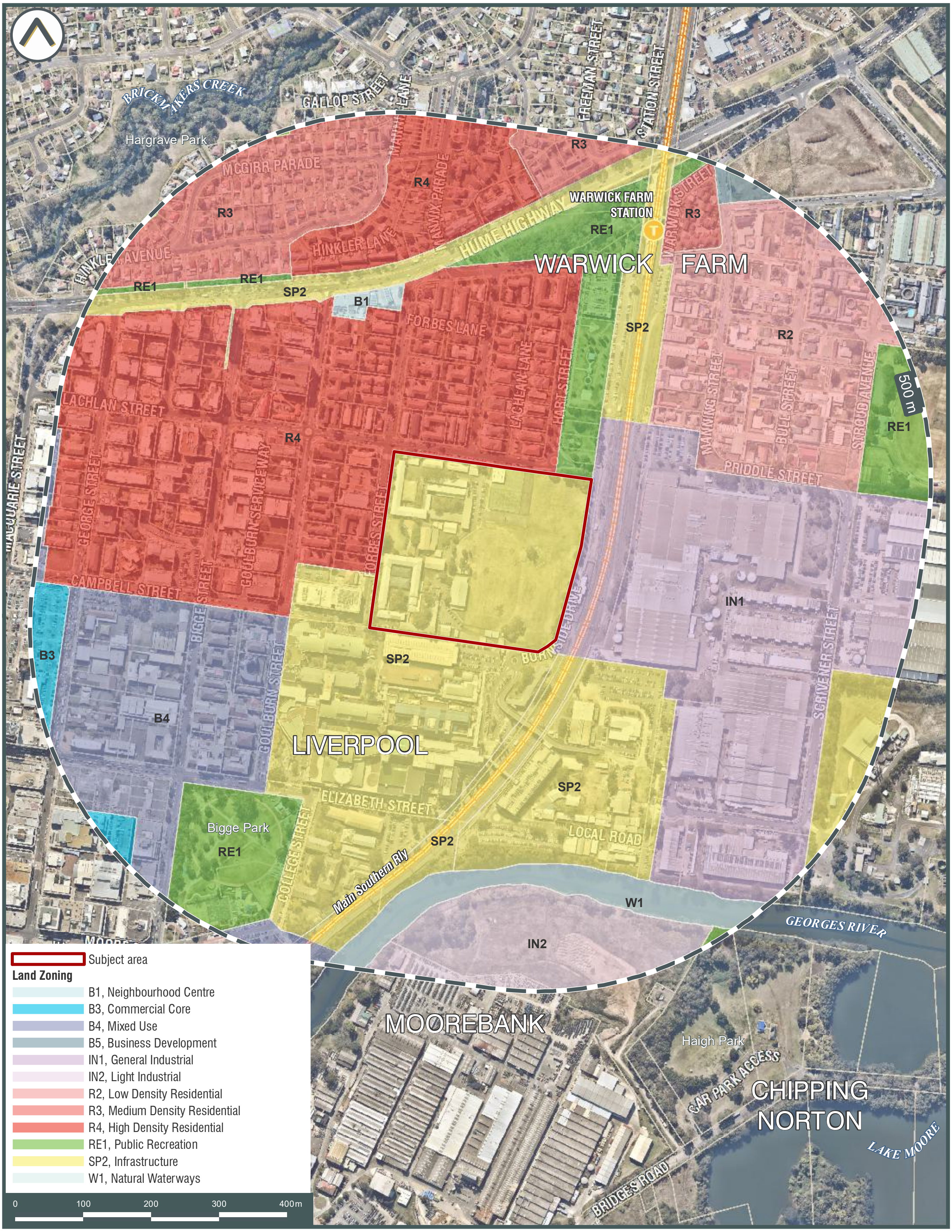
Report Maps

SUBJECT AREA AND SENSITIVE RECEPTORS

LAND INSIGHT & RESOURCES

MAP 1

Enviro-Screen

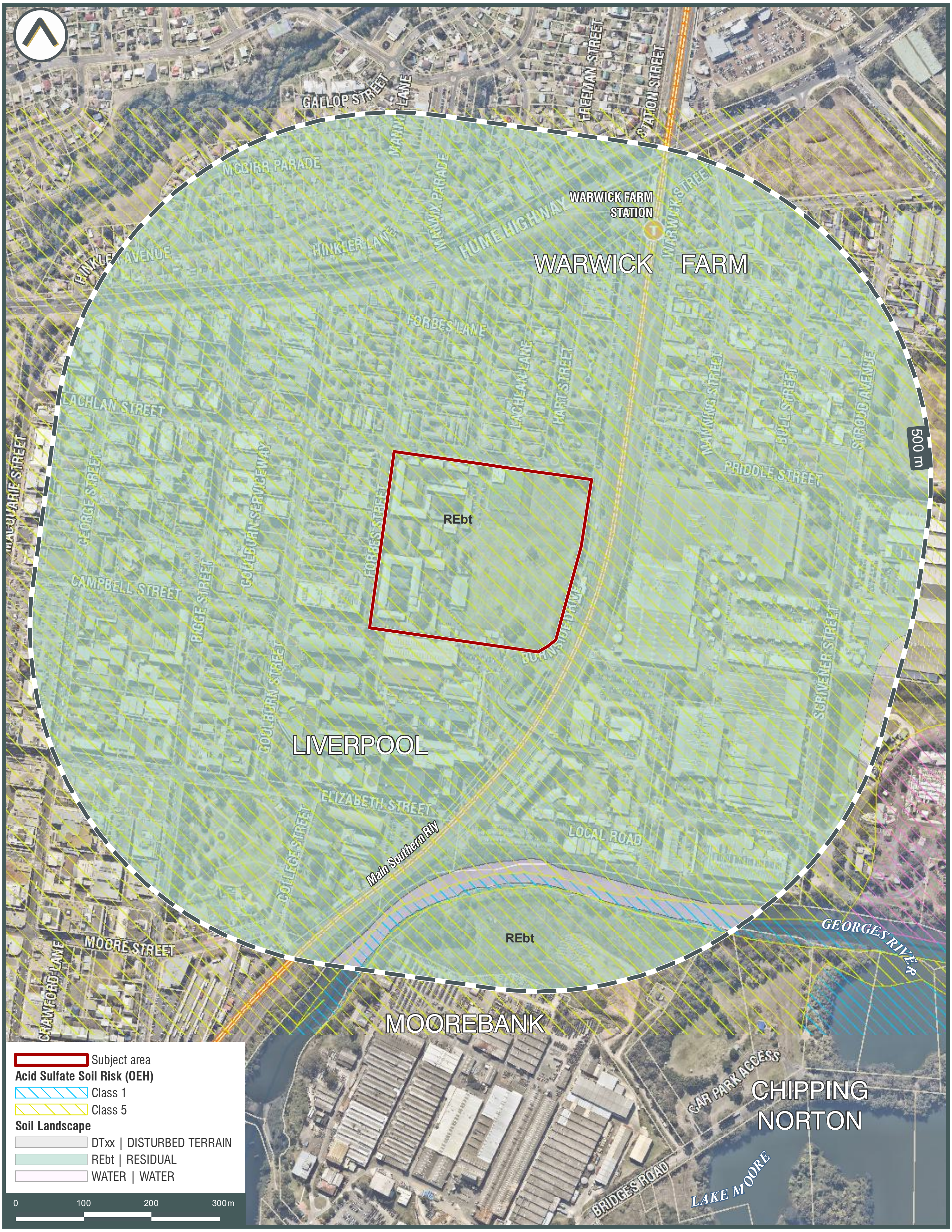


PLANNING CONTROLS

LAND INSIGHT & RESOURCES

MAP 2

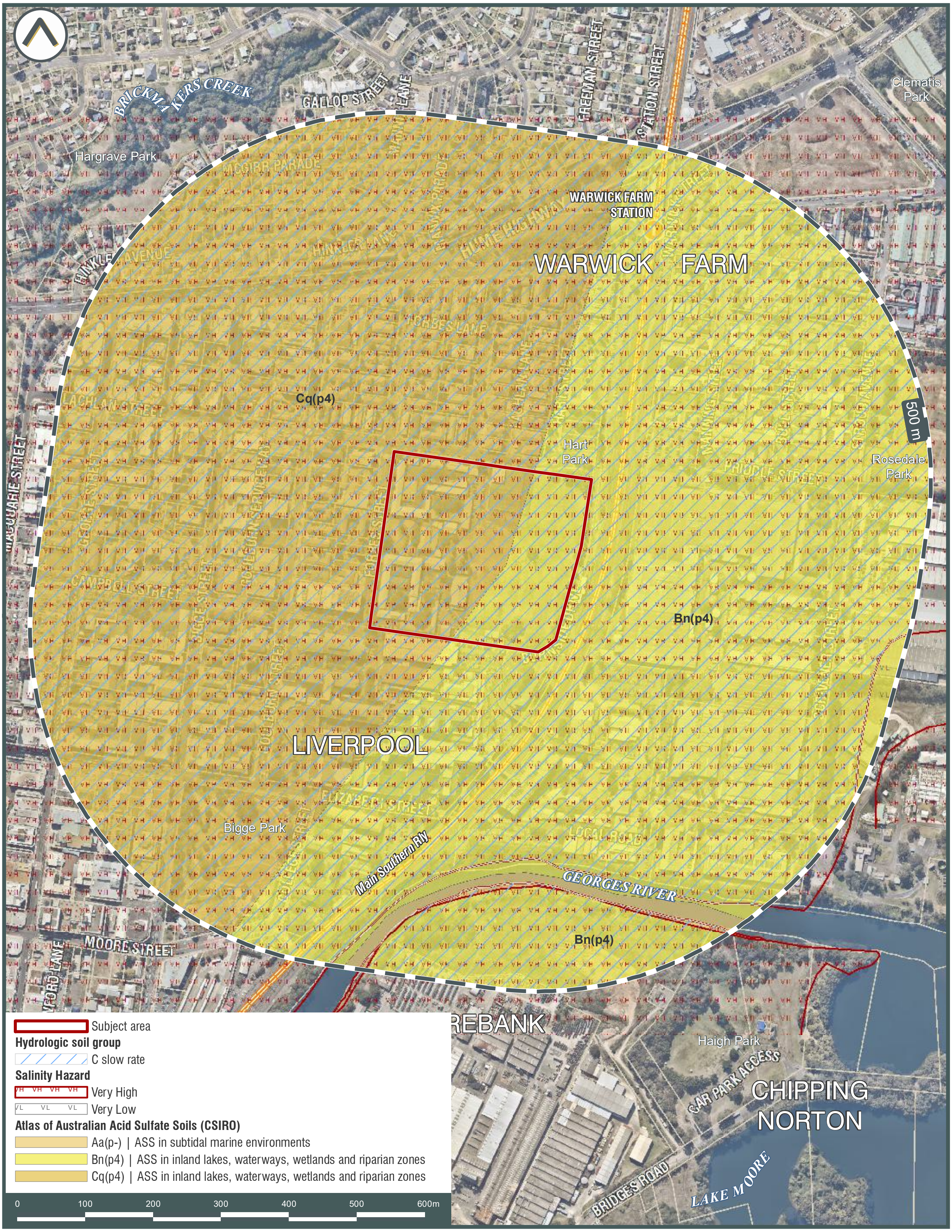
Enviro-Screen



SOIL LANDSCAPES AND ACID SULFATE SOIL RISK

LAND INSIGHT & RESOURCES

MAP 3a Enviro-Screen

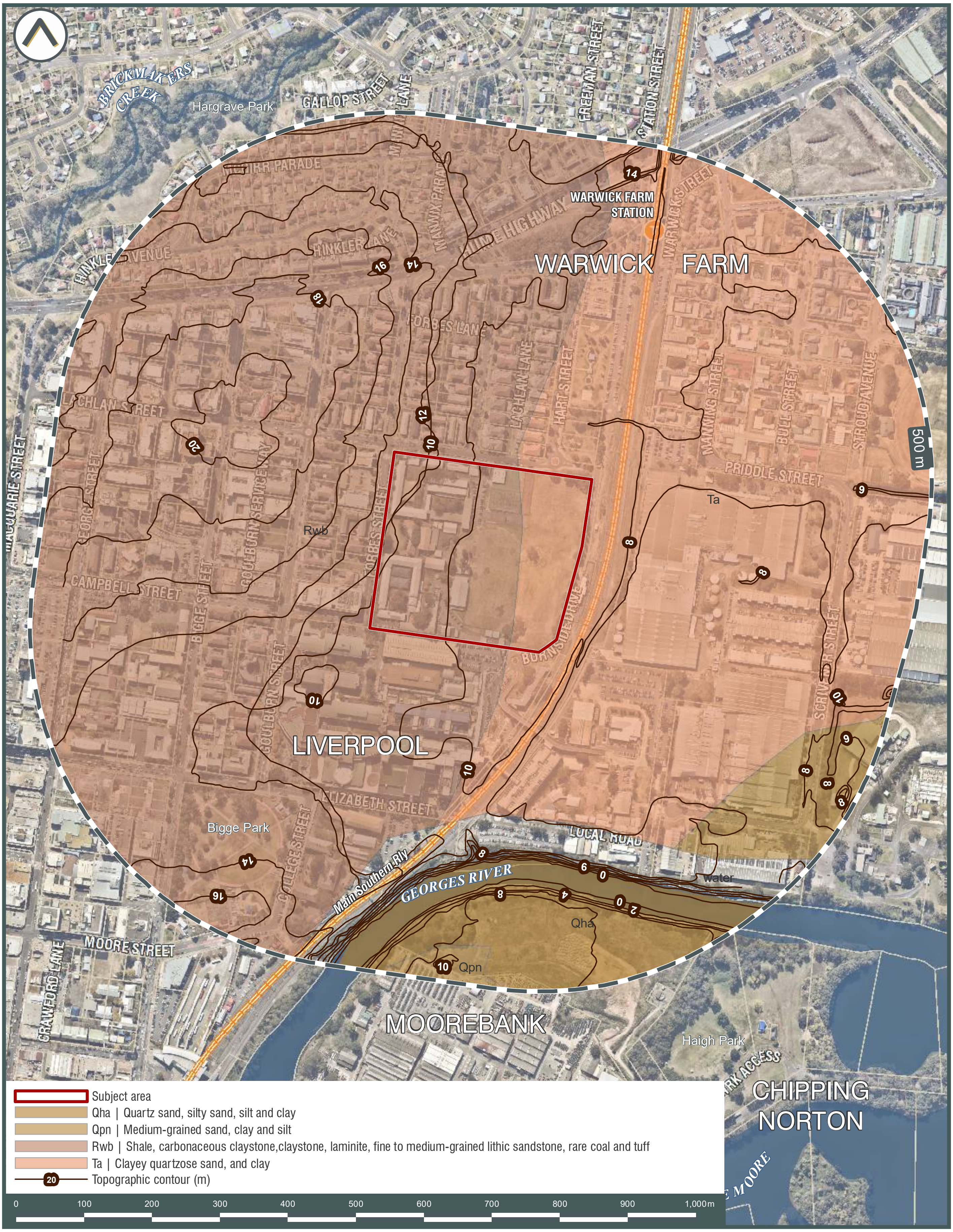


ATLAS OF AUSTRALIAN ACID SULFATE SOILS AND SALINITY

LAND INSIGHT & RESOURCES

MAP 3b

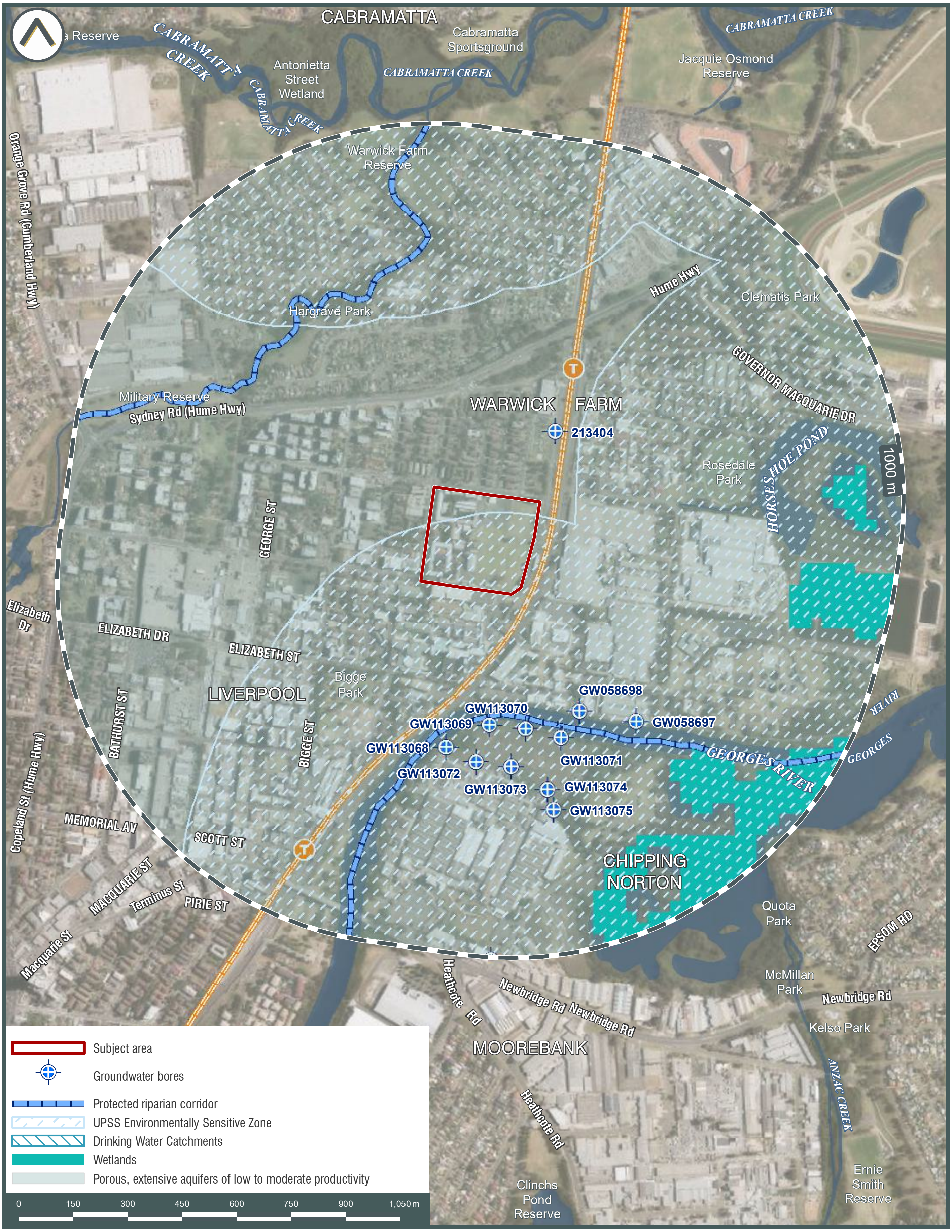
Enviro-Screen



GEOLOGY AND TOPOGRAPHY

LAND INSIGHT & RESOURCES

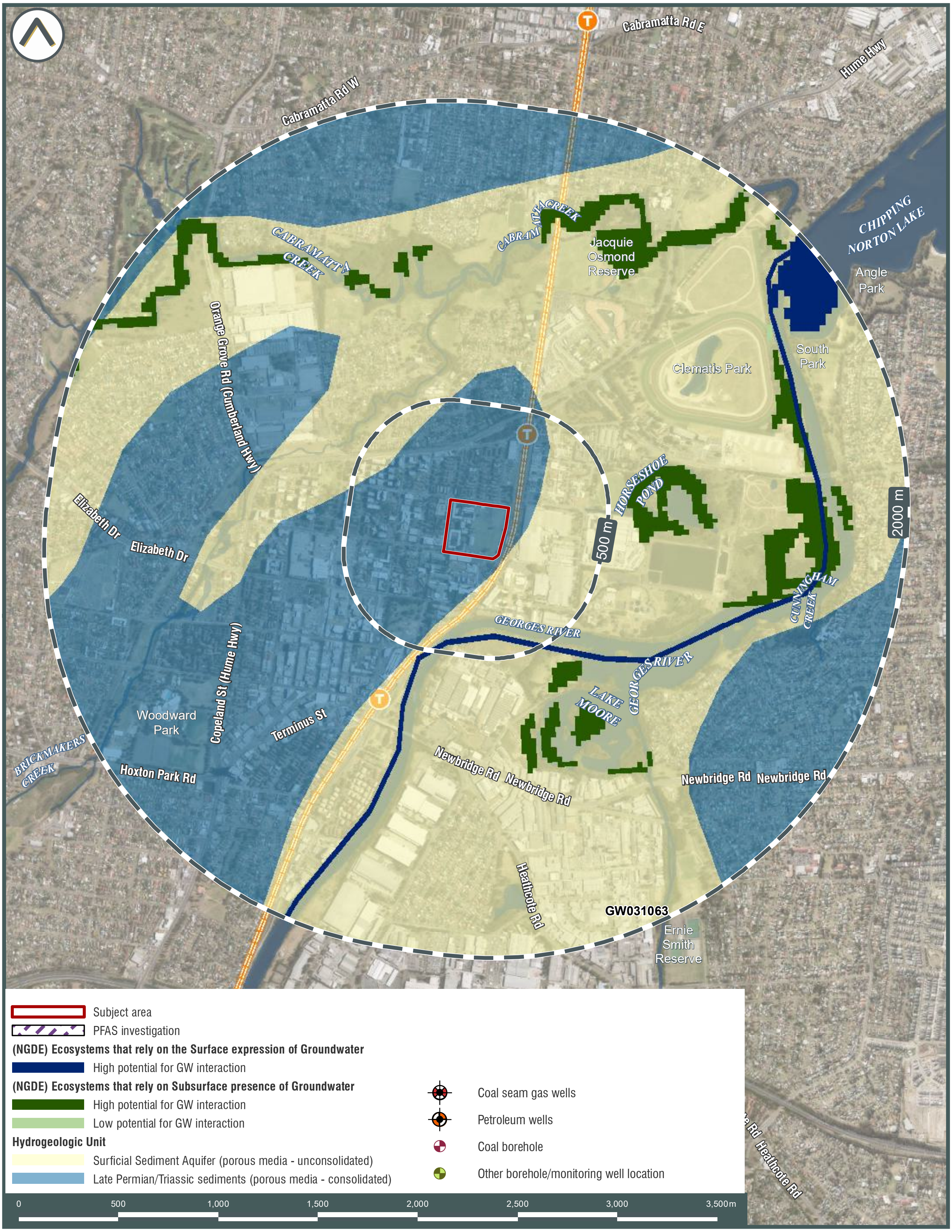
MAP 4 Enviro-Screen



HYDROGEOLOGY AND GROUNDWATER BORES

LAND INSIGHT & RESOURCES

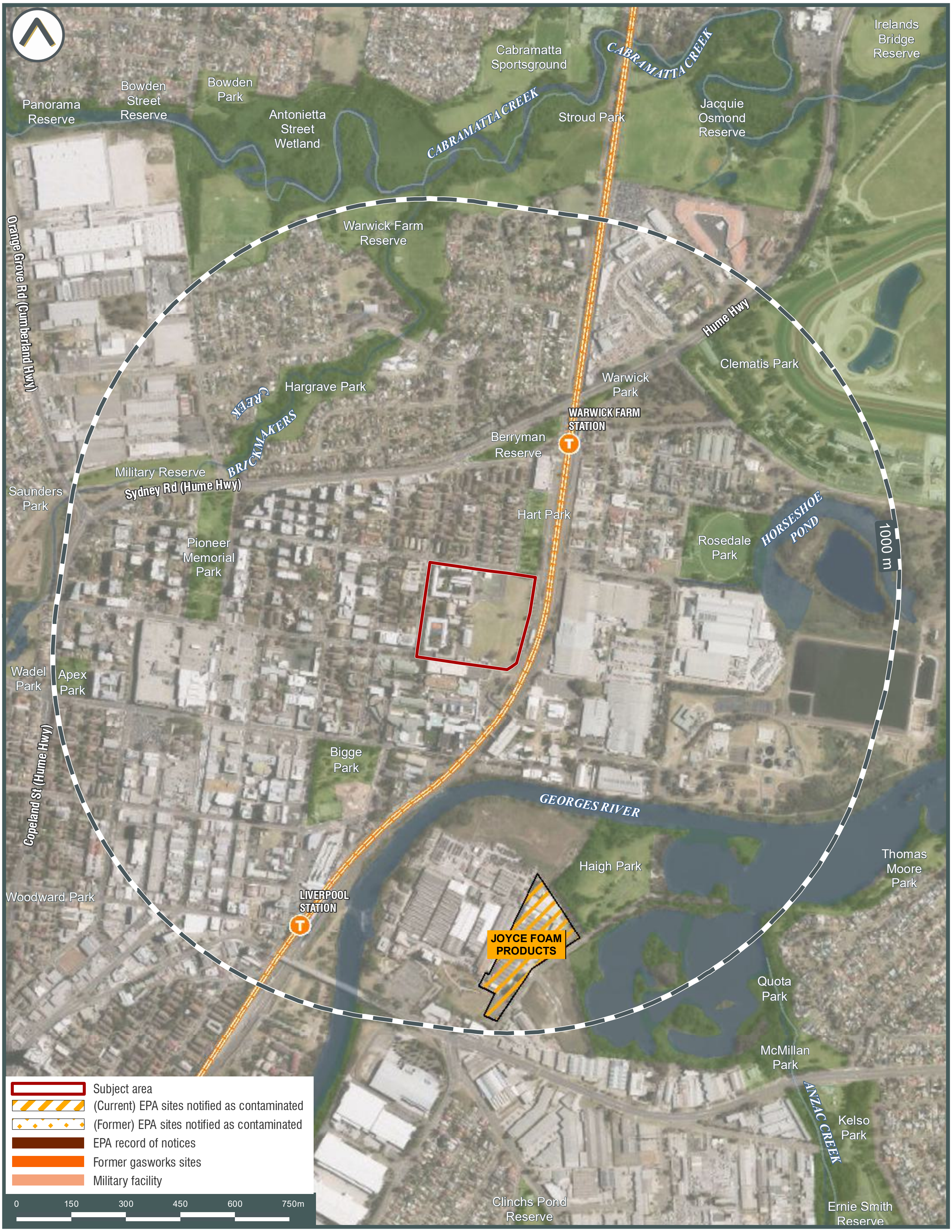
MAP 5a Enviro-Screen



HYDROGEOLOGY AND OTHER BOREHOLES

LAND INSIGHT & RESOURCES

MAP 5b Enviro-Screen



EPA RECORDS AND OTHER REGULATORY CONTAMINATION ISSUES

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MAP 6

Enviro-Screen

POTENTIALLY CONTAMINATING ACTIVITIES

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MAP 7a

Enviro-Screen

CURRENT COMMERCIAL AND TRADE DATA

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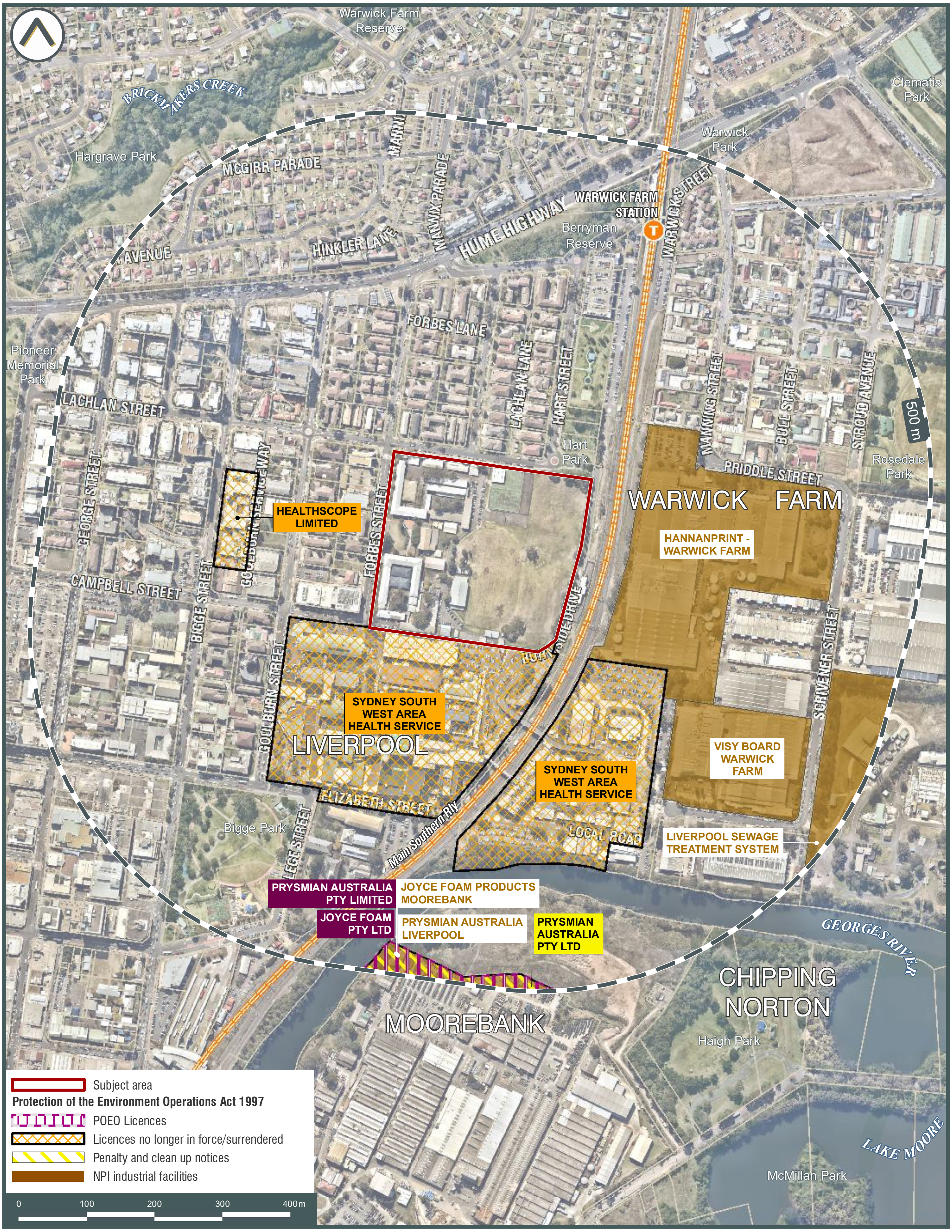
MAP 7

Enviro-Screen



LICENSING UNDER THE POEO ACT 1997 AND NPI FACILITIES

LAND INSIGHT & RESOURCES

MAP 8

Enviro-Screen

HERITAGE

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MAP 9

Enviro-Screen

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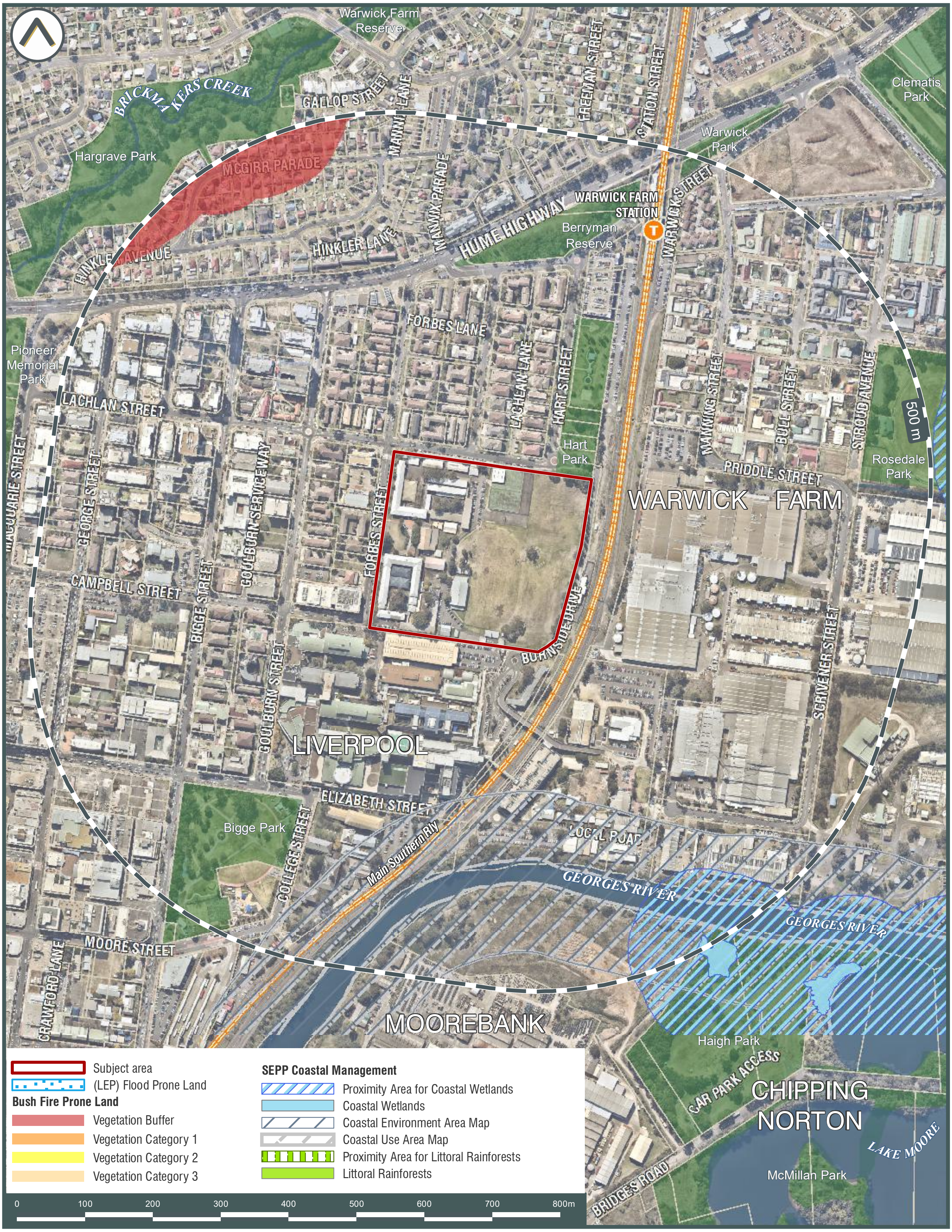

NATURAL HAZARD AND COASTAL MANAGEMENT

LAND INSIGHT & RESOURCES

MAP 10

Enviro-Screen

ATTACHMENT B

Historical Imagery

LIR-00861 Aerial Photograph 1930 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1930

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MAP 11

LIR-00861 Aerial Photograph 1943 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1943

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MAP 12

HISTORIC AERIAL PHOTOGRAPH - 1953

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MAP 13

LIR-00861 Aerial Photograph 1953 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

LIR-00861 Aerial Photograph 1961 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1961

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MAP 14

LIR-00861 Aerial Photograph 1965 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1965

LAND INSIGHT & RESOURCES

MAP 15

LIR-00861 Aerial Photograph 1970 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1970

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MAP 16

LIR-00861 Aerial Photograph 1975 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1975

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MAP 17

LIR-00861 Aerial Photograph 1982 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1982

LAND INSIGHT & RESOURCES

MAP 18

LIR-00861 Aerial Photograph 1986 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1986

LAND INSIGHT & RESOURCES

MAP 19

LIR-00861 Aerial Photograph 1994 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 1994

LAND INSIGHT & RESOURCES

MAP 20

LIR-00861 Aerial Photograph 2002 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 2002

LAND INSIGHT & RESOURCES

MAP 21

LIR-00861 Aerial Photograph 2008 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 2008

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MAP 22

LIR-00861 Aerial Photograph 2010 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 2010

LAND INSIGHT & RESOURCES

MAP 23

LIR-00861 Aerial Photograph 2013 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 2013

LAND INSIGHT & RESOURCES

MAP 24

LIR-00861 Aerial Photograph 2016 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 2016

LAND INSIGHT & RESOURCES

MAP 25

LIR-00861 Aerial Photograph 2019 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC AERIAL PHOTOGRAPH - 2019

LAND INSIGHT & RESOURCES

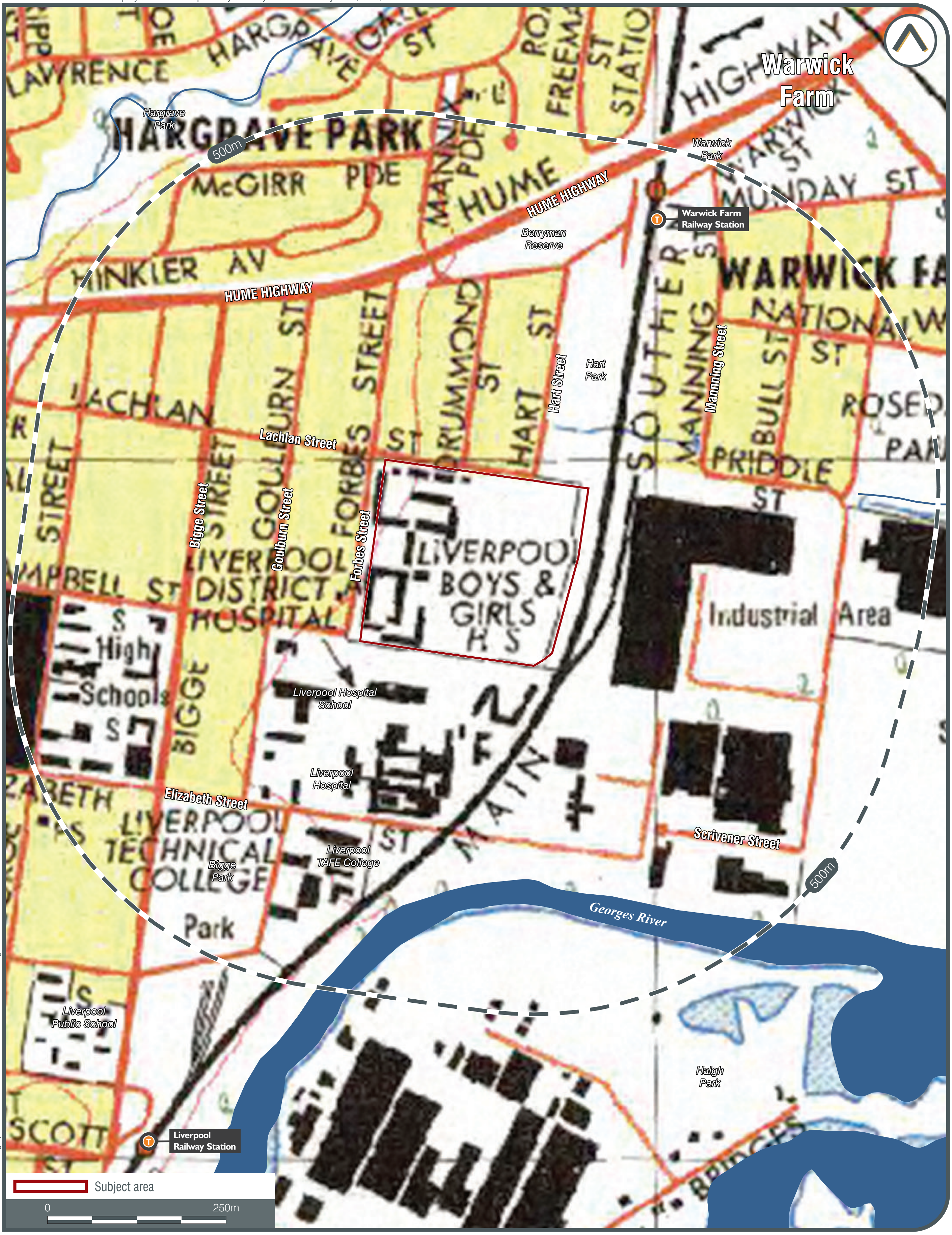
MAP 26

LIR-00861 Historic Zoning Map 1951 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

HISTORIC ZONING MAP - 1951

LAND INSIGHT & RESOURCES

MAP 27



LIR-00861 Aerial Photograph 2016 23 09 2019. Data source: Please refer to 'Digital Data Sources' in the Product Guide

1969-1991 TOPOGRAPHIC MAP SERIES (LIVERPOOL 9030-2S)

LAND INSIGHT & RESOURCES

MAP 28

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Appendix B – Borehole Logs

Environmental Log - Borehole

Hole ID.	**BH17**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: **Department of Education School Infrastructure NSW (SINSW)**

principal:

project: **Site and Building Contamination Assessment**

location: **Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
PT	Not Encountered	E: BH17_0.0-0.1	3.1					**TOPSOIL: SAND**: fine grained, brown, trace small sub-angular gravels.	D	L	no ACM / stains / odours observed Topsoil
		E: BH17_0.1-0.2	1.2					**FILL: Gravelly SAND**: fine to medium grained, brown, medium sub-angular gravels.	D	L	Fill
		E: BH17_0.3-0.4	0.3				CH	**CLAY**: high plasticity, red, grey mottled.	D	MD	Natural
					0.5						
		E: BH17_1.0-1.1	0.2		1.0						
								Borehole BH17 terminated at 1.30 m Target depth			
					1.5						

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH18**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: ***Department of Education School Infrastructure NSW (SINSW)***

principal:

project: ***Site and Building Contamination Assessment***

location: ***Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW***

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

drilling information | **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
SS	Not Encountered							**ASPHALT**.	D	L	no ACM / stains / odours observed
PT		E: BH18_0.1-0.2	1.1					**FILL: Gravelly SAND**: fine to medium grained, brown, small sub-angular gravels.	D		Fill
			1				CI	**CLAY**: medium plasticity, red, yellow and grey mottled.			Natural
		E: BH18_0.4-0.5			0.5						
		E: BH18_1.0-1.1	0.8		1.0						
					1.5						
			0.7		2.0						
			0.1		2.5						
								Borehole BH18 terminated at 2.60 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH19**
sheet:	1 of 1
project no.	**754-SYDEN231101**

client:	*Department of Education School Infrastructure NSW (SINSW)*	date started:	*03 Oct 2019*
principal:		date completed:	*03 Oct 2019*
project:	*Site and Building Contamination Assessment*	logged by:	*AL*
location:	*Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW*	checked by:	*DM*

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description: SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components	moisture condition	consistency / relative density	structure and additional observations
SS	Not Encountered							**ASPHALT**.	D	L	no ACM / stains / odours observed
PT		E: BH19_0.1-0.2	1.5					**FILL: Gravelly SAND**: fine to medium grained, brown, medium sub-angular gravels.	D		Fill
			0.2				CH-MH	**Silty CLAY**: high plasticity, black, high plasticity silt.	M	L / S	Natural
		E: BH19_0.3-0.4									
		E: BH19_0.5-0.6			0.5						
			0.2				CH	**CLAY**: high plasticity, red to grey, yellow mottled.	M	MD	
		E: BH19_1.0-1.1	0.2		1.0						
					1.5						
		E: BH19_2.0-2.1	0.2		2.0						
					2.5						
								Borehole BH19 terminated at 2.60 m Target depth			

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method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH20**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: **Department of Education School Infrastructure NSW (SINSW)**

principal:

project: **Site and Building Contamination Assessment**

location: **Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
SS	Not Encountered							**ASPHALT**.	D	L	no ACM / stains / odours observed
PT		E: BH20_0.1-0.2	1.1					**FILL: Gravelly SAND**: fine to medium grained, grey to brown.	D		Fill
							CI	**Silty CLAY**: medium plasticity, black.	M	L / S	Natural
		E: BH20_0.5-0.6	0.6		0.5		CH	**CLAY**: high plasticity, red, grey mottled.	M	MD	
		E: BH20_1.0-1.1	0.5		1.0						
					1.5			Borehole BH20 terminated at 1.30 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH21**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**04 Oct 2019**
date completed:	**04 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: ***Department of Education School Infrastructure NSW (SINSW)***

principal:

project: ***Site and Building Contamination Assessment***

location: ***Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW***

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
HA	Not Encountered	E: BH21_0.0-0.2	3.7					**FILL: Gravelly SAND**: fine to medium grained, grey, fine grained grey gravels.	D	L	no ACM / stains / odours observed Fill
		E: BH21_0.2-0.3	0.9					**FILL: CLAYEY SAND**: fine to medium grained, brown, medium plasticity red, grey clay, with some medium size sub-angular gravels.	D	L	
			0.5				CI	**CLAY**: medium plasticity, red, yellow mottled.	D	MD	Natural
		E: BH21_0.5-0.6			0.5						
		E: BH21_1.0-1.1	0.6		1.0						
								Borehole BH21 terminated at 1.20 m Target depth			
					1.5						

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH22**
sheet:	1 of 1
project no.	**754-SYDEN231101**
client:	**Department of Education School Infrastructure NSW (SINSW)**
principal:	
project:	**Site and Building Contamination Assessment**
location:	**Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AL**
checked by:	**DM**

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
PT	Not Encountered	E: BH22_0.0-0.1	2.3					**FILL: SAND**: fine to medium grained, brown, with some sub-angular medium sized black gravels.	D	L	no ACM / stains / odours observed Fill
			0.3				CL	**CLAY**: low plasticity, red, yellow mottled.	D	MD	Natural
		E: BH22_0.4-0.5			0.5						
		E: BH22_1.0-1.1	0.1		1.0						
								Borehole BH22 terminated at 1.30 m Target depth			
					1.5						

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH23**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: ***Department of Education School Infrastructure NSW (SINSW)***

principal:

project: ***Site and Building Contamination Assessment***

location: ***Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW***

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
SS	Not Encountered							**ASPHALT**.	D	L	no ACM / stains / odours observed
PT		E: BH23_0.1-0.2	0.8					**FILL: Gravelly SAND**: fine to medium grained, grey, medium sized sub-angular grey gravels.	D		Fill
			0.5				CI	**CLAY**: medium plasticity, red, trace medium sized sub-angular gravels.	D	MD	Reworked natural
		E: BH23_0.3-0.4									
		E: BH23_0.4-0.5	0.5		0.5			**FILL: Sandy GRAVEL**: fine grained, brown, fine to medium grained brown sand, with traces of medium plasticity clay.	D	MD	Fill
		E: BH23_0.6-0.7	0.1				CL	**CLAY**: low plasticity, red, yellow and grey mottled.	D	MD	Natural
					1.0						
		E: BH23_1.2-1.3	0.2								
					1.5			Borehole BH23 terminated at 1.30 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH24**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**04 Oct 2019**
date completed:	**04 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: **Department of Education School Infrastructure NSW (SINSW)**

principal:

project: **Site and Building Contamination Assessment**

location: **Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
HA	Not Encountered	E: BH24_0.0-0.1	1.7					**FILL: Gravelly SAND**: fine to medium grained, grey, fine grained white gravels, traces of plastic.	D	L	no ACM / stains / odours observed Fill
		E: BH24_0.1-0.2	1.1					**FILL: SAND**: fine grained, brown, trace glass and medium plasticity grey clay.			
							CI	**CLAY**: medium plasticity, grey to yellow, red mottled.	D	MD	Natural
		E: BH24_0.4-0.5	0.1		0.5						
		E: BH24_1.0-1.1	0.1		1.0						
								Borehole BH24 terminated at 1.10 m Target depth			
					1.5						

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH25**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: **Department of Education School Infrastructure NSW (SINSW)**

principal:

project: **Site and Building Contamination Assessment**

location: **Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

drilling information | **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description: SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components	moisture condition	consistency / relative density	structure and additional observations
SS	Not Encountered							**ASPHALT**.	D	L	no ACM / stains / odours observed
PT		E: BH25_0.1-0.2	1.7					**FILL: Gravelly SAND**: fine to medium grained, grey to brown, medium sub-angular grey gravels.	D		FIll
			0.1				CL	**CLAY**: low plasticity, red to grey.	D	MD	Natural
		E: BH25_0.4-0.5			0.5						
		E: BH25_1.0-1.1	0.2		1.0						
			0.3		1.5						
		E: BH25_2.0-2.1	0.2		2.0						
					2.5						
								Borehole BH25 terminated at 2.60 m Target depth			

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method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH26**
sheet:	1 of 1
project no.	**754-SYDEN231101**
client:	**Department of Education School Infrastructure NSW (SINSW)**
date started:	**03 Oct 2019**
principal:	
date completed:	**03 Oct 2019**
project:	**Site and Building Contamination Assessment**
logged by:	**AL**
location:	**Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**
checked by:	**DM**

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
SS	Not Encountered							**ASPHALT**.	D	L	no ACM / stains / odours observed
PT		E: BH26_0.1-0.2	14.6					**FILL: Gravelly SAND**: medium grained, brown, medium sized sub-angular gravels, some asphalt pieces.	D		FIll
		E: BH26_0.2-0.3									
			0.2				CI	**CLAY**: medium plasticity, red to grey to yellow.	M	S / MD	Natural
			0.3		0.5						
		E: BH26_0.7-0.8	0.2					becoming low plasticity at 0.7m bgs			
			0.3		1.0						
								Borehole BH26 terminated at 1.30 m Target depth			
					1.5						

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

Environmental Log - Borehole

Hole ID.	BH27
sheet:	1 of 1
project no.	754-SYDEN231101

client:	Department of Education School Infrastructure NSW (SINSW)	date started:	03 Oct 2019
principal:		date completed:	03 Oct 2019
project:	Site and Building Contamination Assessment	logged by:	AL
location:	Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW	checked by:	DM

position: Not Specified — surface elevation: Not Specified — angle from horizontal: 90°

equipment type: , Truck mounted — drilling fluid: — hole diameter : 50 mm

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
PT	Not Encountered	E: BH27_0.0-0.1	2.1					**FILL: Gravelly SAND**: fine to medium grained, brown, small sub-angular gravels.	D	L	no ACM / stains / odours observed Fill
		E: BH27_0.2-0.3	0.9					**FILL: CLAYEY SAND**: fine to medium grained, red, yellow.	D	MD	
		E: BH27_0.4-0.5	1.7					**FILL: ASH**: fine grained, blue, some small sub-angular gravels.	D	L	
					0.5		SC	**FILL: CLAYEY SAND**: fine to medium grained, brown, medium plasticity red, yellow clay.	D	MD	
		E: BH27_0.6-0.7	0.2				CL	**CLAY**: low plasticity, red, grey and yellow mottled.			Natural
			0.3		1.0						
								Borehole BH27 terminated at 1.30 m Target depth			
					1.5						

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method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Borehole

Hole ID.	**BH28**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AL**
checked by:	**DM**

client: **Department of Education School Infrastructure NSW (SINSW)**

principal:

project: **Site and Building Contamination Assessment**

location: **Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**

position: Not Specified | surface elevation: Not Specified | angle from horizontal: 90°

equipment type: , Truck mounted | drilling fluid: | hole diameter : 50 mm

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
HA	Not Encountered	E: BH28_0.0-0.1						**FILL: Gravelly SAND**: fine to medium grained, brown, small sub-angular gravels.	D	L	no ACM / stains / odours observed Fill
		E: BH28_0.2-0.3						**FILL: CLAYEY SAND**: fine to medium grained, brown, medium plasticity red, yellow clay.	D	MD	
		E: BH28_0.5-0.6			0.5		CI	**CLAY**: medium plasticity, red, grey and yellow mottled.	D		Natural
					1.0						
					1.5			Borehole BH28 terminated at 1.30 m Target depth			

CDF_0_9_07_LIBRARY.GLB rev:AU Log COF BOREHOLE: ENVIRONMENTAL LIVERPOOL BOYS AND GIRLS HIGH SCHOOL.GPJ <<DrawingFile>> 28/10/2019 09:51

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Test pit

Hole ID.	**TP07**
sheet:	1 of 1
project no.	**754-SYDEN231101**
client:	**Department of Education School Infrastructure NSW (SINSW)**
date started:	**03 Oct 2019**
principal:	
date completed:	**03 Oct 2019**
project:	**Site and Building Contamination Assessment**
logged by:	**AC**
location:	**Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**
checked by:	**DM**

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP07_0.0-0.1						**TOPSOIL: SAND**: fine to medium grained.	M		no ACM / stains / odours observed Topsoil
			0.8					**FILL: CLAY**: with some ash.	M		Fill
		E: TP07_0.4-0.5	0.9		0.5		CI	**CLAY**: orange, brown, white.	M		Natural
		E: TP07_0.9-1.0	0.7								
					1.0			Test pit TP07 terminated at 1.00 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Test pit

Hole ID.	**TP08**
sheet:	1 of 1
project no.	**754-SYDEN231101**
client:	**Department of Education School Infrastructure NSW (SINSW)**
date started:	**03 Oct 2019**
principal:	
date completed:	**03 Oct 2019**
project:	**Site and Building Contamination Assessment**
logged by:	**AC**
location:	**Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**
checked by:	**DM**

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information | **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP08_0.0-0.1	1.1					**FILL: CLAYEY SAND**: fine to medium grained, brown, low plasticity clay.	D		no ACM / stains / odours observed Fill
			0.9		0.5		CL	**CLAY**: brown, orange mottled, with some ironstone fragments.	D	St	Natural
		E: TP08_0.6-0.7									
					1.0			Test pit TP08 terminated at 0.70 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Test pit

Hole ID.	**TP09**
sheet:	1 of 1
project no.	**754-SYDEN231101**
client:	*Department of Education School Infrastructure NSW (SINSW)*
principal:	
project:	*Site and Building Contamination Assessment*
location:	*Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW*
date started:	*03 Oct 2019*
date completed:	*03 Oct 2019*
logged by:	*AC*
checked by:	*DM*

position: Not Specified | surface elevation: Not Specified | pit orientation:
equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information | **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP09_0.0-0.1	0.8				CL	**CLAY**: brown, orange.	D		no ACM / stains / odours observed Reworked clay
		E: TP09_0.4-0.5	0.9		0.5		CL	**CLAY**: orange.	D		Natural
		E: TP09_0.9-1.0	0.9		1.0						
								Test pit TP09 terminated at 1.00 m Target depth			

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method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Test pit

Hole ID.	**TP10**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**03 Oct 2019**
date completed:	**03 Oct 2019**
logged by:	**AC**
checked by:	**DM**

client: **Department of Education School Infrastructure NSW (SINSW)**

principal:

project: **Site and Building Contamination Assessment**

location: **Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**

position: Not Specified — surface elevation: Not Specified — pit orientation:

equipment type: 3.3t Excavator — excavation method: — excavation dimensions: 1.0 m long 0.3 m wide

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP10_0.0-0.1	0.8					**TOPSOIL: SAND**.	M		no ACM / stains / odours observed Topsoil
							CI	**CLAY**: brown, grey, orange.	M		Reworked clay
		E: TP10_0.4-0.5	0.9		0.5		CI	**CLAY**: orange, brown mottled.	D		Natural
		E: TP10_0.9-1.0	0.8		1.0						
								Test pit TP10 terminated at 1.00 m Target depth			

method		support		samples & field tests		moisture condition		consistency / relative density	
AD	auger drilling*	M	mud	ALT	air lift test	D	dry	VS	very soft
AS	auger screwing*	C	casing	B	bulk disturbed sample	M	moist	S	soft
HA	hand auger	N	nill	D	disturbed sample	W	wet	F	firm
MR	mud rotary			E	environmental sample	Wp	plastic limit	St	stiff
W	washbore			SS	split spoon sample	Wl	liquid limit	VSt	very stiff
PT	hand auger			U##	undisturbed sample ##mm diameter			H	hard
SS	push tube			WS	water sample			Fb	friable
	solid stem flight auger			HB	hammer bouncing			VL	very loose
*	bit shown by suffix			N	standard penetration test (SPT)			L	loose
e.g.	AD/T			N*	SPT - sample recovered			MD	medium dense
B	blank bit			Nc	SPT with solid cone			D	dense
T	TC bit			PID	photoionization detector			VD	very dense
V	V bit			R	refusal				

water
10-Oct-12 water level on date shown
water inflow
water outflow

soil group symbol & soil description
based on AS 1726:2017

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Environmental Log - Test pit

Hole ID.	**TP11**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**04 Oct 2019**
date completed:	**04 Oct 2019**
logged by:	**AC**
checked by:	**DM**

client: **Department of Education School Infrastructure NSW (SINSW)**

principal:

project: **Site and Building Contamination Assessment**

location: **Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP11_0.0-0.1	0.5					**TOPSOIL: Sandy GRAVEL**: blue, some low plasticity clay.	D		no ACM / stains / odours observed Topsoil
								FILL: CLAY: medium plasticity, red, brown.	M		Reworked clay
		E: TP11_0.4-0.5	0.5		0.5						
							CI	**CLAY**: white, grey mottled.	D		Natural
		E: TP11_0.9-1.0	0.5		1.0						
								Test pit TP11 terminated at 1.00 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Environmental Log - Test pit

Hole ID.	**TP12**
sheet:	1 of 1
project no.	**754-SYDEN231101**
client:	**Department of Education School Infrastructure NSW (SINSW)**
principal:	
project:	**Site and Building Contamination Assessment**
location:	**Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**
date started:	**04 Oct 2019**
date completed:	**04 Oct 2019**
logged by:	**AC**
checked by:	**DM**

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP12_0.0-0.1	0.7					**TOPSOIL: SAND**: brown, with some ash.	M		no ACM / stains / odours observed Topsoil
							CI	**CLAY**: orange, brown.	M		Reworked clay
		E: TP12_0.4-0.5	0.7		0.5		CI	**CLAY**: medium plasticity, brown.			Natural
		E: TP12_0.9-1.0	0.8		1.0						
								Test pit TP12 terminated at 1.00 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

coffey
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Environmental Log - Test pit

Hole ID.	**TP13**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**04 Oct 2019**
date completed:	**04 Oct 2019**
logged by:	**AC**
checked by:	**DM**

client: ***Department of Education School Infrastructure NSW (SINSW)***

principal:

project: ***Site and Building Contamination Assessment***

location: ***Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW***

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP13_0.0-0.1	0.7					**ASH-SLAG**: black, grey.			no ACM / stains / odours observed
		E: TP13_0.4-0.5	0.6		0.5		CI	**CLAY**: medium plasticity, brown, orange.			Natural
		E: TP13_0.9-1.0	0.8		1.0						
								Test pit TP13 terminated at 1.00 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

coffey
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Environmental Log - Test pit

Hole ID.	***TP14***
sheet:	1 of 1
project no.	***754-SYDEN231101***
date started:	***04 Oct 2019***
date completed:	***04 Oct 2019***
logged by:	***AC***
checked by:	***DM***

client: ***Department of Education School Infrastructure NSW (SINSW)***

principal:

project: ***Site and Building Contamination Assessment***

location: ***Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW***

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information / **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP14_0.0-0.1	0.8					**TOPSOIL: SILTY SAND**: fine to medium grained, brown.	M		no ACM / stains / odours observed Topsoil
								FILL: Sandy CLAY: medium plasticity, red, orange.	M		Reworked clay
		E: TP14_0.4-0.5	0.7		0.5		CI	**CLAY**: medium plasticity, white, orange, brown.	M		Natural
		E: TP14_0.9-1.0	0.6		1.0			Test pit TP14 terminated at 1.00 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

coffey
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Environmental Log - Test pit

Hole ID.	**TP15**
sheet:	1 of 1
project no.	**754-SYDEN231101**
date started:	**04 Oct 2019**
date completed:	**04 Oct 2019**
logged by:	**AC**
checked by:	**DM**

client: ***Department of Education School Infrastructure NSW (SINSW)***

principal:

project: ***Site and Building Contamination Assessment***

location: ***Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW***

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP15_0.0-0.1	0.7				**TOPSOIL: Sandy GRAVEL**: brown.	M		no ACM / stains / odours observed Topsoil
		E: TP15_0.4-0.5	0.8		0.5	CL	**CLAY**: low plasticity, white, grey, brown.	M		Natural
		E: TP15_0.9-1.0	0.8		1.0					
							Test pit TP15 terminated at 1.00 m Target depth			

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method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

coffey
A TETRA TECH COMPANY

Environmental Log - Test pit

Hole ID.	***TP16***
sheet:	1 of 1
project no.	***754-SYDEN231101***
client:	***Department of Education School Infrastructure NSW (SINSW)***
date started:	***04 Oct 2019***
principal:	
date completed:	***04 Oct 2019***
project:	***Site and Building Contamination Assessment***
logged by:	***AC***
location:	***Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW***
checked by:	***DM***

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information						material substance					
method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description **SOIL NAME**: plasticity or particle characteristic, colour, secondary and minor components	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP16_0.0-0.1	0.7					**TOPSOIL: Gravelly SAND**: fine to medium grained, blue.	M		no ACM / stains / odours observed Topsoil
							CI	**CLAY**: medium plasticity, brown.	M		Natural
		E: TP16_0.4-0.5	0.6		0.5						
		E: TP16_0.9-1.0	0.6		1.0						
								Test pit TP16 terminated at 1.00 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

coffey
A TETRA TECH COMPANY

Environmental Log - Test pit

Hole ID.	**TP29**
sheet:	1 of 1
project no.	**754-SYDEN231101**

client:	**Department of Education School Infrastructure NSW (SINSW)**	date started:	**04 Oct 2019**
principal:		date completed:	**04 Oct 2019**
project:	**Site and Building Contamination Assessment**	logged by:	**AC**
location:	**Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**	checked by:	**DM**

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information | **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description (SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components)	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP29_0.0-0.1	0.8					**TOPSOIL: SAND**: blue.			no ACM / stains / odours observed Topsoil
								FILL: CLAY: medium plasticity, brown.	M		Reworked clay
		E: TP29_0.4-0.5	0.9		0.5		CI	**CLAY**: medium plasticity, orange, brown.	M		Natural
		E: TP29_0.9-1.0	0.9		1.0						
								Test pit TP29 terminated at 1.00 m Target depth			

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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coffey
A TETRA TECH COMPANY

Environmental Log - Test pit

Hole ID.	**TP30**		
sheet:	1 of 1		
project no.	**754-SYDEN231101**		
client:	**Department of Education School Infrastructure NSW (SINSW)**	date started:	**04 Oct 2019**
principal:		date completed:	**04 Oct 2019**
project:	**Site and Building Contamination Assessment**	logged by:	**AC**
location:	**Liverpool Boys and Girls High School, Lachlan Street Liverpool NSW**	checked by:	**DM**

position: Not Specified | surface elevation: Not Specified | pit orientation:

equipment type: 3.3t Excavator | excavation method: | excavation dimensions: 1.0 m long 0.3 m wide

drilling information | **material substance**

method & support	water	samples & field tests	photoionization detector (ppmv)	RL (m)	depth (m)	graphic log	soil group symbol	material description SOIL NAME: plasticity or particle characteristic, colour, secondary and minor components	moisture condition	consistency / relative density	structure and additional observations
E	Not Encountered	E: TP30_0.0-0.1	0.8					**TOPSOIL: SAND**.	D		no ACM / stains / odours observed Topsoil
							CI	**CLAY**: orange, brown mottled.	M		Natural
		E: TP30_0.3-0.4	0.9								
					0.5						
		E: TP30_0.8-0.9	0.8								
								Test pit TP30 terminated at 0.90 m Target depth			
					1.0						

CDF_0_9_07_LIBRARY.GLB rev:AU Log COF BOREHOLE: ENVIRONMENTAL LIVERPOOL BOYS AND GIRLS HIGH SCHOOL.GPJ <<DrawingFile>> 28/10/2019 09:51

method
AD auger drilling*
AS auger screwing*
HA hand auger
MR mud rotary
W washbore
PT hand auger
SS push tube
solid stem flight auger
* bit shown by suffix
e.g. AD/T
B blank bit
T TC bit
V V bit

support
M mud
C casing
N nill

water
10-Oct-12 water level on date shown
water inflow
water outflow

samples & field tests
ALT air lift test
B bulk disturbed sample
D disturbed sample
E environmental sample
SS split spoon sample
U## undisturbed sample ##mm diameter
WS water sample
HB hammer bouncing
N standard penetration test (SPT)
N* SPT - sample recovered
Nc SPT with solid cone
PID photoionization detector
R refusal

soil group symbol & soil description
based on AS 1726:2017

moisture condition
D dry
M moist
W wet
Wp plastic limit
Wl liquid limit

consistency / relative density
VS very soft
S soft
F firm
St stiff
VSt very stiff
H hard
Fb friable
VL very loose
L loose
MD medium dense
D dense
VD very dense

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Appendix C – Site Photographs

Photo 1. TP04

Photo 2. TP03

Photo 3. TP13

Photo 4. BH18

Photo 5. Heritage sewer pumping station located in Girls High on southern boundary

Photo 6. View looking south across Boys High carpark. BH26 is located in foreground.

Photo 7. BH25

Photo 8. Location of BH24 in courtyard

Photo 9. BH23

Photo 10. BH2

Photo 11: Beneath Block A in Boys High School

Photo12: Area adjacent to BH17 looking south west

Appendix D – Data Quality Objectives

Data Quality Objectives

Step 1 - State the Problem

SINSW is proposing to redevelop the property to increase capacity of the school. Various options are being considered which a final decision yet to be made. It is assumed the preferred option will likely include a multi-storey building(s) along the eastern boundary and southern boundary with the majority of the school open space. It is unclear if Mainsbridge School will be part of the redevelopment.

SINSW want to undertake this site contamination assessment to identify potential current and historical sources of contamination, potential CoPC that may present as a constraint to the proposed development and provide an opinion on the impacts to the proposed redevelopment in accordance with applicable legislation.

Step 2 - Identify the Decisions

The decisions to be made based on the results of the investigation were as follows:

- What are the CoPC associated with potential soil contamination at the site?
- Are CoPC present within soil, and if so, do they present an unacceptable risk to human health for the proposed development of the site?
- If soil contamination is present, does the site require remediation works and/or a management plan prior to the commencement of the construction phase of works?

Step 3 - Identify Inputs in the Decision

The inputs required to make the above decisions were as follows:

- Site setting and available background information.
- Selection of appropriate Tier 1 soil assessment criteria.
- Visual observations.
- Field and laboratory analytical results.

Step 4 - Define Boundaries of the Study

The boundaries of the investigation were identified as follows:

- The geographical limits appropriate for the data collection and decision making in this investigation comprised the boundary assessment area as shown on Figure 1 in Appendix A of this report.
- Temporal boundaries: The current status of the sampling points at the time of the investigation.
- Constraints within the study boundary: Constraints to the investigation are outlined in methodology section of this report.

Step 5 - Develop a Decision Rule

The purpose of this step was to define the parameter of interest, specify the action level and combine the outputs of the previous DQO steps into an ‘if/then’ decision rule that defines the conditions that would cause the decision maker to choose alternative actions.

If the levels of contaminants of potential concern in soil were below the adopted soil assessment criteria, the risk to human health and the environment could be considered to be low for that land use.

If concentrations of contaminants in soil exceed the adopted soil assessment criteria, consideration for statistical analysis of the dataset should be undertaken to support the need or otherwise for further assessment, remediation or site management. These decision rules include the 95% upper confidence limit (UCL) of the mean contaminant concentration being less than the adopted site assessment criteria, the standard deviation being less than 50% and no individual concentration being in excess of 250% of the site assessment criteria (for similar soil types).

The spatial extent of data should be considered to assess whether additional data gaps require investigation.

If the quality control (QC) results meet the data quality indicators (DQI), then the analytical data is considered suitable and reliable for the purpose of this contamination investigation.

Step 6 - Specify Limits on Decision Errors

There are two types of decision errors:

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

The null hypothesis, which is an assumption assumed to be true in the absence of contrary evidence, for this study is ‘The site is contaminated and thus not suitable for use’.

These errors may lead to the following decision errors:

- Type I error - Rejecting the hypothesis as false when it is really true: Deciding that contamination is not present when the reverse is true; and
- Type II error - Accepting the hypothesis as true when it is really false: Deciding that contamination is present when the reverse is true.

An assessment will be made as to the likelihood of a decision error being made based on the results of a QA/QC assessment and the closeness of the data to assessment criteria. Additionally, statistical methods such as 95% Upper Confidence Limit (UCL) calculations may be utilised, where applicable.

The acceptable limits on decision errors applied during this investigation and the manner of addressing possible decision errors were developed based on the data quality indicators (DQIs) of:

- Accuracy: a quantitative measure of the closeness of reported data to the true value;
- Comparability: a qualitative parameter expressing the confidence with which one (1) data set can be compared with another;
- Completeness: a measure of the amount of useable data (expressed as %) from a data collection activity;

Step 7 - Optimise the Design

The purpose of this step was to identify a resource-effective data collection design for generating data that satisfies the DQOs.

This assessment was designed considering the information provided during the request for proposal.

A proposal was prepared for the limited contamination assessment which outlined a proposed scope. The methodology within the proposal was reviewed at critical times during the project and amended where necessary based on site conditions, unexpected finds, professional judgement and liaison with CGA. The methodology adopted to satisfy the DQOs is described in detail in Section 7.

To ensure the design satisfied the DQOs, DQIs (for accuracy, comparability, completeness, precision and reproducibility) were established to set acceptance limits on field methodologies and laboratory data collected.

Data Quality Indicators

A summary of the field and laboratory DQIs for the DSI are provided in Table B1.

Table B1: Data Quality Indicators (DQIs)

Field Considerations	Laboratory Considerations	Comments
	Accuracy (bias)	
Work instructions (WI) are appropriate and have been complied with.	Analysis of: • Trip blanks; • Rinsate blanks; • Reagent blanks; • Method blanks; • Matrix spikes; • Surrogate spikes; • Reference material; • Laboratory control samples; and • Laboratory-prepared spikes.	Bias introduced: • By chemicals during handling or transport; • From contaminated equipment; • From contaminated reagent; • During laboratory analysis; • During laboratory preparation and analysis (may be high or low); • During laboratory preparation and analysis (may be high or low); • Precision of preparation of analytical method; • Precision of preparation of analytical method; and • During collection/transport (may be high or low).
	Comparability	
Same WIs used on each occasion. **Experienced sampler.** **Climatic conditions (temperature, rainfall, wind).** **Same types of samples collected (filtered, size fractions).**	Sample analytical methods used (including clean-up). Laboratory practical quantification limits (PQLs) (justify /quantify if different). Same laboratories (justify /quantify if different). Same units (justify /quantify if different).	Same approach to sampling (WIs, holding times). Quantify influence from climatic or physical conditions. Samples collected, preserved, handled in same manner (filtered, same containers).

Table B1: Data Quality Indicators (DQIs)		
Field Considerations	**Laboratory Considerations**	**Comments**
	Completeness	
Critical locations sampled. **WIs appropriate and complied with.** **Experienced sampler.** **Documentation correct.**	Critical samples analysed in accordance with the tender response. Analytes sampled in accordance with scope of works. Appropriate methods and PQLs. Sample documentation correct. Sample holding times complied with.	The required percentage completeness should be specified in the scope of works. Required data must be obtained from critical samples and CoPC. Incompleteness is influenced by: • Field performance problems (access problems, difficulties on site, damage); • Laboratory performance problems (Matrix interference, invalid holding times); and • Matrix problems.
	Representativeness	
Appropriate media sampled according to the scope of works. **Media in the scope of works sampled.**	Samples analysed according to the tender response.	Samples must be collected to reflect characteristics of each medium. Sample analysis must reflect properties of field samples. Homogeneity of the samples. Appropriate collection, handling, storage and preservation. Detection of laboratory artefacts, e.g. contamination blanks.
	Precision	
WIs appropriate and complied with.	Analysis of: • Laboratory and inter-laboratory duplicates; • Laboratory prepared trip spikes; and • Field duplicates.	Measured by the coefficient of variance or standard deviation of the mean or Relative Percentage. Field duplicates measure field and laboratory precision Difference (RPD) calculations. Variation in RPDs can be expected to be higher for organics, low concentrations (<5 x laboratory PQL) or non-homogenous samples.

Acceptable limits adopted for data quality indicators for this DSI are outlined in Table B2.

Table B2: Acceptable Limits of Data Quality Indicators

Item	Acceptable Limit
Analysis of blind (intra-laboratory) duplicates and split (inter-laboratory) duplicates	Rate of 1:20 primary samples for the same analysis of primary samples; Calculation of relative percentage differences between primary and duplicate samples, the results of which to be less than: • 80% (where the average concentration was 1-10 x laboratory PQL); • 50% (where the average concentration was 10-30 x laboratory PQL); and • 30% (where the average concentration was > 30 x laboratory PQL).
Analysis of rinsate blanks	Rate of one (1) sample per batch; and Results less than the laboratory PQL.
Analysis of trip blanks	Rate of one (1) sample per batch; and Results less than the laboratory PQL.
Analysis of trip spikes	Rate of one (1) sample per batch; and Results between 70%-130%.
Analysis of laboratory blanks, spikes, surrogates, reference and control samples	Laboratory specific
Laboratories and methods used	National Association of Testing Authorities accredited.
Sample PQLs	Results less than the adopted assessment criteria; justify/quantify if different.

Appendix E – Data Validation

Coffey Services Australia Pty Ltd

A.B.N. 55 139 460 521

DATA VALIDATION REPORT

Job No: SYDEN231101

Soil Analysis - Lab Batch References: 681511 & 684836 (Liverpool High School), 681503 & 684834 (Liverpool West Public School) & ES1933131 (ALS)

I. SAMPLE HANDLING

	Yes	No (Comment below)
1. Were the sample **holding times** met?	☒	☐
2. Were the samples in **proper custody** between the field and reaching the laboratory?	☒	☐
3. Were the samples **properly and adequately** preserved? *This includes keeping the samples chilled, where applicable.*	☒	☐
4. Were the samples received by the laboratory in good condition?	☒	☐

COMMENTS:

Sample Handling was: ☒ Satisfactory ☐ Partially Satisfactory ☐ Unsatisfactory

Coffey Services Australia Pty Ltd

A.B.N. 55 139 460 521

DATA VALIDATION REPORT

Job No: SYDEN231101

Soil Analysis - Lab Batch References: 681511 & 684836 (Liverpool High School), 681503 & 684834 (Liverpool West Public School) & ES1933131 (ALS)

II PRECISION/ACCURACY ASSESSMENT

	Yes	No (Comment below)
1. Was a NATA registered laboratory used?	☒	☐
2. Did the laboratory perform the requested tests?	☒	☐
3. Were the laboratory methods adopted NATA endorsed?	☒	☐
4. Were the appropriate test procedures followed?	☒	☐
5. Were the reporting limits satisfactory?	☒	☐
6. Was the NATA Seal on the reports?	☒	☐
7. Were the reports signed by an authorised person?	☒	☐

COMMENTS:

Precision/Accuracy of the Laboratory Report	☒ Satisfactory ☐ Partially Satisfactory	☐ Unsatisfactory

DATA VALIDATION REPORT
Job No: SYDEN231101
Soil Analysis - Lab Batch References: 681511 & 684836 (Liverpool High School), 681503 & 684834 (Liverpool West Public School) & ES1933131 (ALS)

III. FIELD QA/QC

1. Number of Soil Samples Analysed: 79
2. Number of Days of Sampling: 3

3. Number and Type of QA/QC Samples Collected:

Quality Control Sample Type	No.	% Total No. Samples
Intra-lab Duplicates (Soil)	5	6.3%
Inter-lab Triplicates	3	3.8%
Equipment Rinsate	2	-

4. FIELD DUPLICATES

	Yes	**No** (Comment below)
A. Were an Adequate Number of field duplicates and triplicates analysed for each chemical?	☒	☐
B. Were RPDs within Control Limits? Acceptable RPDs: RPD <= 30% RPD > 30%, Analysis result < 10 times LOR RPD <= 50%, Analysis result > 10 times LOR and < 20 times LOR	☐	☒

COMMENTS:

Calculated RPDs have been presented in Table 2, Appendix B (soil).
In general, the comparison of primary and duplicate and primary and triplicate samples demonstrated good reproducibility, when the LOR was considered except for one exceedance for zinc in TP10_0.1-0.2.

Reasons determined for variance reported between the primary/triplicate samples include:

- The heterogeneity of fill between primary and duplicate soil sample. Field observations recorded variability in PAH's (RPD 30%) within fill materials on site. The collection and analysis of samples from fill units are expected to yield some degree of variation between primary and the duplicate sample.

6. EQUIPMENT RINSATE SAMPLES

	Yes	No (Comment below)
A. Were an adequate number of Equipment Rinsate Samples collected?	☒	☐
B. Were the Equipment Rinsate Samples free of contaminants?	☒	☐

Field QA/QC was:	☒ Satisfactory ☐ Partially Satisfactory	☐ Unsatisfactory

V LABORATORY INTERNAL QUALITY CONTROL PROCEDURES

1. Type of QA/QC Samples

	Yes	No
Laboratory Blanks/Reagent Blanks	☒	☐
Laboratory Duplicates	☒	☐
Matrix Spikes/Matrix Spike Duplicates	☒	☐
Laboratory Control Spike	☒	☐
Surrogate (where appropriate)*	☒	☐

	Yes	No (Comment below)
2 Were the laboratory blanks/reagents blanks free of contamination?	☒	☐
3. Were the spike recoveries within control limits?		
a. Organics (70% to 130%)	☒	☐
b. Metals/Inorganic (70% to 130%)	☐	☒
4. Were the RPDs of the laboratory duplicates within control limits?	☒	☐
5. Were the surrogate recoveries within control limits?	☒	☐

COMMENTS:

- Spike recoveries were within acceptable limits except for chromium (152%), copper (161%), zinc (132%), lead (143%) and nickel (138%). The laboratory concluded an acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

The above comments relate to intra-lab and inter-lab duplicate samples collected as a measure of field quality control. The above discrepancies were considered minor in relation to the overall assessment of contamination at this site.

5. The laboratory internal QA/QC was:	☒ Satisfactory ☐ Partially Satisfactory	☐ Unsatisfactory

VI DATA USABILITY

1.	Data Directly Usable	☒
2.	Data Usable with the following considerations	☐
3.	Data Not Usable.	☐

COMMENTS:

N/A

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Appendix F – Site Assessment Criteria

Soil Health Investigation Levels (HILs)

HILs relevant to HIL A (low-density residential and is applicable for primary schools) land use were adopted from ASC NEPM 2013.

HILs are deemed applicable for assessing human health risk via all relevant exposure pathways of exposure for metals and organic substances. HILs are concentrations below which contaminants in soils are not considered to adversely affect human health. The adopted HILs for assessment of soil are presented in Table T1.

Soil Health Screening Levels (HSLs)

Soil HSLs are provided in ASC NEPM 2013 for selected petroleum compounds and fractions and are considered applicable to assessing human health risk via vapour intrusion and inhalation. The HSLs depend on specific soil physicochemical properties, land use scenarios, and the characteristics of building structures. They apply to different soil types, and depths below surface to >4m bgl.

Soil HSLs were also adopted from CRCCARE 2011 to assess the exposure pathway of:

- Direct contact (oral ingestion, dermal contact and dust inhalation) for HSL A (low density residential, applicable for primary schools) and intrusive maintenance workers; and
- Vapour intrusion for intrusive maintenance workers (maximum trench depth of 1.0 m).

As a conservative approach, a sandy soil type and depth of 0 - 1 m was adopted. Workers working in deeper excavations are anticipated to have their own management plan as part of the work, health and safety procedures.

The soil HSLs adopted are presented in Table T1.

Petroleum Hydrocarbon Management Limits

Petroleum hydrocarbon management limits provided in ASC NEPM 2013 were considered applicable for assessing petroleum hydrocarbons in soil to avoid or minimise the following potential effects of petroleum hydrocarbon contamination:

- Formation of observable light non-aqueous phase liquid (LNAPL);
- Fire and explosion hazards;
- Effects on buried infrastructure (i.e. penetration of, or damage to, in-ground services by hydrocarbons); and
- Aesthetics.

The management limits adopted are presented in Table T1.

Ecological investigation levels

Ecological Investigation Levels (EILs) have been developed for selected metals and organic substances and are applicable for assessing potential risk to terrestrial ecosystems. EILs depend on specific soil physicochemical properties and land use scenarios and generally apply to the top 2 m of soil. Generic EILs for aged arsenic, aged lead, aged dichlorodiphenyltrichloroethane (DDT) and aged naphthalene were adopted. Site specific EIL's were calculated for chromium, copper, nickel and zinc using site specific soil physiochemical properties (pH), clay content, total organic content, iron and cation exchange capacity (CEC). These properties were analysed at two sample locations within the same medium with the mean average of the samples used.

The ABC of a contaminant is the soil concentration in a specified locality that is the sum of the naturally occurring background level and the contaminant levels that have been introduced from diffuse or non-point sources by general anthropogenic activity not attributed to industrial, commercial, or agricultural activities, for example, motor vehicle emissions. In the absence of physiochemical parameters to calculate site specific EILs for chromium (III), nickel and zinc the DHSH 1995 was referred to for derivation of ambient background concentrations for the site. For the purpose of this assessment, results for urban soil, old suburbs, Low traffic using the 25th percentile were applied.

An added contaminant limit (ACL) is the added concentration (above the ABC) of a contaminant above which further appropriate investigation and evaluation of the impact on ecological values is required. ACLs are based on the soil characteristics of pH, cation exchange capacity (CEC) and clay content.

ESLs are concentrations of contaminants above which further appropriate investigation and evaluation will be required. They were developed for select petroleum hydrocarbons; they depend on specific soil physicochemical properties and land use scenarios and generally apply to the top 2 m of soil (NEPC, 2013). As a conservative approach, ESLs for coarse grained soils were adopted as outlined in the table below.

Adopted EILs for this assessment are outlined in Table T1.

Ecological screening levels

ESLs are concentrations of contaminants above which further appropriate investigation and evaluation will be required. They were developed for select petroleum hydrocarbons; they depend on specific soil physicochemical properties and land use scenarios and generally apply to the top 2 m of soil (NEPC, 2013). As a conservative approach, ESLs for coarse grained soils (urban, residential and public open spaces) were adopted as outlined in Table T1.

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Appendix G – Calibration Certificates

PID Calibration Certificate

Instrument **PhoCheck Tiger**
Serial No. **T-115200**

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PID	✓	10.6 ev			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm		
Software	Version	✓				
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Post sampling results

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		91.2ppm

Calibrated by: **Sen Philip**

Calibration date: **2/10/2019**

Next calibration due: **1/11/2019**

PID Calibration Certificate

Instrument **PhoCheck Tiger**
Serial No. **T-114176**

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PID	✓	10.6 ev			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm		
Software	Version	✓				
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		91.7ppm

Calibrated by: Sarah Lian **Sarah Lian**

Calibration date: **1/10/2019**

Next calibration due: **29/03/2020**

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Appendix H – Analytical Results Tables

coffey

Field_ID	Sampled_Date_Time	Matrix_TYPE	Lab_Report_Number	Asbestos	Heavy Metal									Inorganic
				Asbestos	Arsenic	Cadmium	Chromium (III+VI)	Hexavalent Chromium	Copper	Lead	Mercury	Nickel	Zinc	Moisture Content (dried @ 103°C)
				g/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%
EQL					2	0.4	5	5	5	5	0.1	5	5	1
HSL-A Residential (Low Desnity) Direct Contact														
HSL-D Commercial/Industrial Intrusive Maintenance Worker														
NEPM 2013 Table 1A(1) HILs Res A Soil					100	20	100^	100	6000	300	40	400	7400	
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand 0-1m														
NEPM 2013 EILs Urban residential and public open space Aged Soil					100		250		220	1100		350	400	
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil														
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil														
A08507	02-Oct-19	SOIL	681511	NAD	12	<0.4	13	-	13	23	<0.1	<5	54	12
A08508	02-Oct-19	SOIL	681511	NAD	14	<0.4	30	-	110	95	0.2	6.9	240	9.7
A08509	02-Oct-19	SOIL	681511	NAD	9.1	<0.4	23	-	52	88	<0.1	19	1800	3.2
A08526	02-Oct-19	SOIL	681511	NAD	14	<0.4	26	-	28	23	0.4	<5	34	6.5
A08570	02-Oct-19	SOIL	681511	NAD	22	0.6	34	-	410	140	0.7	12	270	7.3
BH17_0.1-0.2	03-Oct-19	SOIL	681511	NAD	13	<0.4	44	-	39	120	0.2	27	130	14
BH18_0.1-0.2	03-Oct-19	SOIL	681511	NAD	8.1	<0.4	76	-	23	38	0.1	52	58	9.7
BH18_0.4-0.5	03-Oct-19	SOIL	681511	-	6.3	<0.4	28	-	14	23	<0.1	7.6	18	24
BH19_0.1-0.2	03-Oct-19	SOIL	681511	-	7.3	<0.4	42	-	31	17	<0.1	6.9	30	20
BH19_0.5-0.6	03-Oct-19	SOIL	681511	-	4.3	<0.4	20	-	7.9	28	<0.1	7.7	9.8	19
BH20_0.1-0.2	03-Oct-19	SOIL	681511	-	7.8	<0.4	45	-	38	67	<0.1	39	93	19
BH21_0.2-0.3	04-Oct-19	SOIL	681511	NAD	12	<0.4	22	-	21	59	0.1	6.2	62	18
BH22_0.0-0.1	03-Oct-19	SOIL	681511	NAD	24	<0.4	39	-	10	30	<0.1	6.9	19	12
BH22_0.4-0.5	03-Oct-19	SOIL	681511	-	21	<0.4	56	-	14	22	<0.1	<5	10	26
BH23_0.3-0.4	03-Oct-19	SOIL	681511	-	8.3	<0.4	22	-	12	18	<0.1	<5	8.5	16
BH24_0.1-0.2	04-Oct-19	SOIL	681511	NAD	10	<0.4	18	-	16	86	0.4	<5	32	26
BH24_0.4-0.5	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	24
BH25_0.1-0.2	03-Oct-19	SOIL	681511	-	2.4	<0.4	120	-	33	<5	<0.1	120	66	9.1
BH25_0.4-0.5	03-Oct-19	SOIL	681511	-	7.4	<0.4	20	-	7.6	15	<0.1	8.7	8.1	12
BH26_0.1-0.2	03-Oct-19	SOIL	681511	NAD	2.5	<0.4	150	<1	33	10	<0.1	110	55	17
BH26_0.7-0.8	03-Oct-19	SOIL	681511	-	7.4	<0.4	19	-	12	18	<0.1	<5	6.4	20
BH27_0.2-0.3	03-Oct-19	SOIL	681511	NAD	7.3	<0.4	25	-	30	39	0.2	24	55	16
BH27_0.6-0.7	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	27
BH28_0.2-0.3	03-Oct-19	SOIL	681511	-	5.7	<0.4	22	-	15	54	<0.1	12	280	24
TP07_0.0-0.1	03-Oct-19	SOIL	681511	NAD	230	<0.4	<5	-	12	7	0.1	6.3	8.7	17
TP07_0.4-0.5	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	18
TP08_0.0-0.1	03-Oct-19	SOIL	683170	-	55	<0.4	6.8	-	7.7	12	<0.1	7.7	21	11
TP09_0.0-0.1	03-Oct-19	SOIL	683170	-	16	<0.4	22	-	12	20	<0.1	<5	12	15
TP09_0.4-0.5	03-Oct-19	SOIL	683170	-	6.3	<0.4	20	-	6.8	14	<0.1	<5	<5	15
TP10_0.0-0.1	03-Oct-19	SOIL	681511	-	20	<0.4	10	-	14	24	<0.1	5.1	45	26
TP10_0.9-1.0	03-Oct-19	SOIL	681511	-	5.8	<0.4	24	-	9.8	18	<0.1	<5	9	17
TP11_0.0-0.1	04-Oct-19	SOIL	681511	NAD	5.2	<0.4	7.2	-	12	23	<0.1	<5	44	8.7
TP12_0.0-0.1	04-Oct-19	SOIL	681511	-	56	<0.4	<5	-	11	11	<0.1	6.9	15	16
TP12_0.4-0.5	04-Oct-19	SOIL	681511	-	5.1	<0.4	23	-	11	16	<0.1	6.8	13	20
TP13_0.0-0.1	04-Oct-19	SOIL	681511	NAD	3.7	<0.4	5.8	-	22	17	<0.1	17	19	17
TP13_0.4-0.5	04-Oct-19	SOIL	681511	-	4.1	<0.4	22	-	10	19	<0.1	5.1	11	16
TP14_0.0-0.1	04-Oct-19	SOIL	681511	-	<2	<0.4	5.1	-	<5	11	<0.1	<5	11	7
TP15_0.0-0.1	04-Oct-19	SOIL	681511	NAD	3	<0.4	6.5	-	7.2	16	<0.1	<5	20	7.3
TP15_0.4-0.5	04-Oct-19	SOIL	681511	-	6.4	<0.4	21	-	<5	27	<0.1	7	8	8.4
TP16_0.0-0.1	04-Oct-19	SOIL	681511	-	5.9	<0.4	13	-	11	26	<0.1	<5	38	13
TP29_0.0-0.1	04-Oct-19	SOIL	681511	NAD	8.6	<0.4	20	-	72	150	<0.1	<5	87	12
TP29_0.4-0.5	04-Oct-19	SOIL	681511	-	15	<0.4	28	-	8.9	25	<0.1	7.5	22	8.6
TP30_0.0-0.1	04-Oct-19	SOIL	681511	NAD	10	<0.4	32	-	16	18	<0.1	9.8	20	17

Field_ID	OCP																							
	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin aldehyde	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.1	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
HSL-A Residential (Low Desnity) Direct Contact																								
HSL-D Commercial/Industrial Intrusive Maintenance Worker																								
NEPM 2013 Table 1A(1) HILs Res A Soil						6		50				240							10		6		10	300
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand 0-1m																								
NEPM 2013 EILs Urban residential and public open space Aged Soil											180													
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
A08507	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08509	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08526	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH18_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH18_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH19_0.5-0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH21_0.2-0.3	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH22_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH22_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_0.3-0.4	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH24_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH24_0.4-0.5	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH25_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH25_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH26_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH26_0.7-0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH27_0.2-0.3	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH27_0.6-0.7	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
BH28_0.2-0.3	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP07_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP07_0.4-0.5	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP08_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP10_0.9-1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP12_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP12_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP13_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP15_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP15_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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
TP29_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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

Field_ID	Sampled_Date_Time	Matrix_TYPE	Lab_Report_Number		OPP																																			
				Toxaphene	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethion	Fenitrothion	Fensulfothion	Fenthion	EPN	Merphos	Malathion	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Parathion	Phorate	Pirimiphos-methyl	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorvinphos	C6-C9	C10-C16
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				1	0.2	0.2	0.2	0.2	0.2	0.2	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	2	0.2	2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	20	50
HSL-A Residential (Low Desnity) Direct Contact																																								3300
HSL-D Commercial/Industrial Intrusive Maintenance Worker																																								62000
NEPM 2013 Table 1A(1) HILs Res A Soil				20					160																															
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand 0-1m																																								
NEPM 2013 EILs Urban residential and public open space Aged Soil																																								
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																																								1000
A08507	02-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
A08508	02-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
A08509	02-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
A08526	02-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
A08570	02-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
BH17_0.1-0.2	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH18_0.1-0.2	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH18_0.4-0.5	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
BH19_0.1-0.2	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH19_0.5-0.6	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
BH20_0.1-0.2	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH21_0.2-0.3	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH22_0.0-0.1	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH22_0.4-0.5	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
BH23_0.3-0.4	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH24_0.1-0.2	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH24_0.4-0.5	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH25_0.1-0.2	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH25_0.4-0.5	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
BH26_0.1-0.2	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH26_0.7-0.8	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
BH27_0.2-0.3	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
BH27_0.6-0.7	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
BH28_0.2-0.3	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP07_0.0-0.1	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP07_0.4-0.5	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-
TP08_0.0-0.1	03-Oct-19	SOIL	683170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP09_0.0-0.1	03-Oct-19	SOIL	683170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP09_0.4-0.5	03-Oct-19	SOIL	683170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP10_0.0-0.1	03-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP10_0.9-1.0	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP11_0.0-0.1	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP12_0.0-0.1	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP12_0.4-0.5	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP13_0.0-0.1	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP13_0.4-0.5	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP14_0.0-0.1	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP15_0.0-0.1	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP15_0.4-0.5	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP16_0.0-0.1	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP29_0.0-0.1	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50
TP29_0.4-0.5	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	<50
TP30_0.0-0.1	04-Oct-19	SOIL	681511	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<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	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<20	<50

coffey

				Organic							PAH																												
				C16-C34	C34-C40	C6-C10	C10-C40 (Sum of total)	C10-C16 (F2 minus Naphthalene)	Naphthalene	C6-C10 (F1 minus BTEX)	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(g,h,i)perylene	Benzo(b+j)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	3/4-Methylphenol (m/p-cresol)	2,4-Dinitrophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				100	100	20	100	50	0.5	20	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	5	1	1	0.5	0.5	0.5	0.5	0.2
HSL-A Residential (Low Desnity) Direct Contact				4500	6300				1400	4400																													
HSL-D Commercial/Industrial Intrusive Maintenance Worker				85000	120000				29000	82000																													
NEPM 2013 Table 1A(1) HILs Res A Soil																3	3						3							300									
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand 0-1m								110	3	45																	3												
NEPM 2013 EILs Urban residential and public open space Aged Soil																											170												
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil				1300	5600			120		180					0.7																								
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil				2500	10000	700																																	
Field_ID	Sampled_Date_Time	Matrix_TYPE	Lab_Report_Number																																				
A08507	02-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
A08508	02-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
A08509	02-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5
A08526	02-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
A08570	02-Oct-19	SOIL	681511	110	<100	<20	110	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH17_0.1-0.2	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH18_0.1-0.2	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH18_0.4-0.5	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH19_0.1-0.2	03-Oct-19	SOIL	681511	<100	150	<20	150	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH19_0.5-0.6	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH20_0.1-0.2	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH21_0.2-0.3	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH22_0.0-0.1	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH22_0.4-0.5	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH23_0.3-0.4	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH24_0.1-0.2	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH24_0.4-0.5	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_0.1-0.2	03-Oct-19	SOIL	681511	220	310	<20	530	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH25_0.4-0.5	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH26_0.1-0.2	03-Oct-19	SOIL	681511	<100	130	<20	130	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH26_0.7-0.8	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH27_0.2-0.3	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
BH27_0.6-0.7	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH28_0.2-0.3	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP07_0.0-0.1	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP07_0.4-0.5	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08_0.0-0.1	03-Oct-19	SOIL	683170	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP09_0.0-0.1	03-Oct-19	SOIL	683170	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP09_0.4-0.5	03-Oct-19	SOIL	683170	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP10_0.0-0.1	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP10_0.9-1.0	03-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP11_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP12_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP12_0.4-0.5	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP13_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP13_0.4-0.5	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP14_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP15_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP15_0.4-0.5	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP16_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP29_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP29_0.4-0.5	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2
TP30_0.0-0.1	04-Oct-19	SOIL	681511	<100	<100	<20	<100	<50	<0.5	<20	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2

coffey

				SVOC											TPH				Volatile					
				2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-Nitrophenol	4-chloro-3-methylphenol	Dinoseb	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				1	5	20	5	1	20	1	0.5	10	1	20	20	50	50	50	0.1	0.1	0.1	0.2	0.1	0.3
HSL-A Residential (Low Desnity) Direct Contact																			100	450	14000			12000
HSL-D Commercial/Industrial Intrusive Maintenance Worker																			1100	8500	120000			130000
NEPM 2013 Table 1A(1) HILs Res A Soil										100	3000													
NEPM 2013 Table 1A(3) Res A/B Soil HSL for Vapour Intrusion, Sand 0-1m																			0.5	55	160			40
NEPM 2013 EILs Urban residential and public open space Aged Soil																								
NEPM 2013 Table 1B(6) ESLs for Urban Res, Coarse Soil																			50	70	85			105
NEPM 2013 Table 1B(7) Management Limits in Res / Parkland, Coarse Soil																								
Field_ID	**Sampled_Date_Time**	**Matrix_TYPE**	**Lab_Report_Number**																					
A08507	02-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08508	02-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08509	02-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	57	64	121	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08526	02-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08570	02-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	58	67	125	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH17_0.1-0.2	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH18_0.1-0.2	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH18_0.4-0.5	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH19_0.1-0.2	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	72	72	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH19_0.5-0.6	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH20_0.1-0.2	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH21_0.2-0.3	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH22_0.0-0.1	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH22_0.4-0.5	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH23_0.3-0.4	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH24_0.1-0.2	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH24_0.4-0.5	04-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_0.1-0.2	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	77	250	327	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH25_0.4-0.5	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH26_0.1-0.2	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	100	100	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH26_0.7-0.8	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH27_0.2-0.3	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH27_0.6-0.7	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH28_0.2-0.3	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP07_0.0-0.1	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP07_0.4-0.5	03-Oct-19	SOIL	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08_0.0-0.1	03-Oct-19	SOIL	683170	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP09_0.0-0.1	03-Oct-19	SOIL	683170	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP09_0.4-0.5	03-Oct-19	SOIL	683170	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP10_0.0-0.1	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP10_0.9-1.0	03-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP11_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP12_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP12_0.4-0.5	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP13_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP13_0.4-0.5	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP14_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP15_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP15_0.4-0.5	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP16_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP29_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP29_0.4-0.5	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP30_0.0-0.1	04-Oct-19	SOIL	681511	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

coffey

Field_ID	Sampled_Date_Time	Lab_Report_Number	Asbestos	Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	Moisture Content (dried @ 103°C)
			Asbestos	Heavy Metal								Inorganic
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%
EQL				2	0.4	5	5	5	0.1	5	5	1
NSW 2014 General Solid Waste CT1 (No Leaching)				100	20			100	4	40		
NSW 2014 Restricted Solid Waste CT2 (No Leaching)				400	80			400	16	160		
A08507	02-Oct-19	681511	NAD	12	<0.4	13	13	23	<0.1	<5	54	12
A08508	02-Oct-19	681511	NAD	14	<0.4	30	110	95	0.2	6.9	240	9.7
A08509	02-Oct-19	681511	NAD	9.1	<0.4	23	52	88	<0.1	19	1800	3.2
A08526	02-Oct-19	681511	NAD	14	<0.4	26	28	23	0.4	<5	34	6.5
A08570	02-Oct-19	681511	NAD	22	0.6	34	410	140	0.7	12	270	7.3
BH17_0.1-0.2	03-Oct-19	681511	NAD	13	<0.4	44	39	120	0.2	27	130	14
BH18_0.1-0.2	03-Oct-19	681511	NAD	8.1	<0.4	76	23	38	0.1	52	58	9.7
BH18_0.4-0.5	03-Oct-19	681511	-	6.3	<0.4	28	14	23	<0.1	7.6	18	24
BH19_0.1-0.2	03-Oct-19	681511	-	7.3	<0.4	42	31	17	<0.1	6.9	30	20
BH19_0.5-0.6	03-Oct-19	681511	-	4.3	<0.4	20	7.9	28	<0.1	7.7	9.8	19
BH20_0.1-0.2	03-Oct-19	681511	-	7.8	<0.4	45	38	67	<0.1	39	93	19
BH21_0.2-0.3	04-Oct-19	681511	NAD	12	<0.4	22	21	59	0.1	6.2	62	18
BH22_0.0-0.1	03-Oct-19	681511	NAD	24	<0.4	39	10	30	<0.1	6.9	19	12
BH22_0.4-0.5	03-Oct-19	681511	-	21	<0.4	56	14	22	<0.1	<5	10	26
BH23_0.3-0.4	03-Oct-19	681511	-	8.3	<0.4	22	12	18	<0.1	<5	8.5	16
BH24_0.1-0.2	04-Oct-19	681511	NAD	10	<0.4	18	16	86	0.4	<5	32	26
BH24_0.4-0.5	04-Oct-19	681511	-	-	-	-	-	-	-	-	-	24
BH25_0.1-0.2	03-Oct-19	681511	-	2.4	<0.4	120	33	<5	<0.1	120	66	9.1
BH25_0.4-0.5	03-Oct-19	681511	-	7.4	<0.4	20	7.6	15	<0.1	8.7	8.1	12
BH26_0.1-0.2	03-Oct-19	681511	NAD	2.5	<0.4	150	33	10	<0.1	110	55	17
BH26_0.7-0.8	03-Oct-19	681511	-	7.4	<0.4	19	12	18	<0.1	<5	6.4	20
BH27_0.2-0.3	03-Oct-19	681511	NAD	7.3	<0.4	25	30	39	0.2	24	55	16
BH27_0.6-0.7	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	27
BH28_0.2-0.3	03-Oct-19	681511	-	5.7	<0.4	22	15	54	<0.1	12	280	24
TP01_0.0-0.1	03-Oct-19	681511	NAD	4	<0.4	7	8.3	19	<0.1	<5	10	24
TP07_0.0-0.1	03-Oct-19	681511	NAD	230	<0.4	<5	12	7	0.1	6.3	8.7	17
TP07_0.4-0.5	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	18
TP08_0.0-0.1	03-Oct-19	683170	-	55	<0.4	6.8	7.7	12	<0.1	7.7	21	11
TP09_0.0-0.1	03-Oct-19	683170	-	16	<0.4	22	12	20	<0.1	<5	12	15
TP09_0.4-0.5	03-Oct-19	683170	-	6.3	<0.4	20	6.8	14	<0.1	<5	<5	15
TP10_0.0-0.1	03-Oct-19	681511	-	20	<0.4	10	14	24	<0.1	5.1	45	26
TP10_0.9-1.0	03-Oct-19	681511	-	5.8	<0.4	24	9.8	18	<0.1	<5	9	17
TP11_0.0-0.1	04-Oct-19	681511	NAD	5.2	<0.4	7.2	12	23	<0.1	<5	44	8.7
TP12_0.0-0.1	04-Oct-19	681511	-	56	<0.4	<5	11	11	<0.1	6.9	15	16
TP12_0.4-0.5	04-Oct-19	681511	-	5.1	<0.4	23	11	16	<0.1	6.8	13	20
TP13_0.0-0.1	04-Oct-19	681511	NAD	3.7	<0.4	5.8	22	17	<0.1	17	19	17
TP13_0.4-0.5	04-Oct-19	681511	-	4.1	<0.4	22	10	19	<0.1	5.1	11	16
TP14_0.0-0.1	04-Oct-19	681511	-	<2	<0.4	5.1	<5	11	<0.1	<5	11	7
TP15_0.0-0.1	04-Oct-19	681511	NAD	3	<0.4	6.5	7.2	16	<0.1	<5	20	7.3
TP15_0.4-0.5	04-Oct-19	681511	-	6.4	<0.4	21	<5	27	<0.1	7	8	8.4
TP16_0.0-0.1	04-Oct-19	681511	-	5.9	<0.4	13	11	26	<0.1	<5	38	13
TP29_0.0-0.1	04-Oct-19	681511	NAD	8.6	<0.4	20	72	150	<0.1	<5	87	12
TP29_0.4-0.5	04-Oct-19	681511	-	15	<0.4	28	8.9	25	<0.1	7.5	22	8.6
TP30_0.0-0.1	04-Oct-19	681511	NAD	10	<0.4	32	16	18	<0.1	9.8	20	17

Field_ID	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	chlordane	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endrin aldehyde	Endrin ketone	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Toxaphene
	OCP																								
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.1	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	1
NSW 2014 General Solid Waste CT1 (No Leaching)																									
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																									
A08507	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08508	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08509	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08526	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH18_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH18_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH19_0.5-0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH21_0.2-0.3	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH22_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH22_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_0.3-0.4	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH24_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH24_0.4-0.5	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH25_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH25_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH26_0.1-0.2	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH26_0.7-0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH27_0.2-0.3	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH27_0.6-0.7	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
BH28_0.2-0.3	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP01_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP07_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP07_0.4-0.5	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP08_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP10_0.9-1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP12_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP12_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP13_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP15_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP15_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1
TP29_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30_0.0-0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<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	<1

Field_ID	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos	Dimethoate	Disulfoton
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	0.2	0.2	0.2	0.2	0.2
NSW 2014 General Solid Waste CT1 (No Leaching)					4								
NSW 2014 Restricted Solid Waste CT2 (No Leaching)					16								
A08507	-	-	-	-	-	-	-	-	-	-	-	-	-
A08508	-	-	-	-	-	-	-	-	-	-	-	-	-
A08509	-	-	-	-	-	-	-	-	-	-	-	-	-
A08526	-	-	-	-	-	-	-	-	-	-	-	-	-
A08570	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_0.1-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH18_0.1-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH18_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_0.1-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH19_0.5-0.6	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_0.1-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH21_0.2-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH22_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH22_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_0.3-0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH24_0.1-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH24_0.4-0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH25_0.1-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH25_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
BH26_0.1-0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH26_0.7-0.8	-	-	-	-	-	-	-	-	-	-	-	-	-
BH27_0.2-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH27_0.6-0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH28_0.2-0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP01_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP07_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP07_0.4-0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP08_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP10_0.9-1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP12_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP12_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP13_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP15_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP15_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16_0.0-0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP29_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30_0.0-0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

coffey

OPP

Field_ID	Sampled_Date_Time	Lab_Report_Number	Ethoprop	Ethion	Fenitrothion	Fensulfothion	Fenthion	EPN	Merphos	Malathion	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Parathion	Phorate	Pirimiphos-methyl	Pyrazophos	Ronnel	Terbufos	Trichloronate	Tetrachlorvinphos
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2	0.2	2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NSW 2014 General Solid Waste CT1 (No Leaching)																							
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																							
A08507	02-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08508	02-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08509	02-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08526	02-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A08570	02-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH17_0.1-0.2	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH18_0.1-0.2	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH18_0.4-0.5	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH19_0.1-0.2	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH19_0.5-0.6	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH20_0.1-0.2	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH21_0.2-0.3	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH22_0.0-0.1	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH22_0.4-0.5	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH23_0.3-0.4	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH24_0.1-0.2	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH24_0.4-0.5	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH25_0.1-0.2	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH25_0.4-0.5	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH26_0.1-0.2	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH26_0.7-0.8	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH27_0.2-0.3	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH27_0.6-0.7	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
BH28_0.2-0.3	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP01_0.0-0.1	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP07_0.0-0.1	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP07_0.4-0.5	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP08_0.0-0.1	03-Oct-19	683170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.0-0.1	03-Oct-19	683170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP09_0.4-0.5	03-Oct-19	683170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10_0.0-0.1	03-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP10_0.9-1.0	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11_0.0-0.1	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP12_0.0-0.1	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP12_0.4-0.5	04-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP13_0.0-0.1	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP13_0.4-0.5	04-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14_0.0-0.1	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP15_0.0-0.1	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP15_0.4-0.5	04-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16_0.0-0.1	04-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29_0.0-0.1	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TP29_0.4-0.5	04-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30_0.0-0.1	04-Oct-19	681511	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Organic

Field_ID	C6-C9	C10-C16	C16-C34	C34-C40	C6-C10	C10-C40 (Sum of total)	C10-C16 (F2 minus Naphthalene)	Naphthalene	C6-C10 (F1 minus BTEX)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	20	50	100	100	20	100	50	0.5	20
NSW 2014 General Solid Waste CT1 (No Leaching)	650								
NSW 2014 Restricted Solid Waste CT2 (No Leaching)	2600								
A08507	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
A08508	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
A08509	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
A08526	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
A08570	<20	<50	110	<100	<20	110	<50	<0.5	<20
BH17_0.1-0.2	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH18_0.1-0.2	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH18_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH19_0.1-0.2	<20	<50	<100	150	<20	150	<50	<0.5	<20
BH19_0.5-0.6	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH20_0.1-0.2	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH21_0.2-0.3	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH22_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH22_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH23_0.3-0.4	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH24_0.1-0.2	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH24_0.4-0.5	-	-	-	-	-	-	-	-	-
BH25_0.1-0.2	<20	<50	220	310	<20	530	<50	<0.5	<20
BH25_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH26_0.1-0.2	<20	<50	<100	130	<20	130	<50	<0.5	<20
BH26_0.7-0.8	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH27_0.2-0.3	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
BH27_0.6-0.7	-	-	-	-	-	-	-	-	-
BH28_0.2-0.3	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP01_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP07_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP07_0.4-0.5	-	-	-	-	-	-	-	-	-
TP08_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP09_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP09_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP10_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP10_0.9-1.0	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP11_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP12_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP12_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP13_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP13_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP14_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP15_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP15_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP16_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP29_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP29_0.4-0.5	<20	<50	<100	<100	<20	<100	<50	<0.5	<20
TP30_0.0-0.1	<20	<50	<100	<100	<20	<100	<50	<0.5	<20

PAH

Field_ID	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(a)pyrene TEQ calc (Half)	Benzo(a)pyrene TEQ (LOR)	Benzo(g,h,i)perylene	Benzo(b+j)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NSW 2014 General Solid Waste CT1 (No Leaching)					0.8														
NSW 2014 Restricted Solid Waste CT2 (No Leaching)					3.2														
A08507	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A08508	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A08509	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A08526	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A08570	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH17_0.1-0.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH18_0.1-0.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH18_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH19_0.1-0.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH19_0.5-0.6	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH20_0.1-0.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH21_0.2-0.3	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH22_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH22_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH23_0.3-0.4	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH24_0.1-0.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH24_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_0.1-0.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH25_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH26_0.1-0.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH26_0.7-0.8	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH27_0.2-0.3	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BH27_0.6-0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH28_0.2-0.3	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP01_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP07_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP07_0.4-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP09_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP09_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP10_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP10_0.9-1.0	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP11_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP12_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP12_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP13_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP13_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP14_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP15_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP15_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP16_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP29_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP29_0.4-0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TP30_0.0-0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

				SVOC																				TPH				Volatile						
			PAHs (Sum of total)	3/4-Methylphenol (m/p-cresol)	2,4-Dinitrophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,6-Dichlorophenol	2-Chlorophenol	2-Methylphenol	2-Nitrophenol	4,6-Dinitro-2-methylphenol	4,6-Dinitro-o-cyclohexyl phenol	4-Nitrophenol	4-chloro-3-methylphenol	Dinoseb	Pentachlorophenol	Phenol	Tetrachlorophenols	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	3/4-Methylphenol (m/p-cresol)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL			0.5	0.4	5	1	1	0.5	0.5	0.5	0.5	0.2	1	5	20	5	1	20	1	0.5	10	1	20	20	50	50	50	0.2	0.1	0.1	0.1	0.2	0.1	0.3
NSW 2014 General Solid Waste CT1 (No Leaching)			200			8000	40					4000															10000		10	600	288			1000
NSW 2014 Restricted Solid Waste CT2 (No Leaching)			800			32000	160					16000															40000		40	2400	1152			4000
Field_ID	**Sampled_Date_Time**	**Lab_Report_Number**																																
A08507	02-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08508	02-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08509	02-Oct-19	681511	<0.5	<0.5	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	57	64	121	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08526	02-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
A08570	02-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	58	67	125	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH17_0.1-0.2	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH18_0.1-0.2	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH18_0.4-0.5	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH19_0.1-0.2	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	72	72	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH19_0.5-0.6	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH20_0.1-0.2	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH21_0.2-0.3	04-Oct-19	681511	0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH22_0.0-0.1	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH22_0.4-0.5	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH23_0.3-0.4	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH24_0.1-0.2	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH24_0.4-0.5	04-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH25_0.1-0.2	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	77	250	327	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH25_0.4-0.5	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH26_0.1-0.2	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	100	100	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH26_0.7-0.8	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH27_0.2-0.3	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
BH27_0.6-0.7	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH28_0.2-0.3	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP01_0.0-0.1	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP07_0.0-0.1	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP07_0.4-0.5	03-Oct-19	681511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP08_0.0-0.1	03-Oct-19	683170	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	-	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP09_0.0-0.1	03-Oct-19	683170	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	-	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP09_0.4-0.5	03-Oct-19	683170	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	-	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP10_0.0-0.1	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP10_0.9-1.0	03-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP11_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP12_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP12_0.4-0.5	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP13_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP13_0.4-0.5	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP14_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP15_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP15_0.4-0.5	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP16_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP29_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP29_0.4-0.5	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3
TP30_0.0-0.1	04-Oct-19	681511	<0.5	<0.4	<5	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.2	<1	<5	<20	<5	<1	<20	<1	<0.5	<10	<1	<20	<20	<50	<50	<50	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.3

Field Duplicates (soil)
Filter: SDG in('09 Oct 2019')

Method_Type	ChemName	Units	EQL																								
			SDG	09-Oct-19	09-Oct-19		09-Oct-19	09-Oct-19		09-Oct-19	09-Oct-19		09-Oct-19	09-Oct-19		09-Oct-19	09-Oct-19		09-Oct-19	09-Oct-19		09-Oct-19	09-Oct-19		09-Oct-19	09-Oct-19	
			Field ID	TP04_0.0-0.1	DUP02	**RPD**	TP04_0.0-0.1	TRIP01	**RPD**	TP10_0.0-0.1	DUP03	**RPD**	TP10_0.0-0.1	TRIP02	**RPD**	TP11_0.0-0.1	DUP05	**RPD**	TP11_0.0-0.1	TRIP04	**RPD**	TP13_0.0-0.1	DUP08	**RPD**	TP14_0.0-0.1	DUP06	**RPD**
			Sampled Date/Time	03-10-19	03-10-19		03-10-19	03-10-19		03-10-19	03-10-19		03-10-19	03-10-19		04-10-19	04-10-19		04-10-19	04-10-19		04-10-19	04-10-19		04-10-19	04-10-19	
SVOC	3/4-Methylphenol (m/p-cresol)	mg/kg	0.4	<0.4	<0.4	ND	<0.4	-	ND	<0.4	<0.4	ND	<0.4	-	ND	<0.4	<0.4	ND	<0.4	-	ND	<0.4	<0.4	ND	<0.4	<0.4	ND
Volatile	3/4-Methylphenol (m/p-cresol)	mg/kg	0.2	<0.2	<0.2	ND	<0.2	-	ND					-						-							
	Benzene	mg/kg	0.1	<0.1	<0.1	ND	<0.1	<0.2	ND	<0.1	<0.1	ND	<0.1	<0.2	ND	<0.1	<0.1	ND	<0.1	<0.2	ND	<0.1	<0.1	ND	<0.1	<0.1	ND
	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.1	ND
	Toluene	mg/kg	0.1	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.1	ND
	Xylene (m & p)	mg/kg	0.2	<0.2	<0.2	ND	<0.2	<0.5	ND	<0.2	<0.2	ND	<0.2	<0.5	ND	<0.2	<0.2	ND	<0.2	<0.5	ND	<0.2	<0.2	ND	<0.2	<0.2	ND
	Xylene (o)	mg/kg	0.1	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.5	ND	<0.1	<0.1	ND	<0.1	<0.1	ND
	Xylene Total	mg/kg	0.3	<0.3	<0.3	ND	<0.3	<0.5	ND	<0.3	<0.3	ND	<0.3	<0.5	ND	<0.3	<0.3	ND	<0.3	<0.5	ND	<0.3	<0.3	ND	<0.3	<0.3	ND
SVOC	2,4-Dinitrophenol	mg/kg	5	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	<5	ND
	2,4,5-Trichlorophenol	mg/kg	1	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	<1	ND
	2,4,6-Trichlorophenol	mg/kg	1	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	<1	ND
	2,4-Dichlorophenol	mg/kg	0.5	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	2,4-Dimethylphenol	mg/kg	0.5	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	2,6-Dichlorophenol	mg/kg	0.5	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	2-Chlorophenol	mg/kg	0.5	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	2-Methylphenol	mg/kg	0.2	<0.2	<0.2	ND	<0.2	-	ND	<0.2	<0.2	ND	<0.2	-	ND	<0.2	<0.2	ND	<0.2	-	ND	<0.2	<0.2	ND	<0.2	<0.2	ND
	2-Nitrophenol	mg/kg	1	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	<1	ND
	4,6-Dinitro-2-methylphenol	mg/kg	5	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	<5	ND
	4,6-Dinitro-o-cyclohexyl phenol	mg/kg	20	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	<20	ND
	4-Nitrophenol	mg/kg	5	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	-	ND	<5	<5	ND	<5	<5	ND
	4-chloro-3-methylphenol	mg/kg	1	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	<1	ND
	Pentachlorophenol	mg/kg	1	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	<1	ND
	Phenol	mg/kg	0.5	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	-	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Tetrachlorophenols	mg/kg	10	<10	<10	ND	<10	-	ND	<10	<10	ND	<10	-	ND	<10	<10	ND	<10	-	ND	<10	<10	ND	<10	<10	ND
	Phenols (Total Halogenated)	mg/kg	1	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	-	ND	<1	<1	ND	<1	<1	ND
	Phenols (Total Non Halogenated)	mg/kg	20	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	<20	ND
Organic	C6-C10	mg/kg	20	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<20	ND
	C6-C10 (F1 minus BTEX)	mg/kg	20	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<20	ND
SVOC	Dinoseb	mg/kg	20	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	-	ND	<20	<20	ND	<20	<20	ND
Heavy Metal	Arsenic	mg/kg	2	9.8	6.1	47%	9.8	9	9%	**20**	**10**	67%	**20**	9	76%	5.2	4	26%	5.2	9	54%	**3.7**	**<2**	ND	**<2**	**4.3**	ND
	Cadmium	mg/kg	0.4	<0.4	<0.4	ND	<0.4	<1	ND	<0.4	<0.4	ND	<0.4	<1	ND	<0.4	<0.4	ND	<0.4	<1	ND	<0.4	<0.4	ND	<0.4	<0.4	ND
	Chromium (III+VI)	mg/kg	5	18	12	40%	18	18	0%	10	11	10%	10	18	57%	7.2	7.6	5%	7.2	18	86%	5.8	<5	ND	**5.1**	**8.8**	53%
	Copper	mg/kg	5	11	10	10%	11	14	24%	**14**	**5.3**	90%	**14**	14	0%	12	8.8	31%	12	14	15%	22	16	32%	<5	7.5	ND
	Lead	mg/kg	5	31	28	10%	31	30	3%	**24**	**13**	59%	**24**	30	22%	23	16	36%	23	30	26%	**17**	**9.2**	60%	**11**	**22**	67%
	Mercury	mg/kg	0.1	<0.1	<0.1	ND	<0.1	<0.1	ND	<0.1	<0.1	ND	<0.1	<0.1	ND	<0.1	<0.1	ND	<0.1	<0.1	ND	<0.1	<0.1	ND	<0.1	<0.1	ND
	Nickel	mg/kg	5	<5	<5	ND	<5	4	ND	5.1	<5	ND	5.1	4	24%	<5	<5	ND	<5	4	ND	17	13	27%	<5	<5	ND
	Zinc	mg/kg	5	48	44	9%	48	45	6%	**45**	**13**	**110%**	**45**	45	0%	44	28	44%	44	45	2%	19	16	17%	11	13	17%
Organic	Naphthalene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<1	ND	<0.5	<0.5	ND	<0.5	<1	ND	<0.5	<0.5	ND	<0.5	<1	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
PAH	Acenaphthene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Anthracene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Benzo(a) pyrene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Benzo(a)pyrene TEQ calc (Half)	mg/kg	0.5	0.6	0.6	0%	0.6	0.6	0%	0.6	0.6	0%	0.6	0.6	0%	0.6	0.6	0%	0.6	0.6	0%	0.6	0.6	0%	0.6	0.6	0%
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	1.2	1.2	0%	1.2	1.2	0%	1.2	1.2	0%	1.2	1.2	0%	1.2	1.2	0%	1.2	1.2	0%	1.2	1.2	0%	1.2	1.2	0%
	Benzo(g,h,i)perylene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Benzo(b+j)fluoranthene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Chrysene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Dibenz(a,h)anthracene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Benzo(a)pyrene TEQ calc (Zero)	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Fluorene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Naphthalene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	Pyrene	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
	PAHs (Sum of total)	mg/kg	0.5	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND	<0.5	<0.5	ND
Organic	C6-C9	mg/kg	20	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<10	ND	<20	<20	ND	<20	<20	ND
	C10-C16	mg/kg	50	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND
	C16-C34	mg/kg	100	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND
	C34-C40	mg/kg	100	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND	<100	<100	ND
	C10-C40 (Sum of total)	mg/kg	100	<100	<100	ND	<100	<50	ND	<100	<100	ND	<100	<50	ND	<100	<100	ND	<100	<50	ND	<100	<100	ND	<100	<100	ND
	C10-C16 (F2 minus Naphthalene)	mg/kg	50	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND
TPH	C10-C14	mg/kg	20	<20	<20	ND	<20	<50	ND	<20	<20	ND	<20	<50	ND	<20	<20	ND	<20	<50	ND	<20	<20	ND	<20	<20	ND
	C15-C28	mg/kg	50	<50	<50	ND	<50	<100	ND	<50	<50	ND	<50	<100	ND	<50	<50	ND	<50	<100	ND	<50	<50	ND	<50	<50	ND
	C29-C36	mg/kg	50	<50	<50	ND	<50	<100	ND	<50	<50	ND	<50	<100	ND	<50	<50	ND	<50	<100	ND	<50	<50	ND	<50	<50	ND
	+C10-C36 (Sum of total)	mg/kg	50	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND	<50	<50	ND

*RPDs have only been considered where a concentration is greater than 0 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (0-10 x EQL); 50 (10-20 x EQL); 30 (> 20 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory
ND = Not Detected (RPDs not calculated if both primary and duplicate results are below LOR)
- = Not analysed/calculated
Acceptable RPD RPD <= 30%
RPD > 30%, Analyis result < 10 times LOR
RPD <= 50%, Analysis result > 10 times LOR and < 20 times LOR

Field Blanks (WATER)
Filter: Lab_Report_Number in('681503')

			Lab Report Number	681503	681503	681503	681503	681503	681503
			Field ID	R01	R02	TB2	TB1	TS2	TS2
			Sampled_Date/Time	02-10-19	03-10-19	03-10-19	02-10-19	03-10-19	02-10-19
			Sample Type	Rinsate	Rinsate	Trip_B	Trip_B	Trip_S	Trip_S
Method_Type	**ChemName**	**Units**	**EQL**						
Heavy Metal	Arsenic	mg/l	0.001	<0.001	-	-	-	-	-
	Cadmium	mg/l	0.0002	<0.0002	-	-	-	-	-
	Chromium (III+VI)	mg/l	0.001	<0.001	-	-	-	-	-
	Copper	mg/l	0.001	<0.001	-	-	-	-	-
	Lead	mg/l	0.001	<0.001	-	-	-	-	-
	Mercury	mg/l	0.0001	<0.0001	-	-	-	-	-
	Nickel	mg/l	0.001	<0.001	-	-	-	-	-
	Zinc	mg/l	0.005	<0.005	-	-	-	-	-
Organic	C6-C9	mg/l	0.02	<0.02	-	-	-	-	-
	C10-C16	µg/l	50	<50	-	-	-	-	-
	C16-C34	µg/l	100	<100	-	-	-	-	-
	C34-C40	µg/l	100	<100	-	-	-	-	-
	C6-C10	µg/l	20	<20	-	-	-	-	-
	C10-C40 (Sum of total)	µg/l	100	<100	-	-	-	-	-
	C10-C16 (F2 minus Naphthalene)	µg/l	50	<50	-	-	-	-	-
	Naphthalene	µg/l	10	<10	-	-	-	-	-
	C6-C10 (F1 minus BTEX)	µg/l	20	<20	-	-	-	-	-
PAH	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	-	-	-	-	-
	Benzo(b+j)fluoranthene	mg/l	0.001	<0.001	-	-	-	-	-
	Benzo(k)fluoranthene	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	-	-	-	-	-
	PAHs (Sum of total)	µg/l	1	<1	-	-	-	-	-
SVOC	3/4-Methylphenol (m/p-cresol)	mg/l	0.006	<0.006	-	-	-	-	-
	2,4-Dinitrophenol	mg/l	0.03	<0.03	-	-	-	-	-
	2,4,5-Trichlorophenol	µg/l	10	<10	-	-	-	-	-
	2,4,6-Trichlorophenol	µg/l	10	<10	-	-	-	-	-
	2,4-Dichlorophenol	µg/l	3	<3	-	-	-	-	-
	2,4-Dimethylphenol	µg/l	3	<3	-	-	-	-	-
	2,6-Dichlorophenol	µg/l	3	<3	-	-	-	-	-
	2-Chlorophenol	µg/l	3	<3	-	-	-	-	-
	2-Methylphenol	µg/l	3	<3	-	-	-	-	-
	2-Nitrophenol	µg/l	10	<10	-	-	-	-	-
	4,6-Dinitro-2-methylphenol	µg/l	30	<30	-	-	-	-	-
	4,6-Dinitro-o-cyclohexyl phenol	µg/l	100	<100	-	-	-	-	-
	4-Nitrophenol	µg/l	30	<30	-	-	-	-	-
	4-chloro-3-methylphenol	µg/l	10	<10	-	-	-	-	-
	Dinoseb	µg/l	100	<100	-	-	-	-	-
	Pentachlorophenol	µg/l	10	<10	-	-	-	-	-
	Phenol	µg/l	3	<3	-	-	-	-	-
	Tetrachlorophenols	µg/l	30	<30	-	-	-	-	-
	Phenols (Total Halogenated)	mg/l	0.01	<0.01	-	-	-	-	-
	Phenols (Total Non Halogenated)	mg/l	0.1	<0.1	-	-	-	-	-
TPH	C10-C14	µg/l	50	<50	-	-	-	-	-
	C15-C28	µg/l	100	<100	-	-	-	-	-
	C29-C36	µg/l	100	<100	-	-	-	-	-
	+C10-C36 (Sum of total)	µg/l	100	<100	-	-	-	-	-
BTEX	Benzene	µg/l	1	<1	<1	-	-	-	-
	Ethylbenzene	µg/l	1	<1	<1	-	-	-	-
	Toluene	µg/l	1	<1	<1	-	-	-	-
	Xylene (m & p)	µg/l	2	<2	<2	-	-	-	-
	Xylene (o)	µg/l	1	<1	<1	-	-	-	-
	Xylene Total	µg/l	3	<3	<3	-	-	-	-
BTEX	Benzene	mg/kg	0.1	-	-	<0.1	<0.1	-	-
	Ethylbenzene	mg/kg	0.1	-	-	<0.1	<0.1	-	-
	Toluene	mg/kg	0.1	-	-	<0.1	<0.1	-	-
	Xylene (m & p)	mg/kg	0.2	-	-	<0.2	<0.2	-	-
	Xylene (o)	mg/kg	0.1	-	-	<0.1	<0.1	-	-
	Xylene Total	mg/kg	0.3	-	-	<0.3	<0.3	-	-
BTEX	Benzene	%	1	-	-	-	-	100	95
	Ethylbenzene	%	1	-	-	-	-	100	82
	Toluene	%	1	-	-	-	-	130	130
	Xylene (m & p)	%	1	-	-	-	-	100	82
	Xylene (o)	%	1	-	-	-	-	99	80
	Xylene Total	%	1	-	-	-	-	100	81

Appendix I - Laboratory Certificates

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Certificate of Analysis

Coffey Environments Pty Ltd NSW
Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention:	**David McFadden**
Report	**681511-S**
Project name	LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID	SYDEN231101_LB
Received Date	Oct 09, 2019

Client Sample ID			**TP01_0.0-0.1**	**TP01_0.4-0.5**	**TP03_0.0-0.1**	**TP04_0.0-0.1**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S19-Oc13034**	**S19-Oc13035**	**S19-Oc13036**	**S19-Oc13037**
Date Sampled			**Oct 03, 2019**	**Oct 03, 2019**	**Oct 03, 2019**	**Oct 03, 2019**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	71	79	74	91
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

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Client Sample ID			TP01_0.0-0.1	TP01_0.4-0.5	TP03_0.0-0.1	TP04_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13034	S19-Oc13035	S19-Oc13036	S19-Oc13037
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	79	80	80	82
p-Terphenyl-d14 (surr.)	1	%	54	78	112	117
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Toxaphene	1	mg/kg	< 1	-	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	72	-	88	94
Tetrachloro-m-xylene (surr.)	1	%	82	-	87	86
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

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Client Sample ID			TP01_0.0-0.1	TP01_0.4-0.5	TP03_0.0-0.1	TP04_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13034	S19-Oc13035	S19-Oc13036	S19-Oc13037
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Naled	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	-	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	65	-	95	104
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	65	87	87	89

Client Sample ID			TP01_0.0-0.1	TP01_0.4-0.5	TP03_0.0-0.1	TP04_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13034	S19-Oc13035	S19-Oc13036	S19-Oc13037
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	4.0	5.2	3.0	9.8
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	7.0	14	7.6	18
Copper	5	mg/kg	8.3	5.6	5.5	11
Lead	5	mg/kg	19	15	14	31
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	10	< 5	28	48
% Moisture	1	%	24	22	23	17

Client Sample ID			TP04_0.4-0.5	TP05_0.0-0.1	TP05_0.9-1.0	TP07_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13038	S19-Oc13039	S19-Oc13040	S19-Oc13041
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	93	85	113	132
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Environment Testing

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	TP04_0.4-0.5 Soil S19-Oc13038 Oct 03, 2019	TP05_0.0-0.1 Soil S19-Oc13039 Oct 03, 2019	TP05_0.9-1.0 Soil S19-Oc13040 Oct 03, 2019	TP07_0.0-0.1 Soil S19-Oc13041 Oct 03, 2019
Polycyclic Aromatic Hydrocarbons						
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	88	86	70	85
p-Terphenyl-d14 (surr.)	1	%	112	76	86	140
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Toxaphene	1	mg/kg	-	< 1	-	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	-	104	-	94
Tetrachloro-m-xylene (surr.)	1	%	-	89	-	89
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	-	< 2	-	< 2

Client Sample ID			TP04_0.4-0.5	TP05_0.0-0.1	TP05_0.9-1.0	TP07_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13038	S19-Oc13039	S19-Oc13040	S19-Oc13041
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Demeton-S	0.2	mg/kg	-	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	-	< 0.2
EPN	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	-	< 2	-	< 2
Naled	0.2	mg/kg	-	< 0.2	-	< 0.2
Omethoate	2	mg/kg	-	< 2	-	< 2
Phorate	0.2	mg/kg	-	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	122	-	100
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			TP04_0.4-0.5	TP05_0.0-0.1	TP05_0.9-1.0	TP07_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13038	S19-Oc13039	S19-Oc13040	S19-Oc13041
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	92	96	66	76
Heavy Metals						
Arsenic	2	mg/kg	5.5	7.7	5.0	230
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	25	10	19	< 5
Copper	5	mg/kg	6.7	12	8.8	12
Lead	5	mg/kg	18	34	18	7.0
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.1
Nickel	5	mg/kg	5.2	< 5	< 5	6.3
Zinc	5	mg/kg	9.7	65	8.4	8.7
% Moisture	1	%	22	20	18	17

Client Sample ID			TP07_0.4-0.5	TP10_0.0-0.1	TP10_0.9-1.0	TP11_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13042	S19-Oc13043	S19-Oc13044	S19-Oc13045
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	-	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	-	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	-	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	86	99	77
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	-	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	< 100	< 100

eurofins Environment Testing

Client Sample ID			TP07_0.4-0.5	TP10_0.0-0.1	TP10_0.9-1.0	TP11_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13042	S19-Oc13043	S19-Oc13044	S19-Oc13045
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	85	65	84
p-Terphenyl-d14 (surr.)	1	%	-	109	75	122
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Toxaphene	1	mg/kg	< 1	< 1	-	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	89	92	-	94
Tetrachloro-m-xylene (surr.)	1	%	84	89	-	88

Client Sample ID			TP07_0.4-0.5	TP10_0.0-0.1	TP10_0.9-1.0	TP11_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13042	S19-Oc13043	S19-Oc13044	S19-Oc13045
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	-	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	-	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Omethoate	2	mg/kg	< 2	< 2	-	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	98	89	-	104
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	-	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	-	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	-	< 1	< 1	< 1

Client Sample ID			TP07_0.4-0.5	TP10_0.0-0.1	TP10_0.9-1.0	TP11_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13042	S19-Oc13043	S19-Oc13044	S19-Oc13045
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	-	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	-	< 5	< 5	< 5
Dinoseb	20	mg/kg	-	< 20	< 20	< 20
Phenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	-	98	53	90
Heavy Metals						
Arsenic	2	mg/kg	-	20	5.8	5.2
Cadmium	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	-	10	24	7.2
Copper	5	mg/kg	-	14	9.8	12
Lead	5	mg/kg	-	24	18	23
Mercury	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	-	5.1	< 5	< 5
Zinc	5	mg/kg	-	45	9.0	44
% Moisture	1	%	18	26	17	8.7

Client Sample ID			TP12_0.0-0.1	TP12_0.4-0.5	TP13_0.0-0.1	TP13_0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13046	S19-Oc13047	S19-Oc13048	S19-Oc13049
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	136	124	106	136
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50

Client Sample ID			TP12_0.0-0.1	TP12_0.4-0.5	TP13_0.0-0.1	TP13_0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13046	S19-Oc13047	S19-Oc13048	S19-Oc13049
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16 less Naphthalene (F2)N01	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluorantheneN07	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	111	77	110	67
p-Terphenyl-d14 (surr.)	1	%	58	74	56	80
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Toxaphene	1	mg/kg	< 1	-	< 1	-

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Environment Testing

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	TP12_0.0-0.1 Soil S19-Oc13046 Oct 04, 2019	TP12_0.4-0.5 Soil S19-Oc13047 Oct 04, 2019	TP13_0.0-0.1 Soil S19-Oc13048 Oct 04, 2019	TP13_0.4-0.5 Soil S19-Oc13049 Oct 04, 2019
Organochlorine Pesticides						
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	-
Dibutylchlorendate (surr.)	1	%	89	-	89	-
Tetrachloro-m-xylene (surr.)	1	%	117	-	116	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	-
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	-
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	-
Coumaphos	2	mg/kg	< 2	-	< 2	-
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	-
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	-
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	-
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	-
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	-
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	-
EPN	0.2	mg/kg	< 0.2	-	< 0.2	-
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	-
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	-
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	-
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	-
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	-
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	-
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	-
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	-
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	-
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	-
Monocrotophos	2	mg/kg	< 2	-	< 2	-
Naled	0.2	mg/kg	< 0.2	-	< 0.2	-
Omethoate	2	mg/kg	< 2	-	< 2	-
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	-
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	-
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	-
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	-
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	-
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	94	-	83	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1

Environment Testing

Client Sample ID			TP12_0.0-0.1	TP12_0.4-0.5	TP13_0.0-0.1	TP13_0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13046	S19-Oc13047	S19-Oc13048	S19-Oc13049
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	108	81	95	78
Heavy Metals						
Arsenic	2	mg/kg	56	5.1	3.7	4.1
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	23	5.8	22
Copper	5	mg/kg	11	11	22	10
Lead	5	mg/kg	11	16	17	19
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	6.9	6.8	17	5.1
Zinc	5	mg/kg	15	13	19	11
% Moisture	1	%	16	20	17	16

Client Sample ID			TP14_0.0-0.1	TP15_0.0-0.1	TP15_0.4-0.5	TP16_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13050	S19-Oc13051	S19-Oc13052	S19-Oc13053
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	87	70	114	88

Client Sample ID			TP14_0.0-0.1	TP15_0.0-0.1	TP15_0.4-0.5	TP16_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13050	S19-Oc13051	S19-Oc13052	S19-Oc13053
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	72	75	65	88
p-Terphenyl-d14 (surr.)	1	%	70	76	72	77
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	-
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	-
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	-

Client Sample ID			TP14_0.0-0.1	TP15_0.0-0.1	TP15_0.4-0.5	TP16_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13050	S19-Oc13051	S19-Oc13052	S19-Oc13053
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	-
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	-	-
Toxaphene	1	mg/kg	< 1	< 1	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	-
Dibutylchlorendate (surr.)	1	%	100	109	-	-
Tetrachloro-m-xylene (surr.)	1	%	72	77	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Coumaphos	2	mg/kg	< 2	< 2	-	-
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	-
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	-
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	-
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	-
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	-
EPN	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Monocrotophos	2	mg/kg	< 2	< 2	-	-
Naled	0.2	mg/kg	< 0.2	< 0.2	-	-
Omethoate	2	mg/kg	< 2	< 2	-	-
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	-
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	-
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	-
Triphenylphosphate (surr.)	1	%	84	100	-	-

Client Sample ID			TP14_0.0-0.1	TP15_0.0-0.1	TP15_0.4-0.5	TP16_0.0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13050	S19-Oc13051	S19-Oc13052	S19-Oc13053
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	87	85	91	57
Heavy Metals						
Arsenic	2	mg/kg	< 2	3.0	6.4	5.9
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	5.1	6.5	21	13
Copper	5	mg/kg	< 5	7.2	< 5	11
Lead	5	mg/kg	11	16	27	26
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	7.0	< 5
Zinc	5	mg/kg	11	20	8.0	38
% Moisture	1	%	7.0	7.3	8.4	13

Client Sample ID			TP29_0.0-0.1	TP29_0.4-0.5	DUP02	DUP03
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13054	S19-Oc13055	S19-Oc13056	S19-Oc13057
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50

Client Sample ID			TP29_0.0-0.1	TP29_0.4-0.5	DUP02	DUP03
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13054	S19-Oc13055	S19-Oc13056	S19-Oc13057
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	69	90	141	123
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	67	59	67	52
p-Terphenyl-d14 (surr.)	1	%	77	53	65	68
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	-	-
a-BHC	0.05	mg/kg	< 0.05	-	-	-
Aldrin	0.05	mg/kg	< 0.05	-	-	-
b-BHC	0.05	mg/kg	< 0.05	-	-	-
d-BHC	0.05	mg/kg	< 0.05	-	-	-
Dieldrin	0.05	mg/kg	< 0.05	-	-	-

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Client Sample ID			TP29_0.0-0.1	TP29_0.4-0.5	DUP02	DUP03
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13054	S19-Oc13055	S19-Oc13056	S19-Oc13057
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Endosulfan I	0.05	mg/kg	< 0.05	-	-	-
Endosulfan II	0.05	mg/kg	< 0.05	-	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	-	-
Endrin	0.05	mg/kg	< 0.05	-	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	-	-
Endrin ketone	0.05	mg/kg	< 0.05	-	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	-	-
Heptachlor	0.05	mg/kg	< 0.05	-	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Methoxychlor	0.05	mg/kg	< 0.05	-	-	-
Toxaphene	1	mg/kg	< 1	-	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	-	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	-	-	-
Dibutylchlorendate (surr.)	1	%	72	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	72	-	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	-	-
Bolstar	0.2	mg/kg	< 0.2	-	-	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	-	-	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	-	-
Coumaphos	2	mg/kg	< 2	-	-	-
Demeton-S	0.2	mg/kg	< 0.2	-	-	-
Demeton-O	0.2	mg/kg	< 0.2	-	-	-
Diazinon	0.2	mg/kg	< 0.2	-	-	-
Dichlorvos	0.2	mg/kg	< 0.2	-	-	-
Dimethoate	0.2	mg/kg	< 0.2	-	-	-
Disulfoton	0.2	mg/kg	< 0.2	-	-	-
EPN	0.2	mg/kg	< 0.2	-	-	-
Ethion	0.2	mg/kg	< 0.2	-	-	-
Ethoprop	0.2	mg/kg	< 0.2	-	-	-
Ethyl parathion	0.2	mg/kg	< 0.2	-	-	-
Fenitrothion	0.2	mg/kg	< 0.2	-	-	-
Fensulfothion	0.2	mg/kg	< 0.2	-	-	-
Fenthion	0.2	mg/kg	< 0.2	-	-	-
Malathion	0.2	mg/kg	< 0.2	-	-	-
Merphos	0.2	mg/kg	< 0.2	-	-	-
Methyl parathion	0.2	mg/kg	< 0.2	-	-	-
Mevinphos	0.2	mg/kg	< 0.2	-	-	-
Monocrotophos	2	mg/kg	< 2	-	-	-
Naled	0.2	mg/kg	< 0.2	-	-	-
Omethoate	2	mg/kg	< 2	-	-	-
Phorate	0.2	mg/kg	< 0.2	-	-	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	-	-
Pyrazophos	0.2	mg/kg	< 0.2	-	-	-
Ronnel	0.2	mg/kg	< 0.2	-	-	-

Client Sample ID			TP29_0.0-0.1	TP29_0.4-0.5	DUP02	DUP03
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13054	S19-Oc13055	S19-Oc13056	S19-Oc13057
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Terbufos	0.2	mg/kg	< 0.2	-	-	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	-	-
Tokuthion	0.2	mg/kg	< 0.2	-	-	-
Trichloronate	0.2	mg/kg	< 0.2	-	-	-
Triphenylphosphate (surr.)	1	%	71	-	-	-
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	58	40	75	54
Heavy Metals						
Arsenic	2	mg/kg	8.6	15	6.1	10.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	20	28	12	11
Copper	5	mg/kg	72	8.9	10	5.3
Lead	5	mg/kg	150	25	28	13
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	7.5	< 5	< 5
Zinc	5	mg/kg	87	22	44	13
% Moisture	1	%	12	8.6	14	7.3

Client Sample ID			DUP05	DUP08	DUP06	TB3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13058	S19-Oc13059	S19-Oc13060	S19-Oc13062
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	-
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	-
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	-
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	-
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	98	73	76	86
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	-
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	-
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	-
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	-
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	-
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	65	50	63	-
p-Terphenyl-d14 (surr.)	1	%	64	69	67	-

Client Sample ID			DUP05	DUP08	DUP06	TB3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13058	S19-Oc13059	S19-Oc13060	S19-Oc13062
Date Sampled			Oct 04, 2019	Oct 04, 2019	Oct 04, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	-
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	-
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	-
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	-
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	-
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	-
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	-
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	-
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	-
Dinoseb	20	mg/kg	< 20	< 20	< 20	-
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	-
Phenol-d6 (surr.)	1	%	48	42	67	-
Heavy Metals						
Arsenic	2	mg/kg	4.0	< 2	4.3	-
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	-
Chromium	5	mg/kg	7.6	< 5	8.8	-
Copper	5	mg/kg	8.8	16	7.5	-
Lead	5	mg/kg	16	9.2	22	-
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
Nickel	5	mg/kg	< 5	13	< 5	-
Zinc	5	mg/kg	28	16	13	-
% Moisture	1	%	9.7	14	10	-

Client Sample ID			R20 TS3	A08508	A08570	A08509
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13063	S19-Oc13065	S19-Oc13066	S19-Oc13067
Date Sampled			Oct 04, 2019	Oct 02, 2019	Oct 02, 2019	Oct 02, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	-	< 50	58	57
TRH C29-C36	50	mg/kg	-	< 50	67	64
TRH C10-C36 (Total)	50	mg/kg	-	< 50	125	121

Client Sample ID			R20 TS3	A08508	A08570	A08509
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13063	S19-Oc13065	S19-Oc13066	S19-Oc13067
Date Sampled			Oct 04, 2019	Oct 02, 2019	Oct 02, 2019	Oct 02, 2019
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	87	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	82	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	130	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	86	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	83	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	85	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	89	93	73	146
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene N02	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) N04	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) N01	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	< 100	110	< 100
TRH >C34-C40	100	mg/kg	-	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	-	< 100	110	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene N07	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	69	64	54
p-Terphenyl-d14 (surr.)	1	%	-	51	63	53
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	-	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	-	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	-	< 1	< 1	< 1

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Client Sample ID			[R20]TS3	A08508	A08570	A08509
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13063	S19-Oc13065	S19-Oc13066	S19-Oc13067
Date Sampled			Oct 04, 2019	Oct 02, 2019	Oct 02, 2019	Oct 02, 2019
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	< 0.2	< 0.5
2-Nitrophenol	1.0	mg/kg	-	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	< 0.4	< 0.5
4-Nitrophenol	5	mg/kg	-	< 5	< 5	< 5
Dinoseb	20	mg/kg	-	< 20	< 20	< 20
Phenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	-	56	72	58
Heavy Metals						
Arsenic	2	mg/kg	-	14	22	9.1
Cadmium	0.4	mg/kg	-	< 0.4	0.6	< 0.4
Chromium	5	mg/kg	-	30	34	23
Copper	5	mg/kg	-	110	410	52
Lead	5	mg/kg	-	95	140	88
Mercury	0.1	mg/kg	-	0.2	0.7	< 0.1
Nickel	5	mg/kg	-	6.9	12	19
Zinc	5	mg/kg	-	240	270	1800
% Moisture	1	%	-	9.7	7.3	3.2

Client Sample ID			A08507	A08526	TP30_0.0-0.1	BH02_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13068	S19-Oc13069	S19-Oc13070	S19-Oc13071
Date Sampled			Oct 02, 2019	Oct 02, 2019	Oct 04, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	89	88	63	69
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50

Client Sample ID			A08507	A08526	TP30_0.0-0.1	BH02_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13068	S19-Oc13069	S19-Oc13070	S19-Oc13071
Date Sampled			Oct 02, 2019	Oct 02, 2019	Oct 04, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16 less Naphthalene (F2)N01	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluorantheneN07	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	59	53	90	88
p-Terphenyl-d14 (surr.)	1	%	57	53	84	81
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	-	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	-	-	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	-	-	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	-	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	-	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	-	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	-	< 0.05	< 0.05
d-BHC	0.05	mg/kg	-	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	-	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	-	-	< 0.05	< 0.05
Toxaphene	1	mg/kg	-	-	< 1	< 1

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Client Sample ID			A08507	A08526	TP30_0.0-0.1	BH02_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13068	S19-Oc13069	S19-Oc13070	S19-Oc13071
Date Sampled			Oct 02, 2019	Oct 02, 2019	Oct 04, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	-	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	-	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	-	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	-	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	-	-	79	84
Tetrachloro-m-xylene (surr.)	1	%	-	-	90	92
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	-	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	-	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	-	-	< 2	< 2
Demeton-S	0.2	mg/kg	-	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	-	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	-	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	-	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	-	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	-	-	< 0.2	< 0.2
EPN	0.2	mg/kg	-	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	-	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	-	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	-	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	-	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	-	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	-	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	-	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	-	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	-	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	-	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	-	-	< 2	< 2
Naled	0.2	mg/kg	-	-	< 0.2	< 0.2
Omethoate	2	mg/kg	-	-	< 2	< 2
Phorate	0.2	mg/kg	-	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	-	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	-	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	-	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	-	-	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	-	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	-	76	76
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			A08507	A08526	TP30_0.0-0.1	BH02_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13068	S19-Oc13069	S19-Oc13070	S19-Oc13071
Date Sampled			Oct 02, 2019	Oct 02, 2019	Oct 04, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	71	62	94	43
Heavy Metals						
Arsenic	2	mg/kg	12	14	10	2.9
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	13	26	32	9.7
Copper	5	mg/kg	13	28	16	25
Lead	5	mg/kg	23	23	18	15
Mercury	0.1	mg/kg	< 0.1	0.4	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	9.8	31
Zinc	5	mg/kg	54	34	20	26
% Moisture	1	%	12	6.5	17	32

Client Sample ID			BH02_0.4-0.5	BH17_0.1-0.2	BH18_0.1-0.2	BH18_0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13072	S19-Oc13073	S19-Oc13074	S19-Oc13075
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	73	96	137	74

Client Sample ID			BH02_0.4-0.5	BH17_0.1-0.2	BH18_0.1-0.2	BH18_0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13072	S19-Oc13073	S19-Oc13074	S19-Oc13075
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene N02	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) N04	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) N01	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene N07	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	71	77	91	54
p-Terphenyl-d14 (surr.)	1	%	67	79	86	54
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	-
4.4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	-
4.4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	-
4.4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	-
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	-
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	-
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	-
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	-
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	-
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	-

Client Sample ID			BH02_0.4-0.5	BH17_0.1-0.2	BH18_0.1-0.2	BH18_0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13072	S19-Oc13073	S19-Oc13074	S19-Oc13075
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	-
Methoxychlor	0.05	mg/kg	-	< 0.05	< 0.05	-
Toxaphene	1	mg/kg	-	< 1	< 1	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	-
Dibutylchlorendate (surr.)	1	%	-	74	91	-
Tetrachloro-m-xylene (surr.)	1	%	-	88	96	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	-
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	-
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	-
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	-
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	-
Coumaphos	2	mg/kg	-	< 2	< 2	-
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	-
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	-
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	-
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	-
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	-
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	-
EPN	0.2	mg/kg	-	< 0.2	< 0.2	-
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	-
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	-
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	-
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	-
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	-
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	-
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	-
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	-
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	-
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	-
Monocrotophos	2	mg/kg	-	< 2	< 2	-
Naled	0.2	mg/kg	-	< 0.2	< 0.2	-
Omethoate	2	mg/kg	-	< 2	< 2	-
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	-
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	-
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	-
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	-
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	-
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	-
Triphenylphosphate (surr.)	1	%	-	72	87	-

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Client Sample ID			BH02_0.4-0.5	BH17_0.1-0.2	BH18_0.1-0.2	BH18_0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13072	S19-Oc13073	S19-Oc13074	S19-Oc13075
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	63	80	92	50
Heavy Metals						
Arsenic	2	mg/kg	6.7	13	8.1	6.3
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	20	44	76	28
Copper	5	mg/kg	13	39	23	14
Lead	5	mg/kg	29	120	38	23
Mercury	0.1	mg/kg	< 0.1	0.2	0.1	< 0.1
Nickel	5	mg/kg	< 5	27	52	7.6
Zinc	5	mg/kg	210	130	58	18
% Moisture	1	%	28	14	9.7	24

Client Sample ID			BH19_0.1-0.2	BH19_0.5-0.6	BH20_0.1-0.2	BH21_0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13076	S19-Oc13077	S19-Oc13078	S19-Oc13079
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	72	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	72	< 50	< 50	< 50

Client Sample ID			BH19_0.1-0.2	BH19_0.5-0.6	BH20_0.1-0.2	BH21_0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13076	S19-Oc13077	S19-Oc13078	S19-Oc13079
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	87	77	77	94
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	150	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	150	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.5
2-Fluorobiphenyl (surr.)	1	%	87	63	58	68
p-Terphenyl-d14 (surr.)	1	%	76	67	91	72
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05

Client Sample ID			BH19_0.1-0.2	BH19_0.5-0.6	BH20_0.1-0.2	BH21_0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13076	S19-Oc13077	S19-Oc13078	S19-Oc13079
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Toxaphene	1	mg/kg	< 1	-	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	78	-	79	57
Tetrachloro-m-xylene (surr.)	1	%	88	-	58	71
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Naled	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	-	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			BH19_0.1-0.2	BH19_0.5-0.6	BH20_0.1-0.2	BH21_0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13076	S19-Oc13077	S19-Oc13078	S19-Oc13079
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	73	-	69	58
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	86	78	97	58
Heavy Metals						
Arsenic	2	mg/kg	7.3	4.3	7.8	12
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	42	20	45	22
Copper	5	mg/kg	31	7.9	38	21
Lead	5	mg/kg	17	28	67	59
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.1
Nickel	5	mg/kg	6.9	7.7	39	6.2
Zinc	5	mg/kg	30	9.8	93	62
% Moisture	1	%	20	19	19	18

Client Sample ID			BH22_0.0-0.1	BH22_0.4-0.5	BH23_0.3-0.4	BH24_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13080	S19-Oc13081	S19-Oc13082	S19-Oc13083
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	75	70	79	65
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	70	63	74	73
p-Terphenyl-d14 (surr.)	1	%	62	56	78	57

Client Sample ID			BH22_0.0-0.1	BH22_0.4-0.5	BH23_0.3-0.4	BH24_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13080	S19-Oc13081	S19-Oc13082	S19-Oc13083
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Toxaphene	1	mg/kg	< 1	-	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	52	-	107	51
Tetrachloro-m-xylene (surr.)	1	%	71	-	75	77
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			BH22_0.0-0.1	BH22_0.4-0.5	BH23_0.3-0.4	BH24_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13080	S19-Oc13081	S19-Oc13082	S19-Oc13083
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 04, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Naled	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	-	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	55	-	94	88
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	59	68	87	59
Heavy Metals						
Arsenic	2	mg/kg	24	21	8.3	10
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	39	56	22	18
Copper	5	mg/kg	10.0	14	12	16
Lead	5	mg/kg	30	22	18	86
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.4
Nickel	5	mg/kg	6.9	< 5	< 5	< 5
Zinc	5	mg/kg	19	10	8.5	32
% Moisture	1	%	12	26	16	26

eurofins Environment Testing

Client Sample ID			BH24_0.4-0.5	BH25_0.1-0.2	BH25_0.4-0.5	BH26_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13084	S19-Oc13085	S19-Oc13086	S19-Oc13087
Date Sampled			Oct 04, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	-	77	< 50	< 50
TRH C29-C36	50	mg/kg	-	250	< 50	100
TRH C10-C36 (Total)	50	mg/kg	-	327	< 50	100
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	82	98	91
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	220	< 100	< 100
TRH >C34-C40	100	mg/kg	-	310	< 100	130
TRH >C10-C40 (total)*	100	mg/kg	-	530	< 100	130
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	63	98	97
p-Terphenyl-d14 (surr.)	1	%	-	69	114	52

eurofins | Environment Testing

Client Sample ID			BH24_0.4-0.5	BH25_0.1-0.2	BH25_0.4-0.5	BH26_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13084	S19-Oc13085	S19-Oc13086	S19-Oc13087
Date Sampled			Oct 04, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Toxaphene	1	mg/kg	< 1	< 1	-	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	79	57	-	86
Tetrachloro-m-xylene (surr.)	1	%	66	69	-	112
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	-	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2

Client Sample ID			BH24_0.4-0.5	BH25_0.1-0.2	BH25_0.4-0.5	BH26_0.1-0.2
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13084	S19-Oc13085	S19-Oc13086	S19-Oc13087
Date Sampled			Oct 04, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	-	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Omethoate	2	mg/kg	< 2	< 2	-	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	77	56	-	78
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	-	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	-	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	-	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	-	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	-	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	-	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	-	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	-	< 5	< 5	< 5
Dinoseb	20	mg/kg	-	< 20	< 20	< 20
Phenol	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	-	42	50	50
Heavy Metals						
Arsenic	2	mg/kg	-	2.4	7.4	2.5
Cadmium	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	-	120	20	150
Copper	5	mg/kg	-	33	7.6	33
Lead	5	mg/kg	-	< 5	15	10
Mercury	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	-	120	8.7	110
Zinc	5	mg/kg	-	66	8.1	55
% Moisture	1	%	24	9.1	12	17

eurofins Environment Testing

Client Sample ID			BH26_0.7-0.8	BH27_0.2-0.3	BH27_0.6-0.7	BH28_0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13088	S19-Oc13089	S19-Oc13090	S19-Oc13091
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	-	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	-	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	-	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	-	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	-	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	78	83	-	60
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	-	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	-	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	-	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	-	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	-	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	-	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	-	< 100
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	-	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	-	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2-Fluorobiphenyl (surr.)	1	%	62	108	-	85
p-Terphenyl-d14 (surr.)	1	%	68	53	-	75

Client Sample ID			BH26_0.7-0.8	BH27_0.2-0.3	BH27_0.6-0.7	BH28_0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13088	S19-Oc13089	S19-Oc13090	S19-Oc13091
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Toxaphene	1	mg/kg	-	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	-	89	79	74
Tetrachloro-m-xylene (surr.)	1	%	-	114	92	88
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	-	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2

Client Sample ID			BH26_0.7-0.8	BH27_0.2-0.3	BH27_0.6-0.7	BH28_0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S19-Oc13088	S19-Oc13089	S19-Oc13090	S19-Oc13091
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	-	< 2	< 2	< 2
Naled	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	-	< 2	< 2	< 2
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	81	71	66
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	-	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	-	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	-	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	-	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	-	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	-	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	-	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	-	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	-	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	-	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	-	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	-	< 5
Dinoseb	20	mg/kg	< 20	< 20	-	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	-	< 20
Phenol-d6 (surr.)	1	%	69	54	-	90
Heavy Metals						
Arsenic	2	mg/kg	7.4	7.3	-	5.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	-	< 0.4
Chromium	5	mg/kg	19	25	-	22
Copper	5	mg/kg	12	30	-	15
Lead	5	mg/kg	18	39	-	54
Mercury	0.1	mg/kg	< 0.1	0.2	-	< 0.1
Nickel	5	mg/kg	< 5	24	-	12
Zinc	5	mg/kg	6.4	55	-	280
% Moisture	1	%	20	16	27	24

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Client Sample ID			TS
Sample Matrix			Soil
Eurofins Sample No.			S19-Oc13092
Date Sampled			Oct 04, 2019
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	77
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	84
p-Terphenyl-d14 (surr.)	1	%	70

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Client Sample ID			TS
Sample Matrix			Soil
Eurofins Sample No.			S19-Oc13092
Date Sampled			Oct 04, 2019
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	70
Tetrachloro-m-xylene (surr.)	1	%	87
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2

Client Sample ID			TS
Sample Matrix			Soil
Eurofins Sample No.			S19-Oc13092
Date Sampled			Oct 04, 2019
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	59
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	85
Heavy Metals			
Arsenic	2	mg/kg	5.6
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	13
Copper	5	mg/kg	7.5
Lead	5	mg/kg	12
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	9.3
% Moisture	1	%	28

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins | mgt Suite B7A			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Oct 15, 2019	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Melbourne	Oct 15, 2019	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins | mgt Suite B14			
Organochlorine Pesticides	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Organophosphorus Pesticides	Melbourne	Oct 15, 2019	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8081)			
% Moisture	Melbourne	Oct 09, 2019	14 Days
- Method: LTM-GEN-7080 Moisture			

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Company Name: Coffey Environments Pty Ltd NSW
Address: Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Order No.:
Report #: 681511
Phone: +61 2 9406 1000
Fax: +61 2 9406 1004

Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	TP01_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13034	X			X	X	X
2	TP01_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13035					X	X
3	TP03_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13036	X			X	X	X
4	TP04_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13037	X			X	X	X
5	TP04_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13038					X	X
6	TP05_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13039	X			X	X	X
7	TP05_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13040					X	X
8	TP07_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13041	X			X	X	X
9	TP07_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13042				X	X	

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	Chatswood	**Phone:**	+61 2 9406 1000	**Priority:**	5 Day
	NSW 2067	**Fax:**	+61 2 9406 1004	**Contact Name:**	David McFadden
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
Project ID:	SYDEN231101_LB				

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
10	TP10_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13043				X	X	X
11	TP10_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13044					X	X
12	TP11_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13045	X			X	X	X
13	TP12_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13046				X	X	X
14	TP12_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13047					X	X
15	TP13_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13048	X			X	X	X
16	TP13_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13049					X	X
17	TP14_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13050				X	X	X
18	TP15_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13051	X			X	X	X
19	TP15_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13052					X	X
20	TP16_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13053					X	X
21	TP29_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13054	X			X	X	X

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Order No.:
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Received: Oct 9, 2019 3:45 PM
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Priority: 5 Day
Contact Name: David McFadden

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
22	TP29_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13055					X	X
23	DUP02	Oct 04, 2019		Soil	S19-Oc13056					X	X
24	DUP03	Oct 04, 2019		Soil	S19-Oc13057					X	X
25	DUP05	Oct 04, 2019		Soil	S19-Oc13058					X	X
26	DUP08	Oct 04, 2019		Soil	S19-Oc13059					X	X
27	DUP06	Oct 04, 2019		Soil	S19-Oc13060					X	X
28	R03	Oct 04, 2019		Water	S19-Oc13061						X
29	TB3	Oct 04, 2019		Soil	S19-Oc13062			X			
30	TS3	Oct 04, 2019		Soil	S19-Oc13063			X			
31	A08508	Oct 02, 2019		Soil	S19-Oc13065	X				X	X
32	A08570	Oct 02, 2019		Soil	S19-Oc13066	X				X	X
33	A08509	Oct 02, 2019		Soil	S19-Oc13067	X				X	X

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Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
34	A08507	Oct 02, 2019		Soil	S19-Oc13068	X				X	X
35	A08526	Oct 02, 2019		Soil	S19-Oc13069	X				X	X
36	TP30_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13070	X			X	X	X
37	BH02_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13071				X	X	X
38	BH02_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13072					X	X
39	BH17_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13073	X			X	X	X
40	BH18_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13074	X			X	X	X
41	BH18_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13075					X	X
42	BH19_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13076				X	X	X
43	BH19_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13077					X	X
44	BH20_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13078				X	X	X
45	BH21_0.2-0.3	Oct 04, 2019		Soil	S19-Oc13079	X			X	X	X

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Received: Oct 9, 2019 3:45 PM
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Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
46	BH22_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13080	X			X	X	X
47	BH22_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13081					X	X
48	BH23_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13082				X	X	X
49	BH24_0.1-0.2	Oct 04, 2019		Soil	S19-Oc13083	X			X	X	X
50	BH24_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13084				X	X	
51	BH25_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13085				X	X	X
52	BH25_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13086					X	X
53	BH26_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13087	X			X	X	X
54	BH26_0.7-0.8	Oct 03, 2019		Soil	S19-Oc13088					X	X
55	BH27_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13089	X			X	X	X
56	BH27_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13090				X	X	
57	BH28_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13091				X	X	X

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Report #: 681511
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Fax: +61 2 9406 1004

Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
58	TS	Oct 04, 2019		Soil	S19-Oc13092				X	X	X
59	TP01_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13093		X				
60	TP03_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13094		X				
61	TP03_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13095		X				
62	TP05_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13096		X				
63	TP07_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13097		X				
64	TP08_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13098		X				
65	TP08_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13099		X				
66	TP09_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13100		X				
67	TP09_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13101		X				
68	TP09_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13102		X				
69	TP10_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13103		X				

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Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
70	TP11_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13104		X				
71	TP11_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13105		X				
72	TP12_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13106		X				
73	TP13_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13107		X				
74	TP14_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13108		X				
75	TP14_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13109		X				
76	TP15_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13110		X				
77	TP16_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13111		X				
78	TP16_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13112		X				
79	TP29_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13113		X				
80	DUP01	Oct 04, 2019		Soil	S19-Oc13114		X				
81	DUP07	Oct 04, 2019		Soil	S19-Oc13115		X				

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Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
82	DUP04	Oct 04, 2019		Soil	S19-Oc13116		X				
83	TP30_0.3-0.4	Oct 04, 2019		Soil	S19-Oc13117		X				
84	TP30_0.8-0.9	Oct 04, 2019		Soil	S19-Oc13118		X				
85	BH02_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13119		X				
86	BH02_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13120		X				
87	BH17_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13121		X				
88	BH17_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13122		X				
89	BH17_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13123		X				
90	BH18_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13124		X				
91	BH19_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13125		X				
92	BH19_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13126		X				
93	BH19_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13127		X				

eurofins Environment Testing

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Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

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Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
94	BH20_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13128		X				
95	BH20_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13129		X				
96	BH21_0.0-0.2	Oct 04, 2019		Soil	S19-Oc13130		X				
97	BH21_0.5-0.6	Oct 04, 2019		Soil	S19-Oc13131		X				
98	BH21_1.0-1.1	Oct 04, 2019		Soil	S19-Oc13132		X				
99	BH22_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13133		X				
100	BH23_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13134		X				
101	BH23_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13135		X				
102	BH23_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13136		X				
103	BH23_1.2-1.3	Oct 03, 2019		Soil	S19-Oc13137		X				
104	BH24_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13138		X				
105	BH24_1.0-1.1	Oct 04, 2019		Soil	S19-Oc13139		X				

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Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
106	BH25_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13140		X				
107	BH25_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13141		X				
108	BH26_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13142		X				
109	BH27_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13143		X				
110	BH27_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13144		X				
111	BH28_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13145		X				
112	BH28_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13146		X				
Test Counts						22	54	2	30	55	53

eurofins | Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ug/L:** micrograms per litre
ppm: Parts per million	**ppb:** Parts per billion	**%:** Percentage
org/100mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	109			70-130	Pass	
TRH C10-C14	%	121			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	99			70-130	Pass	
Toluene	%	90			70-130	Pass	
Ethylbenzene	%	87			70-130	Pass	
m&p-Xylenes	%	117			70-130	Pass	
o-Xylene	%	89			70-130	Pass	
Xylenes - Total	%	90			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	109			70-130	Pass	
TRH C6-C10	%	76			70-130	Pass	
TRH >C10-C16	%	120			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	90			70-130	Pass	
Acenaphthylene	%	89			70-130	Pass	
Anthracene	%	85			70-130	Pass	
Benz(a)anthracene	%	75			70-130	Pass	
Benzo(a)pyrene	%	75			70-130	Pass	
Benzo(b&j)fluoranthene	%	72			70-130	Pass	
Benzo(g.h.i)perylene	%	106			70-130	Pass	
Benzo(k)fluoranthene	%	85			70-130	Pass	
Chrysene	%	88			70-130	Pass	
Dibenz(a.h)anthracene	%	75			70-130	Pass	
Fluoranthene	%	83			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Fluorene	%	89			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	79			70-130	Pass	
Naphthalene	%	89			70-130	Pass	
Phenanthrene	%	84			70-130	Pass	
Pyrene	%	84			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	89			70-130	Pass	
4.4'-DDD	%	76			70-130	Pass	
4.4'-DDE	%	88			70-130	Pass	
4.4'-DDT	%	76			70-130	Pass	
a-BHC	%	88			70-130	Pass	
Aldrin	%	94			70-130	Pass	
b-BHC	%	83			70-130	Pass	
d-BHC	%	88			70-130	Pass	
Dieldrin	%	94			70-130	Pass	
Endosulfan I	%	88			70-130	Pass	
Endosulfan II	%	90			70-130	Pass	
Endosulfan sulphate	%	79			70-130	Pass	
Endrin	%	81			70-130	Pass	
Endrin aldehyde	%	113			70-130	Pass	
Endrin ketone	%	84			70-130	Pass	
g-BHC (Lindane)	%	78			70-130	Pass	
Heptachlor	%	84			70-130	Pass	
Heptachlor epoxide	%	82			70-130	Pass	
Hexachlorobenzene	%	94			70-130	Pass	
Methoxychlor	%	103			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	90			70-130	Pass	
Dimethoate	%	72			70-130	Pass	
Ethion	%	81			70-130	Pass	
Fenitrothion	%	94			70-130	Pass	
Methyl parathion	%	96			70-130	Pass	
Mevinphos	%	78			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	77			30-130	Pass	
2.4-Dichlorophenol	%	80			30-130	Pass	
2.4.5-Trichlorophenol	%	73			30-130	Pass	
2.4.6-Trichlorophenol	%	84			30-130	Pass	
2.6-Dichlorophenol	%	88			30-130	Pass	
4-Chloro-3-methylphenol	%	67			30-130	Pass	
Pentachlorophenol	%	88			30-130	Pass	
Tetrachlorophenols - Total	%	85			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	84			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	94			30-130	Pass	
2-Methylphenol (o-Cresol)	%	85			30-130	Pass	
2-Nitrophenol	%	82			30-130	Pass	
2.4-Dimethylphenol	%	120			30-130	Pass	
2.4-Dinitrophenol	%	80			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	90			30-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Nitrophenol			%	80			30-130	Pass	
Dinoseb			%	93			30-130	Pass	
Phenol			%	84			30-130	Pass	
LCS - % Recovery									
Heavy Metals									
Arsenic			%	111			80-120	Pass	
Cadmium			%	96			80-120	Pass	
Chromium			%	116			80-120	Pass	
Copper			%	114			80-120	Pass	
Lead			%	118			80-120	Pass	
Mercury			%	103			75-125	Pass	
Nickel			%	114			80-120	Pass	
Zinc			%	113			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Methoxychlor	M19-Oc19041	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S19-Oc13038	CP	%	100			75-125	Pass	
Cadmium	S19-Oc13038	CP	%	76			75-125	Pass	
Chromium	S19-Oc13038	CP	%	111			75-125	Pass	
Copper	S19-Oc13038	CP	%	105			75-125	Pass	
Lead	S19-Oc13038	CP	%	110			75-125	Pass	
Mercury	S19-Oc13038	CP	%	91			70-130	Pass	
Nickel	S19-Oc13038	CP	%	108			75-125	Pass	
Zinc	S19-Oc13038	CP	%	106			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S19-Oc13040	CP	%	125			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S19-Oc13040	CP	%	100			70-130	Pass	
Toluene	S19-Oc13040	CP	%	102			70-130	Pass	
Ethylbenzene	S19-Oc13040	CP	%	123			70-130	Pass	
m&p-Xylenes	S19-Oc13040	CP	%	124			70-130	Pass	
o-Xylene	S19-Oc13040	CP	%	115			70-130	Pass	
Xylenes - Total	S19-Oc13040	CP	%	121			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S19-Oc13040	CP	%	101			70-130	Pass	
TRH C6-C10	S19-Oc13040	CP	%	117			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDT	M19-Oc14539	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S19-Oc13051	CP	%	85			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S19-Oc13051	CP	%	99			70-130	Pass	
Toluene	S19-Oc13051	CP	%	81			70-130	Pass	
Ethylbenzene	S19-Oc13051	CP	%	85			70-130	Pass	
m&p-Xylenes	S19-Oc13051	CP	%	71			70-130	Pass	

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Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
o-Xylene	S19-Oc13051	CP	%	93			70-130	Pass	
Xylenes - Total	S19-Oc13051	CP	%	79			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S19-Oc13051	CP	%	86			70-130	Pass	
TRH C6-C10	S19-Oc13051	CP	%	87			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S19-Oc13055	CP	%	126			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S19-Oc13055	CP	%	124			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S19-Oc13060	CP	%	104			70-130	Pass	
Acenaphthylene	S19-Oc13060	CP	%	95			70-130	Pass	
Anthracene	S19-Oc13060	CP	%	95			70-130	Pass	
Benz(a)anthracene	S19-Oc13060	CP	%	97			70-130	Pass	
Benzo(a)pyrene	S19-Oc13060	CP	%	89			70-130	Pass	
Benzo(b&j)fluoranthene	S19-Oc13060	CP	%	79			70-130	Pass	
Benzo(g.h.i)perylene	S19-Oc13060	CP	%	101			70-130	Pass	
Benzo(k)fluoranthene	S19-Oc13060	CP	%	93			70-130	Pass	
Chrysene	S19-Oc13060	CP	%	83			70-130	Pass	
Dibenz(a.h)anthracene	S19-Oc13060	CP	%	91			70-130	Pass	
Fluoranthene	S19-Oc13060	CP	%	99			70-130	Pass	
Fluorene	S19-Oc13060	CP	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S19-Oc13060	CP	%	92			70-130	Pass	
Naphthalene	S19-Oc13060	CP	%	105			70-130	Pass	
Phenanthrene	S19-Oc13060	CP	%	105			70-130	Pass	
Pyrene	S19-Oc13060	CP	%	105			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S19-Oc13060	CP	%	75			30-130	Pass	
2.4-Dichlorophenol	S19-Oc13060	CP	%	69			30-130	Pass	
2.4.5-Trichlorophenol	S19-Oc13060	CP	%	77			30-130	Pass	
2.4.6-Trichlorophenol	S19-Oc13060	CP	%	75			30-130	Pass	
2.6-Dichlorophenol	S19-Oc13060	CP	%	77			30-130	Pass	
4-Chloro-3-methylphenol	S19-Oc13060	CP	%	79			30-130	Pass	
Pentachlorophenol	S19-Oc13060	CP	%	80			30-130	Pass	
Tetrachlorophenols - Total	S19-Oc13060	CP	%	76			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	S19-Oc13060	CP	%	54			30-130	Pass	
2-Methyl-4.6-dinitrophenol	S19-Oc13060	CP	%	66			30-130	Pass	
2-Methylphenol (o-Cresol)	S19-Oc13060	CP	%	74			30-130	Pass	
2-Nitrophenol	S19-Oc13060	CP	%	64			30-130	Pass	
2.4-Dimethylphenol	S19-Oc13060	CP	%	65			30-130	Pass	
2.4-Dinitrophenol	S19-Oc13060	CP	%	50			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	S19-Oc13060	CP	%	71			30-130	Pass	
4-Nitrophenol	S19-Oc13060	CP	%	63			30-130	Pass	
Dinoseb	S19-Oc13060	CP	%	69			30-130	Pass	
Phenol	S19-Oc13060	CP	%	72			30-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C6-C9	S19-Oc13065	CP	%	99			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S19-Oc13065	CP	%	78			70-130	Pass	
Toluene	S19-Oc13065	CP	%	88			70-130	Pass	
Ethylbenzene	S19-Oc13065	CP	%	81			70-130	Pass	
m&p-Xylenes	S19-Oc13065	CP	%	85			70-130	Pass	
o-Xylene	S19-Oc13065	CP	%	115			70-130	Pass	
Xylenes - Total	S19-Oc13065	CP	%	95			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S19-Oc13065	CP	%	105			70-130	Pass	
TRH C6-C10	S19-Oc13065	CP	%	97			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S19-Oc13069	CP	%	130			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S19-Oc13069	CP	%	125			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S19-Oc13071	CP	%	110			70-130	Pass	
4.4'-DDD	S19-Oc13071	CP	%	97			70-130	Pass	
4.4'-DDE	S19-Oc13071	CP	%	121			70-130	Pass	
a-BHC	S19-Oc13071	CP	%	109			70-130	Pass	
Aldrin	S19-Oc13071	CP	%	122			70-130	Pass	
b-BHC	S19-Oc13071	CP	%	70			70-130	Pass	
d-BHC	S19-Oc13071	CP	%	93			70-130	Pass	
Dieldrin	S19-Oc13071	CP	%	121			70-130	Pass	
Endosulfan I	S19-Oc13071	CP	%	124			70-130	Pass	
Endosulfan II	S19-Oc13071	CP	%	115			70-130	Pass	
Endosulfan sulphate	S19-Oc13071	CP	%	98			70-130	Pass	
Endrin	S19-Oc13071	CP	%	84			70-130	Pass	
Endrin aldehyde	S19-Oc13071	CP	%	104			70-130	Pass	
Endrin ketone	S19-Oc13071	CP	%	100			70-130	Pass	
g-BHC (Lindane)	S19-Oc13071	CP	%	73			70-130	Pass	
Heptachlor	S19-Oc13071	CP	%	72			70-130	Pass	
Heptachlor epoxide	S19-Oc13071	CP	%	122			70-130	Pass	
Hexachlorobenzene	S19-Oc13071	CP	%	117			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S19-Oc13073	CP	%	92			75-125	Pass	
Cadmium	S19-Oc13073	CP	%	90			75-125	Pass	
Chromium	S19-Oc13073	CP	%	141			75-125	Fail	Q08
Copper	S19-Oc13073	CP	%	85			75-125	Pass	
Lead	S19-Oc13073	CP	%	128			75-125	Fail	Q08
Mercury	S19-Oc13073	CP	%	99			70-130	Pass	
Nickel	S19-Oc13073	CP	%	139			75-125	Fail	Q08
Zinc	S19-Oc13073	CP	%	99			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S19-Oc13083	CP	%	102			75-125	Pass	
Cadmium	S19-Oc13083	CP	%	84			75-125	Pass	
Chromium	S19-Oc13083	CP	%	104			75-125	Pass	

Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Copper	S19-Oc13083	CP	%	103			75-125	Pass	
Lead	S19-Oc13083	CP	%	91			75-125	Pass	
Mercury	S19-Oc13083	CP	%	88			70-130	Pass	
Nickel	S19-Oc13083	CP	%	109			75-125	Pass	
Zinc	S19-Oc13083	CP	%	99			75-125	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S19-Oc13085	CP	%	89			70-130	Pass	
Acenaphthylene	S19-Oc13085	CP	%	88			70-130	Pass	
Anthracene	S19-Oc13085	CP	%	90			70-130	Pass	
Benz(a)anthracene	S19-Oc13085	CP	%	76			70-130	Pass	
Benzo(a)pyrene	S19-Oc13085	CP	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	S19-Oc13085	CP	%	80			70-130	Pass	
Benzo(g.h.i)perylene	S19-Oc13085	CP	%	88			70-130	Pass	
Benzo(k)fluoranthene	S19-Oc13085	CP	%	81			70-130	Pass	
Chrysene	S19-Oc13085	CP	%	92			70-130	Pass	
Dibenz(a.h)anthracene	S19-Oc13085	CP	%	125			70-130	Pass	
Fluoranthene	S19-Oc13085	CP	%	92			70-130	Pass	
Fluorene	S19-Oc13085	CP	%	89			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S19-Oc13085	CP	%	99			70-130	Pass	
Naphthalene	S19-Oc13085	CP	%	91			70-130	Pass	
Phenanthrene	S19-Oc13085	CP	%	88			70-130	Pass	
Pyrene	S19-Oc13085	CP	%	90			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S19-Oc13085	CP	%	105			70-130	Pass	
4.4'-DDD	S19-Oc13085	CP	%	75			70-130	Pass	
4.4'-DDE	S19-Oc13085	CP	%	108			70-130	Pass	
a-BHC	S19-Oc13085	CP	%	87			70-130	Pass	
Aldrin	S19-Oc13085	CP	%	107			70-130	Pass	
b-BHC	S19-Oc13085	CP	%	130			70-130	Pass	
d-BHC	S19-Oc13085	CP	%	87			70-130	Pass	
Dieldrin	S19-Oc13085	CP	%	108			70-130	Pass	
Endosulfan I	S19-Oc13085	CP	%	104			70-130	Pass	
Endosulfan II	S19-Oc13085	CP	%	114			70-130	Pass	
Endosulfan sulphate	S19-Oc13085	CP	%	92			70-130	Pass	
Endrin	S19-Oc13085	CP	%	99			70-130	Pass	
Endrin aldehyde	S19-Oc13085	CP	%	101			70-130	Pass	
Endrin ketone	S19-Oc13085	CP	%	106			70-130	Pass	
g-BHC (Lindane)	S19-Oc13085	CP	%	107			70-130	Pass	
Heptachlor	S19-Oc13085	CP	%	74			70-130	Pass	
Heptachlor epoxide	S19-Oc13085	CP	%	99			70-130	Pass	
Hexachlorobenzene	S19-Oc13085	CP	%	103			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S19-Oc13085	CP	%	98			70-130	Pass	
Dimethoate	S19-Oc13085	CP	%	73			70-130	Pass	
Ethion	S19-Oc13085	CP	%	89			70-130	Pass	
Fenitrothion	S19-Oc13085	CP	%	87			70-130	Pass	
Methyl parathion	S19-Oc13085	CP	%	86			70-130	Pass	
Mevinphos	S19-Oc13085	CP	%	78			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S19-Oc13085	CP	%	96			30-130	Pass	

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Environment Testing

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	S19-Oc13085	CP	%	84			30-130	Pass	
2.4.5-Trichlorophenol	S19-Oc13085	CP	%	73			30-130	Pass	
2.4.6-Trichlorophenol	S19-Oc13085	CP	%	78			30-130	Pass	
2.6-Dichlorophenol	S19-Oc13085	CP	%	113			30-130	Pass	
4-Chloro-3-methylphenol	S19-Oc13085	CP	%	84			30-130	Pass	
Pentachlorophenol	S19-Oc13085	CP	%	85			30-130	Pass	
Tetrachlorophenols - Total	S19-Oc13085	CP	%	87			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	S19-Oc13085	CP	%	52			30-130	Pass	
2-Methyl-4.6-dinitrophenol	S19-Oc13085	CP	%	70			30-130	Pass	
2-Methylphenol (o-Cresol)	S19-Oc13085	CP	%	82			30-130	Pass	
2-Nitrophenol	S19-Oc13085	CP	%	87			30-130	Pass	
2.4-Dimethylphenol	S19-Oc13085	CP	%	113			30-130	Pass	
2.4-Dinitrophenol	S19-Oc13085	CP	%	35			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	S19-Oc13085	CP	%	103			30-130	Pass	
4-Nitrophenol	S19-Oc13085	CP	%	89			30-130	Pass	
Dinoseb	S19-Oc13085	CP	%	79			30-130	Pass	
Phenol	S19-Oc13085	CP	%	95			30-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S19-Oc13086	CP	%	91			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S19-Oc13086	CP	%	87			70-130	Pass	
Toluene	S19-Oc13086	CP	%	87			70-130	Pass	
Ethylbenzene	S19-Oc13086	CP	%	88			70-130	Pass	
m&p-Xylenes	S19-Oc13086	CP	%	87			70-130	Pass	
o-Xylene	S19-Oc13086	CP	%	89			70-130	Pass	
Xylenes - Total	S19-Oc13086	CP	%	88			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S19-Oc13086	CP	%	75			70-130	Pass	
TRH C6-C10	S19-Oc13086	CP	%	90			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S19-Oc13091	CP	%	92			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S19-Oc13091	CP	%	82			70-130	Pass	
Toluene	S19-Oc13091	CP	%	83			70-130	Pass	
Ethylbenzene	S19-Oc13091	CP	%	85			70-130	Pass	
m&p-Xylenes	S19-Oc13091	CP	%	84			70-130	Pass	
o-Xylene	S19-Oc13091	CP	%	85			70-130	Pass	
Xylenes - Total	S19-Oc13091	CP	%	84			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S19-Oc13091	CP	%	83			70-130	Pass	
TRH C6-C10	S19-Oc13091	CP	%	91			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S19-Oc13038	CP	mg/kg	5.5	5.5	1.0	30%	Pass	
Cadmium	S19-Oc13038	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S19-Oc13038	CP	mg/kg	25	24	2.0	30%	Pass	
Copper	S19-Oc13038	CP	mg/kg	6.7	6.9	2.0	30%	Pass	
Lead	S19-Oc13038	CP	mg/kg	18	18	<1	30%	Pass	
Mercury	S19-Oc13038	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S19-Oc13038	CP	mg/kg	5.2	5.2	1.0	30%	Pass	
Zinc	S19-Oc13038	CP	mg/kg	9.7	9.9	2.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S19-Oc13039	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S19-Oc13039	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S19-Oc13039	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S19-Oc13039	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S19-Oc13039	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S19-Oc13039	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S19-Oc13039	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S19-Oc13039	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S19-Oc13039	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-Oc13039	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S19-Oc13039	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S19-Oc13039	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S19-Oc13039	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S19-Oc13039	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S19-Oc13039	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S19-Oc13039	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S19-Oc13039	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S19-Oc13039	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Tokuthion	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S19-Oc13039	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S19-Oc13039	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S19-Oc13039	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S19-Oc13039	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S19-Oc13039	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S19-Oc13039	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S19-Oc13039	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S19-Oc13039	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S19-Oc13039	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S19-Oc13039	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S19-Oc13039	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S19-Oc13039	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S19-Oc13039	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S19-Oc13039	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S19-Oc13041	CP	mg/kg	< 0.1	0.6	100	30%	Fail	Q15
4.4'-DDD	S19-Oc13041	CP	mg/kg	< 0.05	0.23	75	30%	Fail	Q15
4.4'-DDE	S19-Oc13041	CP	mg/kg	< 0.05	0.33	110	30%	Fail	Q15
a-BHC	S19-Oc13041	CP	mg/kg	< 0.05	0.30	99	30%	Fail	Q15
Aldrin	S19-Oc13041	CP	mg/kg	< 0.05	0.33	110	30%	Fail	Q15
b-BHC	S19-Oc13041	CP	mg/kg	< 0.05	0.24	82	30%	Fail	Q15
d-BHC	S19-Oc13041	CP	mg/kg	< 0.05	0.23	77	30%	Fail	Q15
Dieldrin	S19-Oc13041	CP	mg/kg	< 0.05	0.37	130	30%	Fail	Q15
Endosulfan I	S19-Oc13041	CP	mg/kg	< 0.05	0.30	100	30%	Fail	Q15
Endosulfan II	S19-Oc13041	CP	mg/kg	< 0.05	0.30	100	30%	Fail	Q15
Endosulfan sulphate	S19-Oc13041	CP	mg/kg	< 0.05	0.20	70	30%	Fail	Q15
Endrin	S19-Oc13041	CP	mg/kg	< 0.05	0.30	98	30%	Fail	Q15
Endrin aldehyde	S19-Oc13041	CP	mg/kg	< 0.05	0.36	120	30%	Fail	Q15
Endrin ketone	S19-Oc13041	CP	mg/kg	< 0.05	0.30	99	30%	Fail	Q15
g-BHC (Lindane)	S19-Oc13041	CP	mg/kg	< 0.05	0.31	100	30%	Fail	Q15
Heptachlor	S19-Oc13041	CP	mg/kg	< 0.05	0.24	81	30%	Fail	Q15
Heptachlor epoxide	S19-Oc13041	CP	mg/kg	< 0.05	0.30	100	30%	Fail	Q15
Hexachlorobenzene	S19-Oc13041	CP	mg/kg	< 0.05	0.31	100	30%	Fail	Q15
Methoxychlor	S19-Oc13041	CP	mg/kg	< 0.05	0.35	120	30%	Fail	Q15
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S19-Oc13042	CP	%	18	17	6.0	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Benzo(a)pyrene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S19-Oc13049	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S19-Oc13049	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S19-Oc13049	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S19-Oc13049	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S19-Oc13049	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S19-Oc13049	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S19-Oc13049	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S19-Oc13049	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S19-Oc13049	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S19-Oc13049	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S19-Oc13049	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S19-Oc13049	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S19-Oc13049	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S19-Oc13049	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S19-Oc13050	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S19-Oc13050	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S19-Oc13050	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S19-Oc13050	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S19-Oc13050	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S19-Oc13050	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S19-Oc13050	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S19-Oc13050	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-Oc13050	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S19-Oc13052	CP	%	8.4	8.3	1.0	30%	Pass	

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Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S19-Oc13054	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S19-Oc13054	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S19-Oc13054	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S19-Oc13054	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S19-Oc13054	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S19-Oc13054	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S19-Oc13058	CP	mg/kg	4.0	4.2	5.0	30%	Pass	
Cadmium	S19-Oc13058	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S19-Oc13058	CP	mg/kg	7.6	8.2	8.0	30%	Pass	
Copper	S19-Oc13058	CP	mg/kg	8.8	9.6	9.0	30%	Pass	
Lead	S19-Oc13058	CP	mg/kg	16	21	28	30%	Pass	
Mercury	S19-Oc13058	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S19-Oc13058	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S19-Oc13058	CP	mg/kg	28	33	15	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S19-Oc13059	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S19-Oc13059	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S19-Oc13059	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S19-Oc13059	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S19-Oc13059	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S19-Oc13059	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S19-Oc13059	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S19-Oc13059	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S19-Oc13059	CP	mg/kg	< 1	< 1	<1	30%	Pass	

Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
Pentachlorophenol	S19-Oc13059	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	S19-Oc13059	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4.6-dinitrophenol	S19-Oc13059	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4.6-dinitrophenol	S19-Oc13059	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	S19-Oc13059	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
2-Nitrophenol	S19-Oc13059	CP	mg/kg	< 1	< 1	<1	30%	Pass
2.4-Dimethylphenol	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-Dinitrophenol	S19-Oc13059	CP	mg/kg	< 5	< 5	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	S19-Oc13059	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	S19-Oc13059	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	S19-Oc13059	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	S19-Oc13059	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S19-Oc13066	CP	%	7.3	6.4	12	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g.h.i)perylene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a.h)anthracene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S19-Oc13070	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4.4'-DDD	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDE	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4.4'-DDT	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass

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Environment Testing

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Heptachlor epoxide	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S19-Oc13070	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S19-Oc13070	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S19-Oc13070	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S19-Oc13070	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S19-Oc13070	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S19-Oc13070	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S19-Oc13070	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S19-Oc13070	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S19-Oc13070	CP	mg/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S19-Oc13070	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S19-Oc13070	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S19-Oc13070	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S19-Oc13070	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S19-Oc13070	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S19-Oc13070	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S19-Oc13070	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S19-Oc13070	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S19-Oc13070	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S19-Oc13072	CP	mg/kg	6.7	6.7	<1	30%	Pass	
Cadmium	S19-Oc13072	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S19-Oc13072	CP	mg/kg	20	19	5.0	30%	Pass	
Copper	S19-Oc13072	CP	mg/kg	13	13	2.0	30%	Pass	
Lead	S19-Oc13072	CP	mg/kg	29	33	11	30%	Pass	
Mercury	S19-Oc13072	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S19-Oc13072	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S19-Oc13072	CP	mg/kg	210	220	4.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S19-Oc13073	CP	mg/kg	13	13	1.0	30%	Pass	
Cadmium	S19-Oc13073	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S19-Oc13073	CP	mg/kg	44	45	2.0	30%	Pass	
Copper	S19-Oc13073	CP	mg/kg	39	40	1.0	30%	Pass	
Lead	S19-Oc13073	CP	mg/kg	120	120	1.0	30%	Pass	
Mercury	S19-Oc13073	CP	mg/kg	0.2	0.2	1.0	30%	Pass	
Nickel	S19-Oc13073	CP	mg/kg	27	27	1.0	30%	Pass	
Zinc	S19-Oc13073	CP	mg/kg	130	130	1.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S19-Oc13074	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S19-Oc13074	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S19-Oc13074	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S19-Oc13074	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S19-Oc13074	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S19-Oc13074	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S19-Oc13074	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S19-Oc13074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-Oc13074	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S19-Oc13076	CP	%	20	19	5.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S19-Oc13082	CP	mg/kg	8.3	7.9	4.0	30%	Pass	
Cadmium	S19-Oc13082	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S19-Oc13082	CP	mg/kg	22	23	3.0	30%	Pass	
Copper	S19-Oc13082	CP	mg/kg	12	11	8.0	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Lead	S19-Oc13082	CP	mg/kg	18	16	9.0	30%	Pass	
Mercury	S19-Oc13082	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S19-Oc13082	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S19-Oc13082	CP	mg/kg	8.5	7.6	11	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S19-Oc13083	CP	mg/kg	10	10	<1	30%	Pass	
Cadmium	S19-Oc13083	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S19-Oc13083	CP	mg/kg	18	18	2.0	30%	Pass	
Copper	S19-Oc13083	CP	mg/kg	16	16	1.0	30%	Pass	
Lead	S19-Oc13083	CP	mg/kg	86	87	1.0	30%	Pass	
Mercury	S19-Oc13083	CP	mg/kg	0.4	0.4	1.0	30%	Pass	
Nickel	S19-Oc13083	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S19-Oc13083	CP	mg/kg	32	32	2.0	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S19-Oc13084	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S19-Oc13084	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S19-Oc13084	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S19-Oc13084	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S19-Oc13084	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S19-Oc13084	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S19-Oc13084	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S19-Oc13084	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S19-Oc13084	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S19-Oc13084	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S19-Oc13084	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S19-Oc13084	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S19-Oc13084	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S19-Oc13084	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S19-Oc13084	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S19-Oc13084	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S19-Oc13084	CP	mg/kg	< 5	< 5	<1	30%	Pass	

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Environment Testing

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
Dinoseb	S19-Oc13084	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S19-Oc13084	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S19-Oc13085	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S19-Oc13085	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S19-Oc13085	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S19-Oc13085	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S19-Oc13085	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S19-Oc13085	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S19-Oc13085	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S19-Oc13085	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-Oc13085	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S19-Oc13086	CP	%	12	12	3.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S19-Oc13089	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S19-Oc13089	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S19-Oc13089	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S19-Oc13089	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S19-Oc13089	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S19-Oc13089	CP	mg/kg	< 100	< 100	<1	30%	Pass	

Environment Testing

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.
R20	This sample is a Trip Spike and therefore all results are reported as a percentage

Authorised By

Ursula Long	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Nibha Vaidya	Senior Analyst-Asbestos (NSW)

Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Certificate of Analysis

Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Coffey Environments Pty Ltd NSW
Level 20, Tower B, Citadel Tower 799 Pacific Highwa
Chatswood
NSW 2067

Attention:	David McFadden
Report	681511-AID
Project Name	LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID	SYDEN231101_LB
Received Date	Oct 09, 2019
Date Reported	Oct 16, 2019

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name	LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID	SYDEN231101_LB
Date Sampled	Oct 02, 2019 to Oct 04, 2019
Report	681511-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP01_0.0-0.1	19-Oc13034	Oct 03, 2019	Approximate Sample 227g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP03_0.0-0.1	19-Oc13036	Oct 03, 2019	Approximate Sample 240g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP04_0.0-0.1	19-Oc13037	Oct 03, 2019	Approximate Sample 144g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP05_0.0-0.1	19-Oc13039	Oct 03, 2019	Approximate Sample 197g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP07_0.0-0.1	19-Oc13041	Oct 03, 2019	Approximate Sample 174g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP11_0.0-0.1	19-Oc13045	Oct 04, 2019	Approximate Sample 234g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP13_0.0-0.1	19-Oc13048	Oct 04, 2019	Approximate Sample 173g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP15_0.0-0.1	19-Oc13051	Oct 04, 2019	Approximate Sample 259g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
TP29_0.0-0.1	19-Oc13054	Oct 04, 2019	Approximate Sample 157g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
A08508	19-Oc13065	Oct 02, 2019	Approximate Sample 221g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
A08570	19-Oc13066	Oct 02, 2019	Approximate Sample 247g Sample consisted of: Brown coarse-grained soil, rocks, concrete cement-like material and glass fragments	Chrysotile asbestos detected in weathered fibre cement fragments. Approximate raw weight of asbestos containing material = 0.00080g Total estimated asbestos content in the sample = 0.00040g* Total estimated asbestos concentration = 0.00016% w/w* No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
A08509	19-Oc13067	Oct 02, 2019	Approximate Sample 145g Sample consisted of: Brown coarse-grained soil, rocks, concrete cement-like material, glass fragments and corroded metal	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
A08507	19-Oc13068	Oct 02, 2019	Approximate Sample 193g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
A08526	19-Oc13069	Oct 02, 2019	Approximate Sample 234g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
TP30_0.0-0.1	19-Oc13070	Oct 04, 2019	Approximate Sample 197g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH17_0.1-0.2	19-Oc13073	Oct 03, 2019	Approximate Sample 217g Sample consisted of: Brown coarse-grained clayey soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH18_0.1-0.2	19-Oc13074	Oct 03, 2019	Approximate Sample 181g Sample consisted of: Brown coarse-grained soil, rocks and bituminous material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH21_0.2-0.3	19-Oc13079	Oct 04, 2019	Approximate Sample 291g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH22_0.0-0.1	19-Oc13080	Oct 03, 2019	Approximate Sample 64g Sample consisted of: Brown soil, organic debris and concrete cement-like material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
BH24_0.1-0.2	19-Oc13083	Oct 04, 2019	Approximate Sample 166g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH26_0.1-0.2	19-Oc13087	Oct 03, 2019	Approximate Sample 299g Sample consisted of: Brown coarse-grained soil, rocks and bituminous material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH27_0.2-0.3	19-Oc13089	Oct 03, 2019	Approximate Sample 137g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Oct 09, 2019	Indefinite

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NATA # 1261
Site # 1254 & 14271

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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
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Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

Company Name:	Coffey Environments Pty Ltd NSW	**Order No.:**		**Received:**	Oct 9, 2019 3:45 PM
Address:	Level 20, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	681511	**Due:**	Oct 16, 2019
		Phone:	+61 2 9406 1000	**Priority:**	5 Day
		Fax:	+61 2 9406 1004	**Contact Name:**	David McFadden
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
Project ID:	SYDEN231101_LB				

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	TP01_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13034	X			X	X	X
2	TP01_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13035					X	X
3	TP03_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13036	X			X	X	X
4	TP04_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13037	X			X	X	X
5	TP04_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13038					X	X
6	TP05_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13039	X			X	X	X
7	TP05_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13040					X	X
8	TP07_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13041	X			X	X	X
9	TP07_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13042				X	X	

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NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

Company Name: Coffey Environments Pty Ltd NSW
Address: Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Order No.:
Report #: 681511
Phone: +61 2 9406 1000
Fax: +61 2 9406 1004

Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
10	TP10_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13043				X	X	X
11	TP10_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13044					X	X
12	TP11_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13045	X			X	X	X
13	TP12_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13046				X	X	X
14	TP12_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13047					X	X
15	TP13_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13048	X			X	X	X
16	TP13_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13049					X	X
17	TP14_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13050				X	X	X
18	TP15_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13051	X			X	X	X
19	TP15_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13052					X	X
20	TP16_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13053					X	X
21	TP29_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13054	X			X	X	X

Company Name:	Coffey Environments Pty Ltd NSW	**Order No.:**		**Received:**	Oct 9, 2019 3:45 PM
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	Chatswood	**Phone:**	+61 2 9406 1000	**Priority:**	5 Day
	NSW 2067	**Fax:**	+61 2 9406 1004	**Contact Name:**	David McFadden
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
Project ID:	SYDEN231101_LB				

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
22	TP29_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13055					X	X
23	DUP02	Oct 04, 2019		Soil	S19-Oc13056					X	X
24	DUP03	Oct 04, 2019		Soil	S19-Oc13057					X	X
25	DUP05	Oct 04, 2019		Soil	S19-Oc13058					X	X
26	DUP08	Oct 04, 2019		Soil	S19-Oc13059					X	X
27	DUP06	Oct 04, 2019		Soil	S19-Oc13060					X	X
28	R03	Oct 04, 2019		Water	S19-Oc13061						X
29	TB3	Oct 04, 2019		Soil	S19-Oc13062			X			
30	TS3	Oct 04, 2019		Soil	S19-Oc13063			X			
31	A08508	Oct 02, 2019		Soil	S19-Oc13065	X				X	X
32	A08570	Oct 02, 2019		Soil	S19-Oc13066	X				X	X
33	A08509	Oct 02, 2019		Soil	S19-Oc13067	X				X	X

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Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
34	A08507	Oct 02, 2019		Soil	S19-Oc13068	X				X	X
35	A08526	Oct 02, 2019		Soil	S19-Oc13069	X				X	X
36	TP30_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13070	X			X	X	X
37	BH02_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13071				X	X	X
38	BH02_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13072					X	X
39	BH17_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13073	X			X	X	X
40	BH18_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13074	X			X	X	X
41	BH18_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13075					X	X
42	BH19_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13076				X	X	X
43	BH19_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13077					X	X
44	BH20_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13078				X	X	X
45	BH21_0.2-0.3	Oct 04, 2019		Soil	S19-Oc13079	X			X	X	X

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Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
46	BH22_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13080	X			X	X	X
47	BH22_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13081					X	X
48	BH23_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13082				X	X	X
49	BH24_0.1-0.2	Oct 04, 2019		Soil	S19-Oc13083	X			X	X	X
50	BH24_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13084				X	X	
51	BH25_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13085				X	X	X
52	BH25_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13086					X	X
53	BH26_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13087	X			X	X	X
54	BH26_0.7-0.8	Oct 03, 2019		Soil	S19-Oc13088					X	X
55	BH27_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13089	X			X	X	X
56	BH27_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13090				X	X	
57	BH28_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13091				X	X	X

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Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
58	TS	Oct 04, 2019		Soil	S19-Oc13092				X	X	X
59	TP01_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13093		X				
60	TP03_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13094		X				
61	TP03_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13095		X				
62	TP05_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13096		X				
63	TP07_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13097		X				
64	TP08_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13098		X				
65	TP08_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13099		X				
66	TP09_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13100		X				
67	TP09_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13101		X				
68	TP09_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13102		X				
69	TP10_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13103		X				

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Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
70	TP11_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13104		X				
71	TP11_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13105		X				
72	TP12_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13106		X				
73	TP13_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13107		X				
74	TP14_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13108		X				
75	TP14_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13109		X				
76	TP15_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13110		X				
77	TP16_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13111		X				
78	TP16_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13112		X				
79	TP29_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13113		X				
80	DUP01	Oct 04, 2019		Soil	S19-Oc13114		X				
81	DUP07	Oct 04, 2019		Soil	S19-Oc13115		X				

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Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
82	DUP04	Oct 04, 2019		Soil	S19-Oc13116		X				
83	TP30_0.3-0.4	Oct 04, 2019		Soil	S19-Oc13117		X				
84	TP30_0.8-0.9	Oct 04, 2019		Soil	S19-Oc13118		X				
85	BH02_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13119		X				
86	BH02_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13120		X				
87	BH17_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13121		X				
88	BH17_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13122		X				
89	BH17_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13123		X				
90	BH18_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13124		X				
91	BH19_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13125		X				
92	BH19_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13126		X				
93	BH19_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13127		X				

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Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
94	BH20_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13128		X				
95	BH20_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13129		X				
96	BH21_0.0-0.2	Oct 04, 2019		Soil	S19-Oc13130		X				
97	BH21_0.5-0.6	Oct 04, 2019		Soil	S19-Oc13131		X				
98	BH21_1.0-1.1	Oct 04, 2019		Soil	S19-Oc13132		X				
99	BH22_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13133		X				
100	BH23_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13134		X				
101	BH23_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13135		X				
102	BH23_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13136		X				
103	BH23_1.2-1.3	Oct 03, 2019		Soil	S19-Oc13137		X				
104	BH24_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13138		X				
105	BH24_1.0-1.1	Oct 04, 2019		Soil	S19-Oc13139		X				

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Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
106	BH25_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13140		X				
107	BH25_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13141		X				
108	BH26_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13142		X				
109	BH27_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13143		X				
110	BH27_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13144		X				
111	BH28_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13145		X				
112	BH28_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13146		X				
Test Counts						22	54	2	30	55	53

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

Sayeed Abu	Senior Analyst-Asbestos (NSW)

Authorised by:

Laxman Dias	Senior Analyst-Asbestos (NSW)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Certificate of Analysis

Coffey Environments Pty Ltd NSW
Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **David McFadden**

Report	**681511-W**
Project name	LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID	SYDEN231101_LB
Received Date	Oct 09, 2019

Client Sample ID			**R03**
Sample Matrix			**Water**
Eurofins Sample No.			**S19-Oc13061**
Date Sampled			**Oct 04, 2019**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	0.02	mg/L	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	< 0.1
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
o-Xylene	0.001	mg/L	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003
4-Bromofluorobenzene (surr.)	1	%	87
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.01	mg/L	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	0.001	mg/L	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001
Anthracene	0.001	mg/L	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001
Chrysene	0.001	mg/L	< 0.001
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001
Fluoranthene	0.001	mg/L	< 0.001
Fluorene	0.001	mg/L	< 0.001

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Client Sample ID			R03
Sample Matrix			Water
Eurofins Sample No.			S19-Oc13061
Date Sampled			Oct 04, 2019
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001
Naphthalene	0.001	mg/L	< 0.001
Phenanthrene	0.001	mg/L	< 0.001
Pyrene	0.001	mg/L	< 0.001
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	69
p-Terphenyl-d14 (surr.)	1	%	79
Phenols (Halogenated)			
2-Chlorophenol	0.003	mg/L	< 0.003
2.4-Dichlorophenol	0.003	mg/L	< 0.003
2.4.5-Trichlorophenol	0.01	mg/L	< 0.01
2.4.6-Trichlorophenol	0.01	mg/L	< 0.01
2.6-Dichlorophenol	0.003	mg/L	< 0.003
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01
Pentachlorophenol	0.01	mg/L	< 0.01
Tetrachlorophenols - Total	0.03	mg/L	< 0.03
Total Halogenated Phenol*	0.01	mg/L	< 0.01
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	0.1	mg/L	< 0.1
2-Methyl-4.6-dinitrophenol	0.03	mg/L	< 0.03
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003
2-Nitrophenol	0.01	mg/L	< 0.01
2.4-Dimethylphenol	0.003	mg/L	< 0.003
2.4-Dinitrophenol	0.03	mg/L	< 0.03
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006
4-Nitrophenol	0.03	mg/L	< 0.03
Dinoseb	0.1	mg/L	< 0.1
Phenol	0.003	mg/L	< 0.003
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1
Phenol-d6 (surr.)	1	%	20
Heavy Metals			
Arsenic	0.001	mg/L	< 0.001
Cadmium	0.0002	mg/L	< 0.0002
Chromium	0.001	mg/L	< 0.001
Copper	0.001	mg/L	< 0.001
Lead	0.001	mg/L	< 0.001
Mercury	0.0001	mg/L	< 0.0001
Nickel	0.001	mg/L	< 0.001
Zinc	0.005	mg/L	< 0.005

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins | mgt Suite B7A			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Oct 11, 2019	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Oct 11, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Oct 11, 2019	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Oct 11, 2019	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Melbourne	Oct 11, 2019	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Melbourne	Oct 11, 2019	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Oct 11, 2019	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Melbourne	Oct 11, 2019	180 Days
- Method:			

Company Name: Coffey Environments Pty Ltd NSW
Address: Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
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Order No.:
Report #: 681511
Phone: +61 2 9406 1000
Fax: +61 2 9406 1004

Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	TP01_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13034	X			X	X	X
2	TP01_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13035					X	X
3	TP03_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13036	X			X	X	X
4	TP04_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13037	X			X	X	X
5	TP04_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13038					X	X
6	TP05_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13039	X			X	X	X
7	TP05_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13040					X	X
8	TP07_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13041	X			X	X	X
9	TP07_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13042				X	X	

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Order No.:
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Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
10	TP10_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13043				X	X	X
11	TP10_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13044					X	X
12	TP11_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13045	X			X	X	X
13	TP12_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13046				X	X	X
14	TP12_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13047					X	X
15	TP13_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13048	X			X	X	X
16	TP13_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13049					X	X
17	TP14_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13050				X	X	X
18	TP15_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13051	X			X	X	X
19	TP15_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13052					X	X
20	TP16_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13053					X	X
21	TP29_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13054	X			X	X	X

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Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
22	TP29_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13055					X	X
23	DUP02	Oct 04, 2019		Soil	S19-Oc13056					X	X
24	DUP03	Oct 04, 2019		Soil	S19-Oc13057					X	X
25	DUP05	Oct 04, 2019		Soil	S19-Oc13058					X	X
26	DUP08	Oct 04, 2019		Soil	S19-Oc13059					X	X
27	DUP06	Oct 04, 2019		Soil	S19-Oc13060					X	X
28	R03	Oct 04, 2019		Water	S19-Oc13061						X
29	TB3	Oct 04, 2019		Soil	S19-Oc13062			X			
30	TS3	Oct 04, 2019		Soil	S19-Oc13063			X			
31	A08508	Oct 02, 2019		Soil	S19-Oc13065	X				X	X
32	A08570	Oct 02, 2019		Soil	S19-Oc13066	X				X	X
33	A08509	Oct 02, 2019		Soil	S19-Oc13067	X				X	X

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Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
Project ID:	SYDEN231101_LB				

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
34	A08507	Oct 02, 2019		Soil	S19-Oc13068	X				X	X
35	A08526	Oct 02, 2019		Soil	S19-Oc13069	X				X	X
36	TP30_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13070	X			X	X	X
37	BH02_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13071				X	X	X
38	BH02_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13072					X	X
39	BH17_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13073	X			X	X	X
40	BH18_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13074	X			X	X	X
41	BH18_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13075					X	X
42	BH19_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13076				X	X	X
43	BH19_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13077					X	X
44	BH20_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13078				X	X	X
45	BH21_0.2-0.3	Oct 04, 2019		Soil	S19-Oc13079	X			X	X	X

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Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
Project ID:	SYDEN231101_LB				

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
46	BH22_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13080	X			X	X	X
47	BH22_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13081					X	X
48	BH23_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13082				X	X	X
49	BH24_0.1-0.2	Oct 04, 2019		Soil	S19-Oc13083	X			X	X	X
50	BH24_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13084				X	X	
51	BH25_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13085				X	X	X
52	BH25_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13086					X	X
53	BH26_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13087	X			X	X	X
54	BH26_0.7-0.8	Oct 03, 2019		Soil	S19-Oc13088					X	X
55	BH27_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13089	X			X	X	X
56	BH27_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13090				X	X	
57	BH28_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13091				X	X	X

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	NSW 2067	**Fax:**	+61 2 9406 1004	**Contact Name:**	David McFadden
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
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Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
58	TS	Oct 04, 2019		Soil	S19-Oc13092				X	X	X
59	TP01_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13093		X				
60	TP03_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13094		X				
61	TP03_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13095		X				
62	TP05_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13096		X				
63	TP07_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13097		X				
64	TP08_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13098		X				
65	TP08_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13099		X				
66	TP09_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13100		X				
67	TP09_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13101		X				
68	TP09_0.9-1.0	Oct 03, 2019		Soil	S19-Oc13102		X				
69	TP10_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13103		X				

eurofins Environment Testing

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NATA # 1261 Site # 20794

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Site # 23736

Company Name:	Coffey Environments Pty Ltd NSW	**Order No.:**		**Received:**	Oct 9, 2019 3:45 PM
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	Chatswood	**Phone:**	+61 2 9406 1000	**Priority:**	5 Day
	NSW 2067	**Fax:**	+61 2 9406 1004	**Contact Name:**	David McFadden
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
Project ID:	SYDEN231101_LB				

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
70	TP11_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13104		X				
71	TP11_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13105		X				
72	TP12_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13106		X				
73	TP13_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13107		X				
74	TP14_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13108		X				
75	TP14_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13109		X				
76	TP15_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13110		X				
77	TP16_0.4-0.5	Oct 04, 2019		Soil	S19-Oc13111		X				
78	TP16_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13112		X				
79	TP29_0.9-1.0	Oct 04, 2019		Soil	S19-Oc13113		X				
80	DUP01	Oct 04, 2019		Soil	S19-Oc13114		X				
81	DUP07	Oct 04, 2019		Soil	S19-Oc13115		X				

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

Perth
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NATA # 1261
Site # 23736

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Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
82	DUP04	Oct 04, 2019		Soil	S19-Oc13116		X				
83	TP30_0.3-0.4	Oct 04, 2019		Soil	S19-Oc13117		X				
84	TP30_0.8-0.9	Oct 04, 2019		Soil	S19-Oc13118		X				
85	BH02_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13119		X				
86	BH02_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13120		X				
87	BH17_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13121		X				
88	BH17_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13122		X				
89	BH17_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13123		X				
90	BH18_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13124		X				
91	BH19_0.3-0.4	Oct 03, 2019		Soil	S19-Oc13125		X				
92	BH19_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13126		X				
93	BH19_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13127		X				

ABN – 50 005 085 521
e.mail : EnviroSales@eurofins.com
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Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
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Kewdale WA 6105
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NATA # 1261
Site # 23736

Company Name:	Coffey Environments Pty Ltd NSW	**Order No.:**	
Address:	Level 20, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	681511
		Phone:	+61 2 9406 1000
		Fax:	+61 2 9406 1004
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)	**Received:**	Oct 9, 2019 3:45 PM
Project ID:	SYDEN231101_LB	**Due:**	Oct 16, 2019
		Priority:	5 Day
		Contact Name:	David McFadden

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
94	BH20_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13128		X				
95	BH20_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13129		X				
96	BH21_0.0-0.2	Oct 04, 2019		Soil	S19-Oc13130		X				
97	BH21_0.5-0.6	Oct 04, 2019		Soil	S19-Oc13131		X				
98	BH21_1.0-1.1	Oct 04, 2019		Soil	S19-Oc13132		X				
99	BH22_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13133		X				
100	BH23_0.1-0.2	Oct 03, 2019		Soil	S19-Oc13134		X				
101	BH23_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13135		X				
102	BH23_0.6-0.7	Oct 03, 2019		Soil	S19-Oc13136		X				
103	BH23_1.2-1.3	Oct 03, 2019		Soil	S19-Oc13137		X				
104	BH24_0.0-0.1	Oct 04, 2019		Soil	S19-Oc13138		X				
105	BH24_1.0-1.1	Oct 04, 2019		Soil	S19-Oc13139		X				

Company Name: Coffey Environments Pty Ltd NSW
Address: Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID: SYDEN231101_LB

Order No.:
Report #: 681511
Phone: +61 2 9406 1000
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Received: Oct 9, 2019 3:45 PM
Due: Oct 16, 2019
Priority: 5 Day
Contact Name: David McFadden

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Asbestos - AS4964	HOLD	BTEX	Eurofins | mgt Suite B14	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X	X	X
Sydney Laboratory - NATA Site # 18217						X		X			X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
106	BH25_1.0-1.1	Oct 03, 2019		Soil	S19-Oc13140		X				
107	BH25_2.0-2.1	Oct 03, 2019		Soil	S19-Oc13141		X				
108	BH26_0.2-0.3	Oct 03, 2019		Soil	S19-Oc13142		X				
109	BH27_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13143		X				
110	BH27_0.4-0.5	Oct 03, 2019		Soil	S19-Oc13144		X				
111	BH28_0.0-0.1	Oct 03, 2019		Soil	S19-Oc13145		X				
112	BH28_0.5-0.6	Oct 03, 2019		Soil	S19-Oc13146		X				
Test Counts						22	54	2	30	55	53

eurofins | Environment Testing

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ug/L:** micrograms per litre
ppm: Parts per million	**ppb:** Parts per billion	**%:** Percentage
org/100mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Environment Testing

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	103			70-130	Pass	
TRH C10-C14	%	118			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	97			70-130	Pass	
Toluene	%	95			70-130	Pass	
Ethylbenzene	%	98			70-130	Pass	
m&p-Xylenes	%	95			70-130	Pass	
Xylenes - Total	%	95			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	90			70-130	Pass	
TRH C6-C10	%	107			70-130	Pass	
TRH >C10-C16	%	110			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	92			80-120	Pass	
Cadmium	%	91			80-120	Pass	
Chromium	%	86			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Copper			%	91			80-120	Pass	
Lead			%	89			80-120	Pass	
Mercury			%	88			75-125	Pass	
Nickel			%	90			80-120	Pass	
Zinc			%	92			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	N19-Oc13988	NCP	%	108			70-130	Pass	
TRH C10-C14	M19-Oc15183	NCP	%	88			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	N19-Oc13988	NCP	%	108			70-130	Pass	
Toluene	N19-Oc13988	NCP	%	107			70-130	Pass	
Ethylbenzene	N19-Oc13988	NCP	%	105			70-130	Pass	
m&p-Xylenes	N19-Oc13988	NCP	%	100			70-130	Pass	
o-Xylene	N19-Oc13988	NCP	%	103			70-130	Pass	
Xylenes - Total	N19-Oc13988	NCP	%	101			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	N19-Oc13988	NCP	%	90			70-130	Pass	
TRH C6-C10	N19-Oc13988	NCP	%	110			70-130	Pass	
TRH >C10-C16	M19-Oc15183	NCP	%	82			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M19-Oc14253	NCP	%	92			75-125	Pass	
Cadmium	M19-Oc14253	NCP	%	86			75-125	Pass	
Chromium	M19-Oc14253	NCP	%	88			75-125	Pass	
Copper	M19-Oc14253	NCP	%	88			75-125	Pass	
Lead	M19-Oc14253	NCP	%	86			75-125	Pass	
Mercury	M19-Oc14253	NCP	%	84			70-130	Pass	
Nickel	M19-Oc14253	NCP	%	88			75-125	Pass	
Zinc	M19-Oc14253	NCP	%	87			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S19-Oc13611	NCP	mg/L	0.02	< 0.02	15	30%	Pass	
TRH C10-C14	N19-Oc13992	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	N19-Oc13992	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	N19-Oc13992	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S19-Oc13611	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-Oc13611	NCP	mg/L	0.005	0.003	44	30%	Fail	Q15
Ethylbenzene	S19-Oc13611	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S19-Oc13611	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S19-Oc13611	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S19-Oc13611	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S19-Oc13611	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	S19-Oc13611	NCP	mg/L	0.03	0.02	13	30%	Pass	
TRH >C10-C16	N19-Oc13992	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M19-Oc14235	NCP	mg/L	0.002	0.002	10	30%	Pass	
Cadmium	M19-Oc14235	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium	M19-Oc14235	NCP	mg/L	0.002	0.002	9.0	30%	Pass	
Copper	M19-Oc14235	NCP	mg/L	0.003	0.004	17	30%	Pass	
Lead	M19-Oc14235	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Mercury	M19-Oc14235	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	M19-Oc14235	NCP	mg/L	0.004	0.004	3.0	30%	Pass	
Zinc	M19-Oc14235	NCP	mg/L	0.027	0.026	5.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

Ursula Long	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)

Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

eurofins | Environment Testing

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NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**Coffey Environments Pty Ltd NSW**
Contact name:	David McFadden
Project name:	LIVERPOOL PRECINCT (LIVERPOOLBOYS)
Project ID:	SYDEN231101_LB
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Oct 9, 2019 3:45 PM
Eurofins reference:	**681511**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 16.9 degrees Celsius.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☑ Sample containers for volatile analysis received with zero headspace.

☑ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

TRIP01, TRIP02, TRIP04, TRIP05, TRIP03 FORWARDED TO ALS.

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to David McFadden - David.McFadden@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Environments Pty Ltd NSW email address.

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Adrian Christie	Project Manager:	David McFadden
Special Instructions:		SEND TRIP'S to ALS	

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	TP01_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP01_0.4-0.5	03-10-19		Soil	J	std			X			
	TP01_0.9-1.0	03-10-19		Soil	J	std					X	
	TP03_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP03_0.4-0.5	03-10-19		Soil	J	std					X	
	TP03_0.9-1.0	03-10-19		Soil	J	std					X	
	TP04_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP04_0.4-0.5	03-10-19		Soil	J	std			X			
	TP05_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP05_0.4-0.5	03-10-19		Soil	J	std					X	
	TP05_0.9-1.0	03-10-19		Soil	J	std			X			
	TP07_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP07_0.4-0.5	03-10-19		Soil	J,B	std				X		
	TP07_0.9-1.0	03-10-19		Soil	J,B	std					X	
	TP08_0.0-0.1	03-10-19		Soil	J,B	std						
	TP08_0.6-0.7	03-10-19		Soil	J	std						
	TP09_0.0-0.1	03-10-19		Soil	J,B'	std						
	TP09_0.4-0.5	03-10-19		Soil	J	std						

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	lupan	Date:	9/10
Coffey Environments		Time:		Company:		Time:	3:45 pm
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)
All Samples Recieved in Good Condition ☒
All Documentation is in Proper Order ☒
Samples Received Properly Chilled ☒
Lab. Ref/Batch No. 681511

***Container Type & Preservation Codes: P** - Plastic, **G**- Glass Bottle, **J** - Glass Jar, **V**- Vial, **Z** - Ziplock bag, **N** - Nitric Acid Preserved, **C** - Hydrochloric Acid Preserved, **S** - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Adrian Christie	Project Manager:	David McFadden
Special Instructions:	SEND TRIP'S TO ALS		

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	TP09_0.9-1.0	03-10-19		Soil	J	std					X	
	TP10_0.0-0.1	03-10-19		Soil	J,B	std			X	X		
	TP10_0.4-0.5	03-10-19		Soil	J	std					X	
	TP10_0.9-1.0	03-10-19		Soil	J	std			X			
	TP11_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X		
	TP11_0.4-0.5	04-10-19		Soil	J,B	std					X	
	TP11_0.9-1.0	04-10-19		Soil	J	std					X	
	TP12_0.0-0.1	04-10-19		Soil	J,B	std			X	X		
	TP12_0.4-0.5	04-10-19		Soil	J	std			X			
	TP12_0.9-1.0	04-10-19		Soil	J	std					X	
	TP13_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X		
	TP13_0.4-0.5	04-10-19		Soil	J	std			X			
	TP13_0.9-1.0	04-10-19		Soil	J	std					X	
	TP14_0.0-0.1	04-10-19		Soil	J,B	std			X	X		
	TP14_0.4-0.5	04-10-19		Soil	J	std					X	
	TP14_0.9-1.0	04-10-19		Soil	J	std					X	
	TP15_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X		
	TP15_0.4-0.5	04-10-19		Soil	J	std			X			

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	Rupam	Date:	9/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** **P** - Plastic, **G**- Glass Bottle, **J** - Glass Jar, **V**- Vial, **Z** - Ziplock bag, **N** - Nitric Acid Preserved, **C** - Hydrochloric Acid Preserved, **S** - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Adrian Christie	Project Manager:	David McFadden
Special Instructions:	SEND TRIP'S TO ALS		

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD							ALS Suite S26		NOTES
	TP15_0.9-1.0	04-10-19		Soil	J	std					X									
	TP16_0.0-0.1	04-10-19		Soil	J,B	std			X											
	TP16_0.4-0.5	04-10-19		Soil	J	std					X									
	TP16_0.9-1.0	04-10-19		Soil	J	std					X									
	TP29_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X										
	TP29_0.4-0.5	04-10-19		Soil	J	std			X											
	TP29_0.9-1.0	04-10-19		Soil	J	std					X									
	DUP01	04-10-19		Soil	J	std					X									
	DUP02	04-10-19		Soil	J	std			X											
	TRIP01	04-10-19		Soil	J	std												X		SEND TO ALS
	DUP03	04-10-19		Soil	J	std			X											
	TRIP02	04-10-19		Soil	J	std												X		SEND TO ALS
	DUP05	04-10-19		Soil	J	std			X											
	TRIP04	04-10-19		Soil	J	std												X		SEND TO ALS
	DUP08	04-10-19		Soil	J	std			X											
	DUP06	04-10-19		Soil	J	std			X											
	TRIP05	04-10-19		Soil	J	std					X									SEND TO ALS
	DUP07	04-10-19		Soil	J	std														

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	Rupam	Date:	9/10
Coffey Environments		Time:	2pm 9/10/19	Company:		Time:	
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** P - Plastic, G- Glass Bottle, J - Glass Jar, V- Vial, Z - Ziplock bag, N - Nitric Acid Preserved, C - Hydrochloric Acid Preserved, S - Sulphuric

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Adrian Christie	Project Manager:	David McFadden
Special Instructions:	SEND TRIP'S to ALS		

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	DUP04	04-10-19		Soil	J	std					X	
	TRIP03	04-10-19		Soil	J	std					X	SEND TO ALS
	R03	04-10-19		Water	2V, G, P	std			X			
	TB3	04-10-19		Water	V	std		X				
	TS3	04-10-19		Water	V	std		X				
	A08508	02-10-19		Soil	Jar, Zip	std	X		X			
	A08570	02-10-19		Soil	Jar, Zip	std	X		X			
	A08509	02-10-19		Soil	Jar, Zip	std	X		X			
	A08507	02-10-19		Soil	Jar, Zip	std	X		X			
	A08526	02-10-19		Soil	Jar, Zip	std	X		X			
	TP30_0.0-0.1	04-10-19		Soil		std	X		X	X		
	TP30_0.3-0.4	04-10-19		Soil		std					X	
	TP30_0.8-0.9	04-10-19		Soil		std					X	

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	Kupan	Date:	9/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** **P** - Plastic, **G**- Glass Bottle, **J** - Glass Jar, **V**- Vial, **Z** - Ziplock bag, **N** - Nitric Acid Preserved, **C** - Hydrochloric Acid Preserved, **S** - Sulphuric

coffey environments
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Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Andrew Lepre	Project Manager:	David McFadden
Special Instructions:			

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	BH02_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		
	BH02-0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH02_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH02_2.0-2.1	03-10-19		Soil	Jar	std					X	
	BH17_0.0-0.1	03-10-19		Soil	Jar, Zip	std						
	BH17_0.1-0.2	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH17_0.3-0.4	03-10-19		Soil	Jar	std					X	
	BH17_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH18_0.1-0.2	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH18_0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH18_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH19_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		
	BH19_0.3-0.4	03-10-19		Soil	Jar, Zip	std					X	
	BH19_0.5-0.6	03-10-19		Soil	Jar	std			X			
	BH19_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH19_2.0-2.1	03-10-19		Soil	Jar	std					X	
	BH20_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		
	BH20_0.5-0.6	03-10-19		Soil	Jar	std					X	

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	Rupam	Date:	9/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** P - Plastic, G- Glass Bottle, J - Glass Jar, V- Vial, Z - Ziplock bag, N - Nitric Acid Preserved, C - Hydrochloric Acid Preserved, S - Sulphuric

Reference No. ______________

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Andrew Lepre	Project Manager:	David McFadden
Special Instructions:			

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	BH20_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH21_0.0-0.2	04-10-19		Soil	Jar, Zip	std					X	
	BH21_0.2-0.3	04-10-19		Soil	Jar, Zip	std	X		X	X		
	BH21_0.5-0.6	04-10-19		Soil	Jar	std					X	
	BH21_1.0-1.1	04-10-19		Soil	Jar	std					X	
	BH22_0.0-0.1	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH22_0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH22_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH23_0.1-0.2	03-10-19		Soil	Jar, Zip	std					X	
	BH23_0.3-0.4	03-10-19		Soil	Jar, Zip	std			X	X		
	BH23_0.4-0.5	03-10-19		Soil	Jar	std					X	
	BH23_0.6-0.7	03-10-19		Soil	Jar	std					X	
	BH23_1.2-1.3	03-10-19		Soil	Jar	std					X	
	BH24_0.0-0.1	04-10-19		Soil	Jar, Zip	std						
	BH24_0.1-0.2	04-10-19		Soil	Jar, Zip	std	X		X	X		
	BH24_0.4-0.5	04-10-19		Soil	Jar	std				X		
	BH24_1.0-1.1	04-10-19		Soil	Jar	std					X	
	BH25_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	Rupani	Date:	9/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes: P** - Plastic, **G**- Glass Bottle, **J** - Glass Jar, **V**- Vial, **Z** - Ziplock bag, **N** - Nitric Acid Preserved, **C** - Hydrochloric Acid Preserved, **S** - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

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Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Andrew Lepre	Project Manager:	David McFadden
Special Instructions:			

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	BH25_0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH25_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH25_2.0-2.1	03-10-19		Soil	Jar	std					X	
	Bh26_0.1-0.2	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH26_0.2-0.3	03-10-19		Soil	Jar	std					X	
	BH26_0.7-0.8	03-10-19		Soil	Jar	std			X			
	BH27_0.0-0.1	03-10-19		Soil	Jar, Zip	std					X	
	BH27_0.2-0.3	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH27_0.4-0.5	03-10-19		Soil	Jar, Zip	std					X	
	BH27_0.6-0.7	03-10-19		Soil	Jar	std				X		
	BH28_0.0-0.1	03-10-19		Soil	Jar, Zip	std					X	
	BH28_0.2-0.3	03-10-19		Soil	Jar, Zip	std			X	X		
	BH28_0.5-0.6	03-10-19		Soil	Jar	std					X	
	TS	04-10-19		Soil	Jar, Zip	std			X	X		Trench Sample From DP TP

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	Rupam	Date:	4/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** **P** - Plastic, **G**- Glass Bottle, **J** - Glass Jar, **V**- Vial, **Z** - Ziplock bag, **N** - Nitric Acid Preserved, **C** - Hydrochloric Acid Preserved, **S** - Sulphuric

Certificate of Analysis

Coffey Environments Pty Ltd NSW
Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **David McFadden**

Report	**684836-S**
Project name	LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID	SYDEN231101_LB
Received Date	Oct 27, 2019

Client Sample ID			**BH26_0.1-0.2**
Sample Matrix			**Soil**
Eurofins Sample No.			**M19-Oc42317**
Date Sampled			**Oct 03, 2019**
Test/Reference	LOR	Unit	
Chromium (hexavalent)	1	mg/kg	< 1
% Moisture	1	%	25

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Chromium (hexavalent)	Melbourne	Oct 28, 2019	28 Days
- Method: APHA 3500-Cr Hexavalent Chromium- (Extraction:- USEPA3060)			
% Moisture	Melbourne	Oct 28, 2019	14 Days
- Method: LTM-GEN-7080 Moisture			

Company Name:	Coffey Environments Pty Ltd NSW	**Order No.:**	
Address:	Level 20, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	684836
		Phone:	+61 2 9406 1000
		Fax:	+61 2 9406 1004
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)		
Project ID:	SYDEN231101_LB		

Received:	Oct 27, 2019 12:58 PM
Due:	Oct 30, 2019
Priority:	2 Day
Contact Name:	David McFadden

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Chromium (hexavalent)	Moisture Set
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X
Sydney Laboratory - NATA Site # 18217							
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	BH26_0.1-0.2	Oct 03, 2019		Soil	M19-Oc42317	X	X
Test Counts						1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ug/L:** micrograms per litre
ppm: Parts per million	**ppb:** Parts per billion	**%:** Percentage
org/100mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank									
Chromium (hexavalent)			mg/kg	< 1			1	Pass	
LCS - % Recovery									
Chromium (hexavalent)			%	104			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M19-Oc36123	NCP	%	106			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M19-Oc36321	NCP	mg/kg	< 1		<1	30%	Pass	
% Moisture	M19-Oc42373	NCP	%	19	20	5.0	30%	Pass	

Eurofins Environment Testing

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised By

Ursula Long	Analytical Services Manager
Julie Kay	Senior Analyst-Inorganic (VIC)

Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Melbourne
6 Monterey Road
Dandenong South Vic 3175
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NATA # 1261
Site # 1254 & 14271

Sydney
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**Coffey Environments Pty Ltd NSW**
Contact name:	David McFadden
Project name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID:	SYDEN231101_LB
COC number:	Not provided
Turn around time:	2 Day
Date/Time received:	Oct 27, 2019 12:58 PM
Eurofins reference:	**684836**

Sample information

- ☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☑ All samples have been received as described on the above COC.
- ☑ COC has been completed correctly.
- ☑ Attempt to chill was evident.
- ☑ Appropriately preserved sample containers have been used.
- ☑ All samples were received in good condition.
- ☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☑ Appropriate sample containers have been used.
- ☒ Split sample sent to requested external lab.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to David McFadden - David.McFadden@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Environments Pty Ltd NSW email address.

Enviro Sample Vic

From:	Ursula Long
Sent:	Monday, 28 October 2019 12:08 PM
To:	Enviro Sample Vic Transit; Enviro Sample Vic; Catherine Wilson
Subject:	2 DAY ADDITIONAL: FW: Eurofins Test Results, Invoice - Report 681511 : Site LIVERPOOL PRECINCT (LIVERPOOL BOYS) (SYDEN231101_LB)

2 day TAT additional please on 681511 for Cr6+

- BH26_0.1-0.2 - Oc13087

D.S 03|10
I20-I23

Kind regards,

Ursula Long

Eurofins | Environment Testing
Unit F3, Parkview Building
16 Mars Road
LANE COVE WEST NSW 2066
AUSTRALIA
Phone : +61 2 9900 8420
Mobile: +61 428 845 495

Email : UrsulaLong@eurofins.com
Website: www.eurofins.com.au/environmental-testing

From: McFadden, David [mailto:David.McFadden@coffey.com]
Sent: Sunday, 27 October 2019 12:58 PM
To: Ursula Long
Subject: FW: Eurofins Test Results, Invoice - Report 681511 : Site LIVERPOOL PRECINCT (LIVERPOOL BOYS) (SYDEN231101_LB)

EXTERNAL EMAIL*

Hi Ursula,

I need to get some more testing completed on sample ID BH26_0.1-0.2.

Please analyse for hexavalent chromium on a 2 day TAT please.

684836
Adlcins EP

Kind regards,
David

From: UrsulaLong@eurofins.com <UrsulaLong@eurofins.com>
Sent: Wednesday, October 16, 2019 6:14 PM
To: McFadden, David <David.McFadden@coffey.com>
Subject: Eurofins Test Results, Invoice - Report 681511 : Site LIVERPOOL PRECINCT (LIVERPOOL BOYS) (SYDEN231101_LB)

Certificate of Analysis

Eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Coffey Environments Pty Ltd NSW
Level 20, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Attention: **David McFadden**

Report **683170-S**
Project name LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID SYDEN231101_LB
Received Date Oct 17, 2019

Client Sample ID			**TP08_0.0-0.1**	**TP09_0.0-0.1**	**TP09_0.4-0.5**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M19-Oc26674**	**M19-Oc26675**	**M19-Oc26676**
Date Sampled			**Oct 03, 2019**	**Oct 03, 2019**	**Oct 03, 2019**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	108	105	96
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			TP08_0.0-0.1	TP09_0.0-0.1	TP09_0.4-0.5
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			M19-Oc26674	M19-Oc26675	M19-Oc26676
Date Sampled			Oct 03, 2019	Oct 03, 2019	Oct 03, 2019
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	60	60	59
p-Terphenyl-d14 (surr.)	1	%	89	93	84
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	57	66	61
Heavy Metals					
Arsenic	2	mg/kg	55	16	6.3
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	6.8	22	20
Copper	5	mg/kg	7.7	12	6.8
Lead	5	mg/kg	12	20	14
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	7.7	< 5	< 5
Zinc	5	mg/kg	21	12	< 5
% Moisture	1	%	11	15	15

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins | mgt Suite B7			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Oct 17, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Oct 17, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Oct 17, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Oct 17, 2019	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Melbourne	Oct 17, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Melbourne	Oct 17, 2019	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Phenols (IWRG 621)			
Phenols (Halogenated)	Melbourne	Oct 21, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Oct 21, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
% Moisture	Melbourne	Oct 17, 2019	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins Environment Testing

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web : www.eurofins.com.au

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Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

Company Name:	Coffey Environments Pty Ltd NSW	**Order No.:**		**Received:**	Oct 17, 2019 3:48 PM
Address:	Level 20, Tower B, Citadel Tower 799 Pacific Highway	**Report #:**	683170	**Due:**	Oct 22, 2019
	Chatswood	**Phone:**	+61 2 9406 1000	**Priority:**	3 Day
	NSW 2067	**Fax:**	+61 2 9406 1004	**Contact Name:**	David McFadden
Project Name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)				
Project ID:	SYDEN231101_LB				

Eurofins Analytical Services Manager : Ursula Long

Sample Detail						Moisture Set	Eurofins | mgt Suite B7
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X
Sydney Laboratory - NATA Site # 18217							
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	TP08_0.0-0.1	Oct 03, 2019		Soil	M19-Oc26674	X	X
2	TP09_0.0-0.1	Oct 03, 2019		Soil	M19-Oc26675	X	X
3	TP09_0.4-0.5	Oct 03, 2019		Soil	M19-Oc26676	X	X
Test Counts						3	3

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Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ug/L:** micrograms per litre
ppm: Parts per million	**ppb:** Parts per billion	**%:** Percentage
org/100mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
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Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
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APHA	American Public Health Association
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NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

eurofins

Environment Testing

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	

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Environment Testing

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	91			70-130	Pass	
TRH C10-C14	%	117			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	103			70-130	Pass	
Toluene	%	103			70-130	Pass	
Ethylbenzene	%	103			70-130	Pass	
m&p-Xylenes	%	98			70-130	Pass	
Xylenes - Total	%	100			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	105			70-130	Pass	
TRH C6-C10	%	90			70-130	Pass	
TRH >C10-C16	%	115			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	80			70-130	Pass	
Acenaphthylene	%	72			70-130	Pass	
Anthracene	%	78			70-130	Pass	
Benz(a)anthracene	%	71			70-130	Pass	
Benzo(a)pyrene	%	86			70-130	Pass	
Benzo(b&j)fluoranthene	%	82			70-130	Pass	
Benzo(g.h.i)perylene	%	110			70-130	Pass	
Benzo(k)fluoranthene	%	120			70-130	Pass	
Chrysene	%	82			70-130	Pass	
Dibenz(a.h)anthracene	%	81			70-130	Pass	
Fluoranthene	%	94			70-130	Pass	
Fluorene	%	73			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	95			70-130	Pass	
Naphthalene	%	82			70-130	Pass	
Phenanthrene	%	74			70-130	Pass	
Pyrene	%	101			70-130	Pass	
LCS - % Recovery							

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenols (Halogenated)									
2-Chlorophenol			%	81			30-130	Pass	
2.4-Dichlorophenol			%	70			30-130	Pass	
2.4.5-Trichlorophenol			%	56			30-130	Pass	
2.4.6-Trichlorophenol			%	65			30-130	Pass	
2.6-Dichlorophenol			%	84			30-130	Pass	
4-Chloro-3-methylphenol			%	76			30-130	Pass	
Pentachlorophenol			%	39			30-130	Pass	
Tetrachlorophenols - Total			%	59			30-130	Pass	
LCS - % Recovery									
Phenols (non-Halogenated)									
2-Cyclohexyl-4.6-dinitrophenol			%	33			30-130	Pass	
2-Methyl-4.6-dinitrophenol			%	32			30-130	Pass	
2-Methylphenol (o-Cresol)			%	82			30-130	Pass	
2-Nitrophenol			%	64			30-130	Pass	
2.4-Dimethylphenol			%	78			30-130	Pass	
2.4-Dinitrophenol			%	30			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)			%	72			30-130	Pass	
4-Nitrophenol			%	32			30-130	Pass	
Dinoseb			%	33			30-130	Pass	
Phenol			%	79			30-130	Pass	
LCS - % Recovery									
Heavy Metals									
Arsenic			%	102			80-120	Pass	
Cadmium			%	82			80-120	Pass	
Chromium			%	95			80-120	Pass	
Copper			%	96			80-120	Pass	
Lead			%	95			80-120	Pass	
Mercury			%	87			75-125	Pass	
Nickel			%	96			80-120	Pass	
Zinc			%	100			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	P19-Oc20211	NCP	%	79			70-130	Pass	
TRH C10-C14	M19-Oc20401	NCP	%	112			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	P19-Oc20211	NCP	%	85			70-130	Pass	
Toluene	P19-Oc20211	NCP	%	80			70-130	Pass	
Ethylbenzene	P19-Oc20211	NCP	%	90			70-130	Pass	
m&p-Xylenes	P19-Oc20211	NCP	%	82			70-130	Pass	
o-Xylene	P19-Oc20211	NCP	%	92			70-130	Pass	
Xylenes - Total	P19-Oc20211	NCP	%	85			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	P19-Oc20211	NCP	%	79			70-130	Pass	
TRH C6-C10	P19-Oc20211	NCP	%	78			70-130	Pass	
TRH >C10-C16	M19-Oc20401	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M19-Oc18695	NCP	%	103			70-130	Pass	
Acenaphthylene	M19-Oc18695	NCP	%	95			70-130	Pass	
Anthracene	M19-Oc18695	NCP	%	100			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	M19-Oc18695	NCP	%	92			70-130	Pass	
Benzo(a)pyrene	M19-Oc18695	NCP	%	80			70-130	Pass	
Benzo(b&j)fluoranthene	M19-Oc18695	NCP	%	97			70-130	Pass	
Benzo(g.h.i)perylene	M19-Oc18695	NCP	%	83			70-130	Pass	
Benzo(k)fluoranthene	M19-Oc18695	NCP	%	93			70-130	Pass	
Chrysene	M19-Oc18695	NCP	%	98			70-130	Pass	
Dibenz(a.h)anthracene	M19-Oc18695	NCP	%	86			70-130	Pass	
Fluoranthene	M19-Oc18695	NCP	%	98			70-130	Pass	
Fluorene	M19-Oc18695	NCP	%	93			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M19-Oc18695	NCP	%	90			70-130	Pass	
Naphthalene	M19-Oc18695	NCP	%	104			70-130	Pass	
Phenanthrene	M19-Oc18695	NCP	%	94			70-130	Pass	
Pyrene	M19-Oc18695	NCP	%	105			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M19-Oc18695	NCP	%	103			30-130	Pass	
2.4-Dichlorophenol	M19-Oc18695	NCP	%	93			30-130	Pass	
2.4.5-Trichlorophenol	M19-Oc18695	NCP	%	88			30-130	Pass	
2.4.6-Trichlorophenol	M19-Oc18695	NCP	%	89			30-130	Pass	
2.6-Dichlorophenol	M19-Oc18695	NCP	%	110			30-130	Pass	
4-Chloro-3-methylphenol	M19-Oc18695	NCP	%	101			30-130	Pass	
Pentachlorophenol	M19-Oc18695	NCP	%	81			30-130	Pass	
Tetrachlorophenols - Total	M19-Oc18695	NCP	%	93			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M19-Oc18695	NCP	%	32			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M19-Oc18695	NCP	%	51			30-130	Pass	
2-Methylphenol (o-Cresol)	M19-Oc18695	NCP	%	104			30-130	Pass	
2-Nitrophenol	M19-Oc18695	NCP	%	85			30-130	Pass	
2.4-Dimethylphenol	M19-Oc18695	NCP	%	101			30-130	Pass	
2.4-Dinitrophenol	M19-Oc18695	NCP	%	53			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M19-Oc18695	NCP	%	92			30-130	Pass	
4-Nitrophenol	M19-Oc18695	NCP	%	60			30-130	Pass	
Dinoseb	M19-Oc18695	NCP	%	62			30-130	Pass	
Phenol	M19-Oc18695	NCP	%	104			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M19-Oc28240	NCP	%	111			75-125	Pass	
Cadmium	M19-Oc28240	NCP	%	86			75-125	Pass	
Chromium	M19-Oc28240	NCP	%	115			75-125	Pass	
Copper	M19-Oc28240	NCP	%	115			75-125	Pass	
Lead	M19-Oc28240	NCP	%	103			75-125	Pass	
Mercury	M19-Oc28240	NCP	%	92			70-130	Pass	
Nickel	M19-Oc28240	NCP	%	111			75-125	Pass	
Zinc	M19-Oc28240	NCP	%	112			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S19-Oc19902	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M19-Oc25856	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M19-Oc25856	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M19-Oc25856	NCP	mg/kg	< 50	< 50	<1	30%	Pass	

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Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S19-Oc19902	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S19-Oc19902	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S19-Oc19902	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S19-Oc19902	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S19-Oc19902	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S19-Oc19902	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S19-Oc19902	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-Oc19902	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M19-Oc25856	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M19-Oc18694	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M19-Oc18694	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M19-Oc18694	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M19-Oc18694	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M19-Oc18694	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M19-Oc18694	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M19-Oc18694	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M19-Oc18694	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	M19-Oc18694	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M19-Oc18694	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M19-Oc18694	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M19-Oc18694	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M19-Oc18694	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M19-Oc18694	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M19-Oc28240	NCP	mg/kg	7.3	7.4	2.0	30%	Pass	
Cadmium	M19-Oc28240	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M19-Oc28240	NCP	mg/kg	28	29	5.0	30%	Pass	
Copper	M19-Oc28240	NCP	mg/kg	37	38	1.0	30%	Pass	
Lead	M19-Oc28240	NCP	mg/kg	17	18	3.0	30%	Pass	
Mercury	M19-Oc28240	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	M19-Oc28240	NCP	mg/kg	30	30	2.0	30%	Pass	
Zinc	M19-Oc28240	NCP	mg/kg	55	56	2.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M19-Oc25965	NCP	%	26	27	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

Ursula Long	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)

Glenn Jackson
General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Sample Receipt Advice

Company name:	**Coffey Environments Pty Ltd NSW**
Contact name:	David McFadden
Project name:	LIVERPOOL PRECINCT (LIVERPOOL BOYS)
Project ID:	SYDEN231101_LB
COC number:	Not provided
Turn around time:	3 Day
Date/Time received:	Oct 17, 2019 3:48 PM
Eurofins reference:	**683170**

Sample information

- ☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 16.9 degrees Celsius.
- ☑ All samples have been received as described on the above COC.
- ☑ COC has been completed correctly.
- ☑ Attempt to chill was evident.
- ☑ Appropriately preserved sample containers have been used.
- ☑ All samples were received in good condition.
- ☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☑ Appropriate sample containers have been used.
- ☒ Split sample sent to requested external lab.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to David McFadden - David.McFadden@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Environments Pty Ltd NSW email address.

Enviro Sample Vic

From:	Ursula Long
Sent:	Thursday, 17 October 2019 4:13 PM
To:	Enviro Sample Vic; Enviro Sample Vic Transit; Catherine Wilson
Subject:	3 DAY TAT ADDITIONAL: FW: Eurofins Test Results, Invoice - Report 681511 : Site LIVERPOOL PRECINCT (LIVERPOOL BOYS) (SYDEN231101_LB)
Importance:	High

3 day TAT additional please on 681511 – jars are on Hold in Melbourne, for B7 analysis

TP08_0.0-0.1 (S19-Oc13098)
TP09_0.0-0.1 (S19-Oc13100)
TP09_0.4-0.5 (S19-Oc13101)

HOLD, 1591

Darwin
683170

Kind regards,

Ursula Long

Eurofins | Environment Testing
Unit F3, Parkview Building
16 Mars Road
LANE COVE WEST NSW 2066
AUSTRALIA
Phone : +61 2 9900 8420
Mobile: +61 428 845 495

Email : UrsulaLong@eurofins.com
Website: www.eurofins.com.au/environmental-testing

From: McFadden, David [mailto:David.McFadden@coffey.com]
Sent: Thursday, 17 October 2019 3:48 PM
To: Ursula Long
Subject: RE: Eurofins Test Results, Invoice - Report 681511 : Site LIVERPOOL PRECINCT (LIVERPOOL BOYS) (SYDEN231101_LB)

EXTERNAL EMAIL*

Hi Ursula,

I need to get the following scheduled for analysis of Suite B7A on a 3 day TAT:

TP08_0.0-0.1 (S19-Oc13098)
TP09_0.0-0.1 (S19-Oc13100)
TP09_0.4-0.5 (S19-Oc13101)

Kind Regards,
David

From: UrsulaLong@eurofins.com <UrsulaLong@eurofins.com>
Sent: Wednesday, October 16, 2019 6:14 PM
To: McFadden, David <David.McFadden@coffey.com>

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES1933131**	Page	: 1 of 6
Client	: **COFFEY ENVIRONMENTS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: DAVID MCFADDEN	Contact	: Customer Services ES
Address	: LEVEL 19, 799 PACIFIC HIGHWAY Tower B - Citadel Tower CHATSWOOD NSW, AUSTRALIA 2067	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 02 9406 1132	Telephone	: +61-2-8784 8555
Project	: SYDEN231101_LB Liverpool Precinct (Liverpool Boys)	Date Samples Received	: 10-Oct-2019 12:40
Order number	: ----	Date Analysis Commenced	: 11-Oct-2019
C-O-C number	: ----	Issue Date	: 17-Oct-2019 16:00
Sampler	: Adrian Christie		
Site	:		
Quote number	: EN/222		
No. of samples received	: 5		
No. of samples analysed	: 3		

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
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
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.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TRIP01	TRIP02	TRIP04	----	----
			Client sampling date / time	03-Oct-2019 00:00	03-Oct-2019 00:00	04-Oct-2019 00:00	----	----
Compound	CAS Number	LOR	Unit	ES1933131-001	ES1933131-002	ES1933131-003	--------	--------
				Result	Result	Result	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**18.0**	**13.8**	**8.9**	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**9**	<5	<5	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	**18**	**4**	**7**	----	----
Copper	7440-50-8	5	mg/kg	**14**	<5	**8**	----	----
Lead	7439-92-1	5	mg/kg	**30**	**9**	**16**	----	----
Nickel	7440-02-0	2	mg/kg	**4**	<2	**3**	----	----
Zinc	7440-66-6	5	mg/kg	**45**	**9**	**28**	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TRIP01	TRIP02	TRIP04	----	----
			Client sampling date / time	03-Oct-2019 00:00	03-Oct-2019 00:00	04-Oct-2019 00:00	----	----
Compound	CAS Number	LOR	Unit	ES1933131-001	ES1933131-002	ES1933131-003	--------	--------
				Result	Result	Result	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued								
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**80.2**	**83.2**	**85.3**	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**90.0**	**93.9**	**95.9**	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**58.2**	**67.6**	**64.0**	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**108**	**112**	**115**	----	----
Anthracene-d10	1719-06-8	0.5	%	**93.4**	**98.6**	**96.9**	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**113**	**117**	**117**	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**110**	**106**	**114**	----	----
Toluene-D8	2037-26-5	0.2	%	**118**	**110**	**116**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TRIP01	TRIP02	TRIP04	----	----
			Client sampling date / time	03-Oct-2019 00:00	03-Oct-2019 00:00	04-Oct-2019 00:00	----	----
Compound	CAS Number	LOR	Unit	ES1933131-001	ES1933131-002	ES1933131-003	--------	--------
				Result	Result	Result	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued								
4-Bromofluorobenzene	460-00-4	0.2	%	111	105	114	----	----

Surrogate Control Limits

Sub-Matrix: **SOIL**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

QUALITY CONTROL REPORT

Work Order	: **ES1933131**	Page	: 1 of 7
Client	: **COFFEY ENVIRONMENTS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: DAVID MCFADDEN	Contact	: Customer Services ES
Address	: LEVEL 19, 799 PACIFIC HIGHWAY Tower B - Citadel Tower CHATSWOOD NSW, AUSTRALIA 2067	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 02 9406 1132	Telephone	: +61-2-8784 8555
Project	: SYDEN231101_LB Liverpool Precinct (Liverpool Boys)	Date Samples Received	: 10-Oct-2019
Order number	: ----	Date Analysis Commenced	: 11-Oct-2019
C-O-C number	: ----	Issue Date	: 17-Oct-2019
Sampler	: Adrian Christie		
Site	:		
Quote number	: EN/222		
No. of samples received	: 5		
No. of samples analysed	: 3		

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*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
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: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 2636482)									
EB1926419-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	4	5	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	2	3	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	31	35	11.7	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	23	24	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	7	9	25.9	No Limit
ES1933131-001	TRIP01	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	18	25	29.6	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	14	43.5	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	14	9	41.4	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	30	34	11.8	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	45	23	66.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 2636485)									
EB1926428-001	Anonymous	EA055: Moisture Content	----	0.1	%	14.0	14.9	6.45	0% - 50%
ES1933382-001	Anonymous	EA055: Moisture Content	----	0.1	%	20.8	21.4	2.59	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2636481)									
EB1926419-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES1933131-001	TRIP01	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2637491)									
ES1933131-001	TRIP01	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2637491) - continued									
ES1933131-001	TRIP01	EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES1933154-008	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2634926)									
EB1926419-002	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES1933131-001	TRIP01	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	**Client sample ID**	**Method: Compound**	**CAS Number**	**LOR**	**Unit**	**Original Result**	**Duplicate Result**	**RPD (%)**	**Recovery Limits (%)**
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2637492)									
ES1933131-001	TRIP01	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES1933154-008	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 2634926)									
EB1926419-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES1933131-001	TRIP01	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 2637492)									
ES1933131-001	TRIP01	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES1933154-008	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080: BTEXN (QC Lot: 2634926)									
EB1926419-002	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES1933131-001	TRIP01	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	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: **SOIL**

				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
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 2636482)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	104	86.0	126
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	104	83.0	113
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	98.2	76.0	128
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	100	86.0	120
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	103	80.0	114
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	108	87.0	123
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	106	80.0	122
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2636481)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	84.7	70.0	105
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2637491)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	118	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	112	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	103	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	107	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	120	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	104	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	124	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	119	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	97.0	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	103	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.0	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	88.8	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	102	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	68.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	64.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	72.8	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2634926)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	87.0	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2637492)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	97.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	102	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	95.9	71.0	129
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2634926)								

Sub-Matrix: **SOIL**

				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
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2634926) - continued								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	89.4	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2637492)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	97.1	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	100	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	75.2	63.0	131
EP080: BTEXN (QCLot: 2634926)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	91.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	89.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	90.2	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	88.8	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	91.2	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	99.4	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 2636482)							
EB1926419-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	99.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	100	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	109	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	108	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	96.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	104	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	98.8	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2636481)							
EB1926419-002	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	93.4	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2637491)							
ES1933131-001	TRIP01	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	101	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	105	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2634926)							
EB1926419-002	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	91.6	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2637492)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2637492) - continued							
ES1933131-001	TRIP01	EP071: C10 - C14 Fraction	----	523 mg/kg	98.9	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	116	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	116	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2634926)							
EB1926419-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	94.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2637492)							
ES1933131-001	TRIP01	EP071: >C10 - C16 Fraction	----	860 mg/kg	99.8	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	122	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	104	52.0	132
EP080: BTEXN (QCLot: 2634926)							
EB1926419-002	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	97.6	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	98.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	101	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	101	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	103	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	94.6	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES1933131**	Page	: 1 of 5
Client	: **COFFEY ENVIRONMENTS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: DAVID MCFADDEN	Telephone	: +61-2-8784 8555
Project	: SYDEN231101_LB Liverpool Precinct (Liverpool Boys)	Date Samples Received	: 10-Oct-2019
Site	:	Issue Date	: 17-Oct-2019
Sampler	: Adrian Christie	No. of samples received	: 5
Order number	: ----	No. of samples analysed	: 3

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method		*Sample Date*	*Extraction / Preparation*			*Analysis*		
Container / Client Sample ID(s)			*Date extracted*	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055) TRIP01,	TRIP02	**03-Oct-2019**	**----**	----	----	**12-Oct-2019**	17-Oct-2019	✓
Soil Glass Jar - Unpreserved (EA055) TRIP04		**04-Oct-2019**	**----**	----	----	**12-Oct-2019**	18-Oct-2019	✓
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T) TRIP01,	TRIP02	**03-Oct-2019**	**12-Oct-2019**	31-Mar-2020	✓	**14-Oct-2019**	31-Mar-2020	✓
Soil Glass Jar - Unpreserved (EG005T) TRIP04		**04-Oct-2019**	**12-Oct-2019**	01-Apr-2020	✓	**14-Oct-2019**	01-Apr-2020	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T) TRIP01,	TRIP02	**03-Oct-2019**	**12-Oct-2019**	31-Oct-2019	✓	**15-Oct-2019**	31-Oct-2019	✓
Soil Glass Jar - Unpreserved (EG035T) TRIP04		**04-Oct-2019**	**12-Oct-2019**	01-Nov-2019	✓	**15-Oct-2019**	01-Nov-2019	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM)) TRIP01,	TRIP02	**03-Oct-2019**	**14-Oct-2019**	17-Oct-2019	✓	**16-Oct-2019**	23-Nov-2019	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) TRIP04		**04-Oct-2019**	**14-Oct-2019**	18-Oct-2019	✓	**16-Oct-2019**	23-Nov-2019	✓
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080) TRIP01,	TRIP02	**03-Oct-2019**	**11-Oct-2019**	17-Oct-2019	✓	**15-Oct-2019**	17-Oct-2019	✓
Soil Glass Jar - Unpreserved (EP071) TRIP01,	TRIP02	**03-Oct-2019**	**14-Oct-2019**	17-Oct-2019	✓	**16-Oct-2019**	23-Nov-2019	✓
Soil Glass Jar - Unpreserved (EP080) TRIP04		**04-Oct-2019**	**11-Oct-2019**	18-Oct-2019	✓	**15-Oct-2019**	18-Oct-2019	✓
Soil Glass Jar - Unpreserved (EP071) TRIP04		**04-Oct-2019**	**14-Oct-2019**	18-Oct-2019	✓	**16-Oct-2019**	23-Nov-2019	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Due for extraction	Evaluation	Analysis: Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080) TRIP01, TRIP02	**03-Oct-2019**	**11-Oct-2019**	17-Oct-2019	✓	**15-Oct-2019**	17-Oct-2019	✓
Soil Glass Jar - Unpreserved (EP071) TRIP01, TRIP02	**03-Oct-2019**	**14-Oct-2019**	17-Oct-2019	✓	**16-Oct-2019**	23-Nov-2019	✓
Soil Glass Jar - Unpreserved (EP080) TRIP04	**04-Oct-2019**	**11-Oct-2019**	18-Oct-2019	✓	**15-Oct-2019**	18-Oct-2019	✓
Soil Glass Jar - Unpreserved (EP071) TRIP04	**04-Oct-2019**	**14-Oct-2019**	18-Oct-2019	✓	**16-Oct-2019**	23-Nov-2019	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080) TRIP01, TRIP02	**03-Oct-2019**	**11-Oct-2019**	17-Oct-2019	✓	**15-Oct-2019**	17-Oct-2019	✓
Soil Glass Jar - Unpreserved (EP080) TRIP04	**04-Oct-2019**	**11-Oct-2019**	18-Oct-2019	✓	**15-Oct-2019**	18-Oct-2019	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	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. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270D. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260B. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

ALS Environmental

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES1933131**

Client	: **COFFEY ENVIRONMENTS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: DAVID MCFADDEN	Contact	: Customer Services ES
Address	: LEVEL 19, 799 PACIFIC HIGHWAY Tower B - Citadel Tower CHATSWOOD NSW, AUSTRALIA 2067	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: david.mcfadden@coffey.com	E-mail	: ALSEnviro.Sydney@ALSGlobal.com
Telephone	: 02 9406 1132	Telephone	: +61-2-8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: SYDEN231101_LB Liverpool Precinct (Liverpool Boys)	Page	: 1 of 2
Order number	: ----	Quote number	: ES2018COFENV0007 (EN/222)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	:		
Sampler	: Adrian Christie		

Dates

Date Samples Received	: 10-Oct-2019 12:40	Issue Date	: 10-Oct-2019
Client Requested Due Date	: 17-Oct-2019	Scheduled Reporting Date	: **17-Oct-2019**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 6.6'c - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 5 / 3

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **SOIL**

Laboratory sample ID	*Client sampling date / time*	*Client sample ID*	(On Hold) SOIL No analysis requested	SOIL - EA055-103 Moisture Content	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES1933131-001	03-Oct-2019 00:00	TRIP01		✓	✓
ES1933131-002	03-Oct-2019 00:00	TRIP02		✓	✓
ES1933131-003	04-Oct-2019 00:00	TRIP04		✓	✓
ES1933131-004	04-Oct-2019 00:00	TRIP05	✓		
ES1933131-005	04-Oct-2019 00:00	TRIP03	✓		

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

DAVID MCFADDEN

- *AU Certificate of Analysis - NATA (COA)	Email	david.mcfadden@coffey.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	david.mcfadden@coffey.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	david.mcfadden@coffey.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	david.mcfadden@coffey.com
- A4 - AU Tax Invoice (INV)	Email	david.mcfadden@coffey.com
- Chain of Custody (CoC) (COC)	Email	david.mcfadden@coffey.com
- EDI Format - ENMRG (ENMRG)	Email	david.mcfadden@coffey.com
- EDI Format - ESDAT (ESDAT)	Email	david.mcfadden@coffey.com

INVOICES CHAT-GeneralAdmin

- A4 - AU Tax Invoice (INV)	Email	CHAT-GeneralAdmin@coffey.com

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office: Chatswood
Report Results to: DMcFadden | Mobile: 401547597 | Email: david.mcfadden@coffey.com
Invoices to: DMcFadden | Phone: 401547597 | Email: david.mcfadden@coffey.com

Project No: SYDEN231101_LB | Task No: Liverpool High School
Project Name: Liverpool Precinct (Liverpool Boys) | Laboratory: Eurofins
Sampler's Name: Adrian Christie | Project Manager: David McFadden
Special Instructions: SEND TRIP'S to ALS

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	TP01_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP01_0.4-0.5	03-10-19		Soil	J	std			X			
	TP01_0.9-1.0	03-10-19		Soil	J	std					X	
	TP03_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP03_0.4-0.5	03-10-19		Soil	J	std					X	
	TP03_0.9-1.0	03-10-19		Soil	J	std					X	
	TP04_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP04_0.4-0.5	03-10-19		Soil	J	std			X			
	TP05_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP05_0.4-0.5	03-10-19		Soil	J	std					X	
	TP05_0.9-1.0	03-10-19		Soil	J	std			X			
	TP07_0.0-0.1	03-10-19		Soil	J,B	std	X		X	X		
	TP07_0.4-0.5	03-10-19		Soil	J,B	std				X		
	TP07_0.9-1.0	03-10-19		Soil	J,B	std					X	
	TP08_0.0-0.1	03-10-19		Soil	J,B	std						
	TP08_0.6-0.7	03-10-19		Soil	J	std						
	TP09_0.0-0.1	03-10-19		Soil	J,B'	std						
	TP09_0.4-0.5	03-10-19		Soil	J	std						

Environmental Division
Sydney
Work Order Reference
ES1933131

Telephone : + 61-2-8784 8555

RELINQUISHED BY		RECEIVED BY	
Name: DMcFadden	Date:	Name: lupam	Date: 9/10
Coffey Environments	Time:	Company:	Time: 3:45 PM
Name:	Date:	Name: Sep	Date: 10/10/19
Company:	Time:	Company: ALS Graves Nest	Time: 1240pm

Sample Receipt Advice: (Lab Use Only)
All Samples Recieved in Good Condition ☑
All Documentation is in Proper Order ☑
Samples Received Properly Chilled ☑
Lab. Ref/Batch No. 681511

***Container Type & Preservation Codes:** P - Plastic. G- Glass Bottle. J - Glass Jar. V- Vial. Z - Ziplock bag. N - Nitric Acid Preserved. C - Hydrochloric Acid Preserved. S - Sulphuric

rec: FAS 10/10/19 17.8°C
3:30

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Adrian Christie	Project Manager:	David McFadden
Special Instructions:		SEND TRIP'S TO ALS	

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	TP09_0.9-1.0	03-10-19		Soil	J	std					X	
	TP10_0.0-0.1	03-10-19		Soil	J,B	std			X	X		
	TP10_0.4-0.5	03-10-19		Soil	J	std					X	
	TP10_0.9-1.0	03-10-19		Soil	J	std			X			
	TP11_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X		
	TP11_0.4-0.5	04-10-19		Soil	J,B	std					X	
	TP11_0.9-1.0	04-10-19		Soil	J	std					X	
	TP12_0.0-0.1	04-10-19		Soil	J,B	std			X	X		
	TP12_0.4-0.5	04-10-19		Soil	J	std			X			
	TP12_0.9-1.0	04-10-19		Soil	J	std					X	
	TP13_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X		
	TP13_0.4-0.5	04-10-19		Soil	J	std			X			
	TP13_0.9-1.0	04-10-19		Soil	J	std					X	
	TP14_0.0-0.1	04-10-19		Soil	J,B	std			X	X		
	TP14_0.4-0.5	04-10-19		Soil	J	std					X	
	TP14_0.9-1.0	04-10-19		Soil	J	std					X	
	TP15_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X		
	TP15_0.4-0.5	04-10-19		Soil	J	std			X			

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	hupan	Date:	9/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:	→	Name:	Sp	Date:	10/10
Company:		Time:		Company:	ALS EN	Time:	1240pm

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No. ☐

***Container Type & Preservation Codes:** P - Plastic. G- Glass Bottle. J - Glass Jar. V- Vial. Z - Ziplock bag. N - Nitric Acid Preserved. C - Hydrochloric Acid Preserved. S - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Adrian Christie	Project Manager:	David McFadden
Special Instructions:	SEND TRIP'S TO ALS		

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	ALS Suite S26	NOTES
	TP15_0.9-1.0	04-10-19		Soil	J	std					X		
	TP16_0.0-0.1	04-10-19		Soil	J,B	std			X				
	TP16_0.4-0.5	04-10-19		Soil	J	std					X		
	TP16_0.9-1.0	04-10-19		Soil	J	std					X		
	TP29_0.0-0.1	04-10-19		Soil	J,B	std	X		X	X			
	TP29_0.4-0.5	04-10-19		Soil	J	std			X				
	TP29_0.9-1.0	04-10-19		Soil	J	std					X		
	DUP01	04-10-19		Soil	J	std					X		
	DUP02	04-10-19		Soil	J	std			X				
1	TRIP01	04-10-19		Soil	J	std						X	SEND TO ALS
	DUP03	04-10-19		Soil	J	std			X				
2	TRIP02	04-10-19		Soil	J	std						X	SEND TO ALS
	DUP05	04-10-19		Soil	J	std			X				
3	TRIP04	04-10-19		Soil	J	std						X	SEND TO ALS
	DUP08	04-10-19		Soil	J	std			X				
	DUP06	04-10-19		Soil	J	std			X				
4	TRIP05	04-10-19		Soil	J	std					X		SEND TO ALS
	DUP07	04-10-19		Soil	J	std							

RELINQUISHED BY				RECEIVED BY			
Name: DMcFadden		Date:		Name:	Rupam	Date:	9/10
Coffey Environments		Time:	2pm 9/10/19	Company:		Time:	
Name:		Date:		Name:	Sef	Date:	10/10/19
Company:		Time:		Company:	ALS CN	Time:	12:40pm

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** P - Plastic. G- Glass Bottle. J - Glass Jar. V- Vial. Z - Ziplock bag. N - Nitric Acid Preserved. C - Hydrochloric Acid Preserved. S - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No: SYDEN231101_LB Task No: Liverpool High School

Project Name: Liverpool Precinct (Liverpool Boys) Laboratory: Eurofins

Sampler's Name: Adrian Christie Project Manager: David McFadden

Special Instructions: SEND TRIP'S to ALS

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	DUP04	04-10-19		Soil	J	std					X	
	TRIP03	04-10-19		Soil	J	std					X	SEND TO ALS
	R03	04-10-19		Water	2V, G, P	std			X			
	TB3	04-10-19		Water	V	std		X				
	TS3	04-10-19		Water	V	std		X				
	A08508	02-10-19		Soil	Jar, Zip	std	X		X			
	A08570	02-10-19		Soil	Jar, Zip	std	X		X			
	A08509	02-10-19		Soil	Jar, Zip	std	X		X			
	A08507	02-10-19		Soil	Jar, Zip	std	X		X			
	A08526	02-10-19		Soil	Jar, Zip	std	X		X			
	TP30_0.0-0.1	04-10-19		Soil		std	X		X	X		
	TP30_0.3-0.4	04-10-19		Soil		std					X	
	TP30_0.8-0.9	04-10-19		Soil		std					X	

RELINQUISHED BY		RECEIVED BY	
Name: DMcFadden	Date:	Name: Lupan	Date: 9/10
Coffey Environments	Time:	Company:	Time:
Name:	Date:	Name: Sep	Date: 10/10/19
Company:	Time:	Company: ALS CN	Time: 12:00pm

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** P - Plastic, G- Glass Bottle, J - Glass Jar, V- Vial, Z - Ziplock bag, N - Nitric Acid Preserved, C - Hydrochloric Acid Preserved, S - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Andrew Lepre	Project Manager:	David McFadden
Special Instructions:			

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	BH02_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		
	BH02-0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH02_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH02_2.0-2.1	03-10-19		Soil	Jar	std					X	
	BH17_0.0-0.1	03-10-19		Soil	Jar, Zip	std						
	BH17_0.1-0.2	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH17_0.3-0.4	03-10-19		Soil	Jar	std					X	
	BH17_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH18_0.1-0.2	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH18_0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH18_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH19_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		
	BH19_0.3-0.4	03-10-19		Soil	Jar, Zip	std					X	
	BH19_0.5-0.6	03-10-19		Soil	Jar	std			X			
	BH19_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH19_2.0-2.1	03-10-19		Soil	Jar	std					X	
	BH20_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		
	BH20_0.5-0.6	03-10-19		Soil	Jar	std					X	

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:	→	Name:	Rupan	Date:	9/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:	→	Name:	Sop	Date:	10/10/19
Company:		Time:		Company:	ALS CN	Time:	1240pm

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

*Container Type & Preservation Codes: P - Plastic. G- Glass Bottle. J - Glass Jar. V- Vial. Z - Ziplock bag. N - Nitric Acid Preserved. C - Hydrochloric Acid Preserved. S - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No:	SYDEN231101_LB	Task No:	Liverpool High School
Project Name:	Liverpool Precinct (Liverpool Boys)	Laboratory:	Eurofins
Sampler's Name:	Andrew Lepre	Project Manager:	David McFadden
Special Instructions:			

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	BH20_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH21_0.0-0.2	04-10-19		Soil	Jar, Zip	std					X	
	BH21_0.2-0.3	04-10-19		Soil	Jar, Zip	std	X		X	X		
	BH21_0.5-0.6	04-10-19		Soil	Jar	std					X	
	BH21_1.0-1.1	04-10-19		Soil	Jar	std					X	
	BH22_0.0-0.1	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH22_0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH22_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH23_0.1-0.2	03-10-19		Soil	Jar, Zip	std					X	
	BH23_0.3-0.4	03-10-19		Soil	Jar, Zip	std			X	X		
	BH23_0.4-0.5	03-10-19		Soil	Jar	std					X	
	BH23_0.6-0.7	03-10-19		Soil	Jar	std					X	
	BH23_1.2-1.3	03-10-19		Soil	Jar	std					X	
	BH24_0.0-0.1	04-10-19		Soil	Jar, Zip	std						
	BH24_0.1-0.2	04-10-19		Soil	Jar, Zip	std	X		X	X		
	BH24_0.4-0.5	04-10-19		Soil	Jar	std				X		
	BH24_1.0-1.1	04-10-19		Soil	Jar	std					X	
	BH25_0.1-0.2	03-10-19		Soil	Jar, Zip	std			X	X		

RELINQUISHED BY			RECEIVED BY		
Name: DMcFadden	Date:	→	Name: Rupam	Date: 9/10	
Coffey Environments	Time:		Company:	Time:	
Name:	Date:	→	Name: SP	Date: 10/10/19	
Company:	Time:		Company: ALS CN	Time: 12:40pm	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** P - Plastic. G- Glass Bottle. J - Glass Jar. V- Vial. Z - Ziplock bag. N - Nitric Acid Preserved. C - Hydrochloric Acid Preserved. S - Sulphuric

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

Consigning Office:	Chatswood				
Report Results to:	DMcFadden	Mobile:	401547597	Email:	david.mcfadden@coffey.com
Invoices to:	DMcFadden	Phone:	401547597	Email:	david.mcfadden@coffey.com

Project No: SYDEN231101_LB Task No: Liverpool High School

Project Name: Liverpool Precinct (Liverpool Boys) Laboratory: Eurofins

Sampler's Name: Andrew Lepre Project Manager: David McFadden

Special Instructions:

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Asbestos P/A	BTEX ONLY	B7A	B14	HOLD	NOTES
	BH25_0.4-0.5	03-10-19		Soil	Jar	std			X			
	BH25_1.0-1.1	03-10-19		Soil	Jar	std					X	
	BH25_2.0-2.1	03-10-19		Soil	Jar	std					X	
	Bh26_0.1-0.2	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH26_0.2-0.3	03-10-19		Soil	Jar	std					X	
	BH26_0.7-0.8	03-10-19		Soil	Jar	std			X			
	BH27_0.0-0.1	03-10-19		Soil	Jar, Zip	std					X	
	BH27_0.2-0.3	03-10-19		Soil	Jar, Zip	std	X		X	X		
	BH27_0.4-0.5	03-10-19		Soil	Jar, Zip	std					X	
	BH27_0.6-0.7	03-10-19		Soil	Jar	std				X		
	BH28_0.0-0.1	03-10-19		Soil	Jar, Zip	std					X	
	BH28_0.2-0.3	03-10-19		Soil	Jar, Zip	std			X	X		
	BH28_0.5-0.6	03-10-19		Soil	Jar	std					X	
	TS	04-10-19		Soil	Jar, Zip	std			X	X		Trench Sample From DP TP

RELINQUISHED BY				RECEIVED BY			
Name:	DMcFadden	Date:		Name:	Kupau	Date:	9/10
Coffey Environments		Time:		Company:		Time:	
Name:		Date:		Name:	Sep	Date:	10/10/19
Company:		Time:		Company:	ALS CN	Time:	12:40pm

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☐
- All Documentation is in Proper Order ☐
- Samples Received Properly Chilled ☐
- Lab. Ref/Batch No.

***Container Type & Preservation Codes:** P - Plastic. G- Glass Bottle. J - Glass Jar. V- Vial. Z - Ziplock bag. N - Nitric Acid Preserved. C - Hydrochloric Acid Preserved. S - Sulphuric