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Geotechnics / Environment / Groundwater

Integrated Practical Solutions

Report on
Supplementary Contamination Investigation

Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road
Kemps Creek

Prepared for
ESR Australia

Project 211619.02
October 2022



Document History

Document details

Project No.	211619.02	Document No.	R.001.Rev0
Document title	Report on Supplementary Contamination Investigation Proposed Industrial Development		
Site address	Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek		
Report prepared for	ESR Australia		
File name	211619.02.R.001.Rev0		

Document status and review

Status	Prepared by	Reviewed by	Date issued
Revision 0	Jack Hinchliffe	Paul Gorman	7 October 2022

Distribution of copies

Status	Electronic	Paper	Issued to
Revision 0	1	-	Grace Macdonald, ESR Australia

The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

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Report on Supplementary Contamination Investigation
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

1. Introduction

Douglas Partners Pty Ltd (DP) was engaged by ESR Australia (ESR) to complete this Supplementary Contamination Investigation (SCI) for the proposed industrial development known as Westlink Stage 2, located at 1030-1064 Mamre Road, Kemps Creek (the site). The site is shown on Drawing 1, Appendix A. It is understood that the report will be used to support a development application for the proposed development. The investigation was undertaken in general accordance with DP's proposal 211619.02.P.001.Rev0 dated 18 May 2022.

DP has previously undertaken pre-purchase due diligence contamination investigations on the site to support ESR's progressive purchase of the two properties which now from the site (refer to Section 6). The previous investigations indicated that the potential for widespread gross chemical contamination is generally low. Notwithstanding, further targeted investigations were recommended in some areas, namely where fill may have been placed or stockpiled. This was to better understand (but not limited to) the asbestos risk.

Therefore, the objective of the SCI was to investigate data gaps at the site (identified during previous investigations) and hence assess the suitability of the site for the proposed development and whether further investigation and/or management is required.

The following key guidelines were consulted in the preparation of this report:

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013); and
- NSW EPA *Guidelines for Consultants Reporting on Contaminated Land* (NSW EPA, 2020).

This report must be read in conjunction with all appendices including the notes provided in Appendix B.

2. Proposed Development

The proposed development is associated with Stage 2 of the ESR Westlink industrial warehouse development project. Stage 1 of the Westlink project extending to the north-west of site with the abutting portion of this identified as Lot 11 in Deposited Plan 253503. It is understood that Stage 2 of the development is likely to comprises in the order of four medium to large industrial warehouse buildings (with associated offices, loading docks, car parking and access pavements), with building(s) at the eastern end of the site expected to extend onto Stage 1.

To allow construction of the building a series of level pads will be constructed with pad levels relative to Australian Height Datum reducing from east to west across the site, thereby following the natural topography. To allow for construction of these pads it is anticipated that significant cut and fill at the site will be required.

3. Scope of Work

The scope of work comprised:

- Review of the following information:
  - Regional geological, soil and hydrogeological mapping;
  - Acid sulphate soil mapping;
  - Council Section 10.7 Planning Certificate supplied by ESR for the property identified as 1030- 1048 Mamre Road (Lot 3 in Deposited Plan 25002); and
  - Previous contamination investigation reports DP (2021)[1] and DP (2022).[2]
- A site walkover to determine current and (where possible) recent features and land use and assess the potential for contaminating activities;
- Development of a conceptual site model (CSM) outlining potential contamination sources, transport pathways and receptors;
- Development of a sampling strategy which incorporates previous test locations from DP (2021) and DP (2022);
- With the assistance of an excavator, excavation of 79 test pits (TP101 to TP125, TP125A, TP126, TP126A to TP131, TP131A, TP132, TP132A to TP138, TP138A, TP139 to TP166 and TP170 to TP177) in areas of greater contamination concern as outlined in DP (2021) and DP (2022) and as shown on Drawing 2, Appendix A. Test pits were excavated generally 0.5 m - 1 m into natural soils (range 0.1 m - 1.2 m), to the limit of the excavator's reach and to a maximum depth of 3.6 m below ground level (bgl);
- Auguring of three boreholes (BH167 to BH169) using hand tools to between 0.4 m and 0.7 m into natural soils within the residential building footprint located on the 1050-1064 Mamre Road property;
- Logging of encountered soils at each test location;
- Collection of soil samples at regular depth intervals, changes in strata and upon signs of contamination;
- Laboratory testing of selected soil samples (and QA / QC samples) at a NATA accredited laboratory for various combinations of the following potential contaminants of concern and parameters:
  - Heavy metals;
  - Total recoverable hydrocarbons (TRH);
  - Total petroleum hydrocarbons (TPH);

[1] Douglas Partners Pty Ltd, '*Report on Pre-Purchase Due Diligence Preliminary Contamination Assessment, Proposed Industrial Development, 1050-1064 Mamre Road, Kemps Creek*', DP ref: 207450.01.R.001.Rev0 dated 29 September 2021 (DP, 2021).
[2] Douglas Partners Pty Ltd, *'Report on Pre-Purchase Due Diligence Preliminary Contamination Assessment, Proposed Industrial Development, 1030-1048 Mamre Road, Kemps Creek'*, DP ref: 211619.01.R.001.Rev0 dated 30 March 2022 (DP, 2022).

- Benzene, toluene, ethyl benzene and xylenes (BTEX);
- Polycyclic aromatic hydrocarbons (PAH);
- Polychlorinated biphenyls (PCB);
- Phenols;
- Organochlorine pesticides (OCP);
- Organophosphorus pesticides (OPP);
- pH;
- Cation exchange capacity (CEC); and
- Asbestos.

- Provision of this SCI report which describes the works undertaken, outlines the field and laboratory results and includes comments on the potential for, and nature of, contamination at the site based on the available information.

4. Site Information

Site Address	1030-1064 Mamre Road, Kemps Creek
Legal Description	Lot 3, Deposited Plan 250002 Lot 4, Deposited Plan 250002
Approximate Area	21.7 ha
Zoning	Zone IN1 General Industrial
Local Council Area	Penrith City Council
Current Use	1030-1048 Mamre Road: Rural, undeveloped 1050-1064 Mamre Road: Rural / residential
Surrounding Uses	North: Rural / residential East: Rural / residential South: Rural / residential West: Mamre Road, then rural / residential

The site boundary is shown on **Figure 1**.

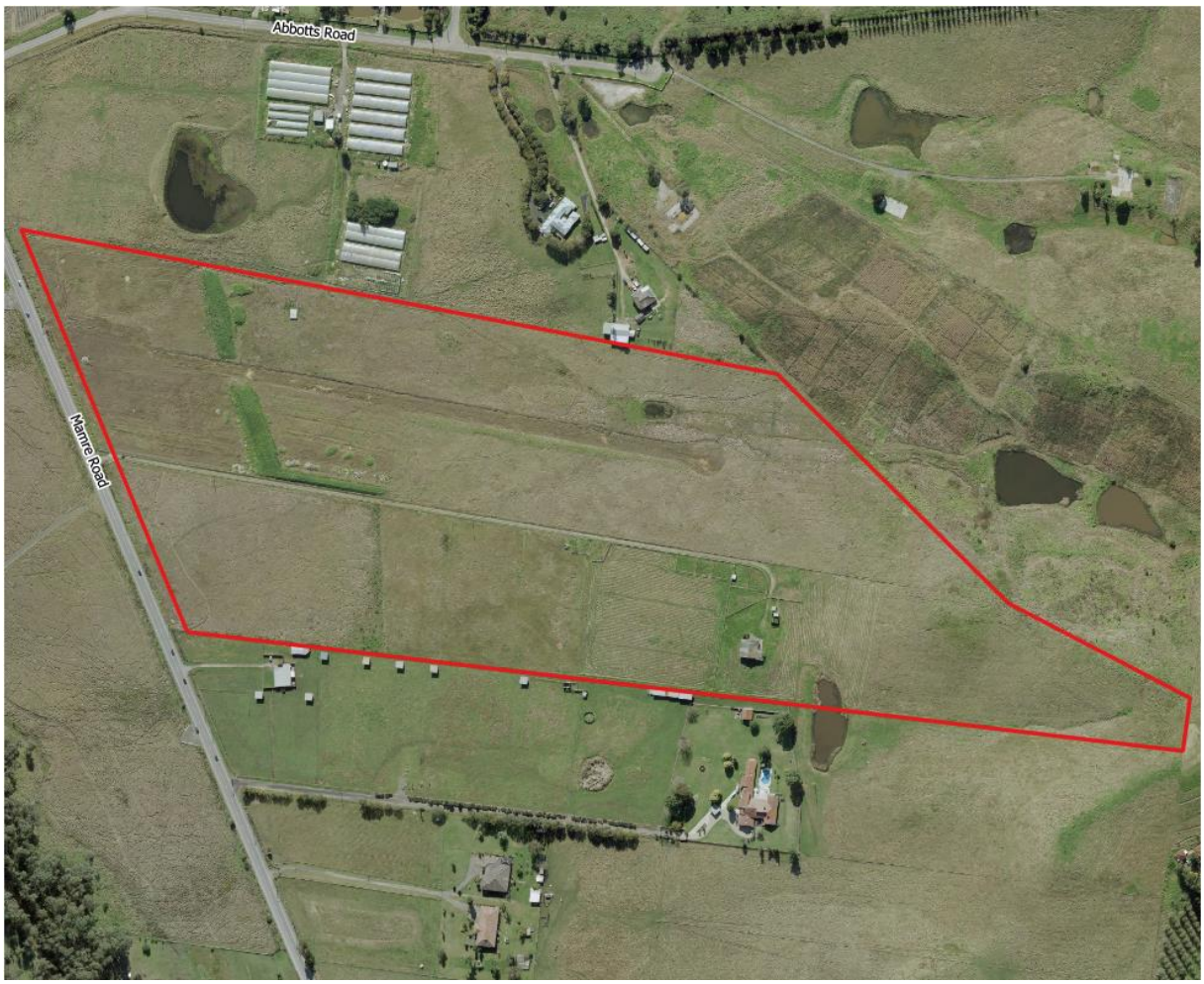


Figure 1: Site Location

5. Environmental Setting

Regional Topography	The eastern end of the site is located on a topographic high point at the end of a ridge line. The regional topography generally slopes west towards Kemps Creek.
Site Topography	The site currently falls from a RL of about 98 m AHD at the south-eastern corner of the site to about 44 m AHD at the western end of the site adjacent to Mamre Road.
Soil Landscape	The Penrith 1:100,000 Soils Landscape Sheet maps the site as Luddenham and Blacktown soil landscapes. The Luddenham soil landscape is classified as an erosional landscape with undulating to rolling low hills. The Blacktown soil landscape is classified as a residual landscape with gently undulating rises on Wianamatta Group shales.

Geology	The Penrith 1:100,000 Geology Sheet maps the site as Bringelly Shale of the Wianamatta Group. Bringelly Shale is characterised by shale, carbonaceous claystone, claystone, laminite and fine to medium-grained lithic sandstone.
Acid Sulfate Soils	Acid sulfate soil is not considered to be an issue of potential concern at the site based on the elevation and geology.
Surface Water	Surface water is expected to infiltrate into exposed soils or flow west downslope towards Kemps Creek which is present to the west of the site on the opposite side of Mamre Road.
Groundwater	Given the elevation and geology of the site, the regional groundwater at the site is expected to be at depth in the fractured rock beneath the site and is anticipated to be saline with very low yield. Perched groundwater may be present along the ephemeral creek lines / drainage lines and rivers at and near the site. A search of the Water NSW registered groundwater bore online database as part of DP (2021) and DP (2022) did not identify any bores on the site or within 500 m of the site.

6. Previous Reports and Site History

The following previous contamination assessment reports are relevant to the current investigation:

- Douglas Partners Pty Ltd, *'Report on Pre-Purchase Due Diligence Preliminary Contamination Assessment, Proposed Industrial Development, 1050-1064 Mamre Road, Kemps Creek'*, DP ref: 207450.01.R.001.Rev0 dated 29 September 2021 (DP, 2021); and
- Douglas Partners Pty Ltd, *'Report on Pre-Purchase Due Diligence Preliminary Assessment, Proposed Industrial Development, 1030-1048 Mamre Road, Kemps Creek'*, DP ref: 211619.01.R.001.Rev0 dated 30 March 2022 (DP, 2022).

6.1 DP (2021)

The pre-purchase due diligence preliminary contamination assessment was undertaken to support ESR's purchase due diligence works for the property at 1050-1064 Mamre Road, Kemps Creek. It was understood that the report may also be used post purchase to support a development application for a proposed redevelopment comprising medium to large industrial buildings (with associated offices, loading docks, car parking and access pavements) should the purchase proceed. The objective of the assessment was to provide an indication on the risk of contamination at the site (with respect to the proposed land use) and the potential waste classification of soils for consideration as part of due diligence.

The assessment comprised a limited desktop study supplemented with limited intrusive works which included excavation / auguring and associated soil sampling from two boreholes, 11 surface samples, and 19 test pits.

The site history information suggested that the site was acquired by the then owners in 1983 from previous land owners who potentially developed the site from a rural setting to rural residential setting sometime before 1986 and this had remained unchanged.

A judgemental sampling strategy to determine borehole and test pit locations was adopted given the preliminary due diligence nature of the assessment. Locations were based on site history information, the CSM, site walkover observations and to provide general site coverage in conjunction the geotechnical investigation (which was undertaken concurrently). In total 32 test locations were completed for the assessment. These borehole and test pit locations are shown on Drawing 4, in Appendix A.

The general lithology encountered during the investigation was generally a silty clay topsoil overlying natural clays on siltstone bedrock. Inclusions of organic and rootlets along with ash (TP6 and BH21), charcoal (TP6), metal (BH21) and wood fragments (BH21) were also observed.

The results of the soil testing reported concentrations of TRH, BTEX, phenols, OCP, OPP and PCB in the soil samples below practical quantitation limit (PQL) and the respective site assessment criteria (SAC). Metals were detected in all soil samples and PAHs were detected in some soil samples but were all at low concentrations and within the SAC.

No asbestos was detected in the soil samples analysed and no suspected asbestos-containing material (ACM) fragments were observed on the ground surface during the site walkover or in sample locations. However, it was noted that other anthropogenics were reported in the fill and this can be an indicator of potential ACM between sampled locations. Moreover, some areas were not available for sampling at the time of the investigation (i.e., around the residential house, storage container area, etc.).

The preliminary *in situ* waste classification for the fill material at the site was general solid waste (non-putrescible) and natural soil samples recorded results consistent with background ranges and below the adopted screening criteria for virgin excavated natural material (VENM).

The investigation generally concluded that the site could be made suitable the proposed industrial development from a contamination perspective although further assessment and targeted sampling of the following was required:

- Building footprints and surrounding areas of fill (following demolition);
- Footprints of the storage containers and adjacent miscellaneous items (following removal);
- Footprints of the former buildings / structures; and
- Footprint of the internal access road.

6.2 DP (2022)

DP completed a pre-purchase due diligence preliminary contamination assessment to support ESR's purchase due diligence works for the property identified as 1030-1048 Mamre Road, Kemps Creek. Similar to DP (2021) it was understood that the report may also be used post purchase to support a development application for a proposed redevelopment comprising medium to large industrial buildings (with associated offices, loading docks, car parking and access pavements) should the purchase proceed. The objective of the assessment was to provide an indication on the risks of contamination at the site (with respect to the proposed industrial land use) for consideration as part of due diligence. The

investigation was based on a limited site history search, site walkover and a limited number of test locations.

The site history information suggested that the site had remained rural / agricultural (grazing) since at least 1947 (if not earlier). Based on the titles search and historical aerial photographs, it is possible that the western portion of the site was used for market gardens during the late 1970s and through the 1980s. By 1994, the western portion of the site had undergone a significant amount of earthworks (including establishment of an access road and stockpiling of spoil) in preparation for what would be consistent with a residential development on the site (although no such development occurred). The site was acquired by the then owners in 1998 and the earthworks did not appear to continue beyond this time. The site remained, for the most part, unchanged since *circa* 2002.

A judgemental sampling strategy to determine borehole and test pit locations was adopted given the preliminary due diligence nature of the assessment. Locations were based on site history information, the CSM, site walkover observations and to provide general site coverage in conjunction the geotechnical investigation (which was undertaken concurrently). In total 23 test locations were completed for the assessment. These test pit locations are shown on Drawing 4, in Appendix A.

The general lithology encountered during the investigation was generally a silty clay topsoil overlying alluvial and residual clays on siltstone bedrock. The stockpiles that were present at the western end of the site generally comprised clay filling with varying proportions of sand and gravel, building rubble in the form of concrete, metal and plastic were observed in some of the test pits into stockpiles (TP17, SS1 to SS3).

The results of the soil testing indicated concentrations of TRH, BTEX, phenols, OCP, OPP and PCB PQL and the respective SAC. Metals were detected in all soil samples and PAHs were detected in some soil samples but were all at low concentrations and within the SAC.

Friable asbestos was detected by laboratory analysis in sample SS2, which was obtained from one of the small southern stockpiles containing concrete. The friable asbestos concentration was 0.0033% w/w, above the commercial / industrial land use screening criteria of 0.001% w/w. This suggested an increased risk of encountering asbestos in stockpiles containing building wastes (e.g., concrete) and adjacent areas.

Although no asbestos was detected by laboratory analysis in any other samples, it was noted that other anthropogenic materials were reported in several of the stockpiles including concrete and rebar and these can be indicators of potential asbestos containing materials in the stockpiles.

The preliminary *in situ* waste classification for the fill material at the site was general solid waste (non-putrescible) and natural samples recorded results consistent with background ranges and below the adopted screening criteria for VENM. However, as asbestos was detected by laboratory analysis in sample SS2, the material in the corresponding stockpile (and other stockpiles comprising similar material) was preliminarily classified as general solid waste (non-putrescible), special waste (asbestos).

The investigation generally concluded that the site could be made suitable the proposed industrial development from a contamination perspective. Notwithstanding, further assessment and targeted sampling of all stockpiles and adjacent areas where filling may have occurred should be undertaken to assess suitability of these materials to be retained on-site from a contamination perspective, most notably with respect to asbestos.

7. Section 10.7 Planning Certificate

Subsequent to DP's investigations, as summarised in the previous section, ESR provided DP a copy of the Penrith City Council Section 10.7 Planning Certificate for the property identified as 1030-1048 Mamre Road, Kemp Creek (Lot 3, Deposited Plan 25002). A copy of the certificate in included in Appendix C.

The planning certificate indicates that Council is not aware of the land being affected by any matters as prescribed by Section 59 (2) of the *Contaminated Land Management Act 1997.*

Note: Whilst a Section 10.7 Planning Certificate was not reviewed for the property identified as 1050-1064, Mamre Road, Kemp Creek (Lot 4, Deposited Plan 25002), based on the results of the aforementioned certificate for the adjacent property and the results from DP (2021) and this SCI, this was not considered to impact the integrity of the contamination assessment for the property.

8. Site Walkover

A site walkover was undertaken by an environmental scientist on 19 July 2022. The general site topography was consistent with that described in Section 5. The site layout appears to have generally remained unchanged from the site conditions observed during the site walkovers detailed in DP (2021) and DP (2022). The following key site features pertinent to this SCI were observed (refer to photographs in Appendix D).

1030-1048 Mamre Road:

- The majority of the site was covered in thick, long grass which limited visual observations of the ground surface and the presence of potential smaller stockpiles or localised filling (Photographs 6 to 10);
- A small dam was located on the north-eastern section of the site;
- A small, corrugated iron shelter (used by livestock) was present in the central northern area of the site;
- There were multiple large concrete blocks (cubes) scattered around the western half of the site along with some fly tipping (e.g., sheets of corrugated iron);
- Two large stockpiles (identified as the northern (SP1) and southern (SP2) mounds) which were about 2-4 m high and multiple smaller stockpiles were present in the western third of the site and covered with thick grass (Photographs 6 to 10);
- Several stockpiles of concrete, rebar and reinforced concrete with a soil matrix were observed; and
- Some of the eastern stockpiles contained mass boulder like materials including concrete, sandstone and other natural rock materials. There was a smaller proportion of the soil matrix in these stockpiles.

The observed stockpile locations are shown on Drawing 3, Appendix A.

1050-1064 Mamre Road:

- A residential house and unattached shed were located at the centre of the site (Photographs 1 and 2);
- The majority of the property was utilised as fenced off pens and open grassland fields (Photograph 3). During recent years DP understands these were used for horses;
- The storage containers and associated stockpiled building materials previously north of the residential house had been removed since DP (2021). Superficial building waste, including ACM fragment, was observed within the surface soils (Photographs 4);
- There was an unsealed access road off Mamre Road that was located along the northern boundary of the property and connected to the residential house (Photograph 5);
- A man-made dam was observed south-east of the residential house which was shared with the neighbouring southern property;
- A small stockpile adjacent to the pens and access road (TP139, Drawing 5, Appendix A) comprised a mix of sand and clay filling with varying quantities of building rubble (refer to log, Appendix G); and
- There was evidence of filling within one of the paddocks as sandstone, brick and tile was observed to be present within the superficial layer of soils. This was in the vicinity of previous sample locations SS8 and SS9, and current location TP141 as shown on Drawings 4 and 5, Appendix A.

9. Conceptual Site Model

A CSM is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how the site became contaminated and how potential receptors may be exposed to contamination in the future as part of the site's industrial development, i.e., it enables an assessment of the potential source – pathway – receptor linkages (complete pathways).

Potential Sources

Based on the previous investigations and walkover, the following potential sources of contamination and associated contaminants of potential concern (COPC) have been identified.

- S1: Fill / Stockpiles: Associated with levelling and infilling (including possible imported fill, stockpiles and / or fly tipping).
  - Primary COPC: metals, TRH, PAH and asbestos.
  - Secondary COPC: BTEX, PCB, OCP, OPP and phenols.
- S2: Internal access road (imported aggregate, fuel or oil leaks or spills).
  - Primary COPC: metals, TRH, BTEX, PAH, PCB and asbestos.
- S3: Former and existing structures.
  - Primary COPC: asbestos, synthetic mineral fibres (SMF), lead (in paint) and PCB.

Potential Receptors

The following potential human receptors have been identified:

- R1: Future users [commercial / industrial];
- R2: Construction and maintenance workers; and
- R3: Adjacent site users [residential and commercial / industrial].

The following potential environmental receptors have been identified:

- R4: Surface water [Kemps Creek (freshwater)];
- R5: Groundwater; and
- R6: Terrestrial ecology.

Potential Pathways

The following potential pathways have been identified:

- P1: Ingestion and dermal contact;
- P2: Inhalation of dust and / or vapours;
- P3: Surface water run-off;
- P4: Leaching of contaminants and vertical migration into groundwater;
- P5: Lateral migration of groundwater providing base flow to water bodies; and
- P6: Inhalation, ingestion and absorption.

Summary of Potentially Complete Exposure Pathways

A 'source–pathway–receptor' approach has been used to assess the potential risks of harm being caused to human or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (potential complete pathways). The possible pathways between the above sources (S1 to S3) and receptors (R1 to R6) are provided in below Table 1.

Table 1: Summary of Potentially Complete Exposure Pathways

Source and COPC	Transport Pathway	Receptor	Risk Management Action
S1: Fill / Stockpiles Metals, TRH, BTEX, PAH, OCP, OPP, phenols and asbestos **S2: Internal Access Road** Metals, TRH, BTEX, PAH, PCB and asbestos	P1: Ingestion and dermal contact P2: Inhalation of dust and/or vapours P3: Surface water run-off P4: Leaching of contaminants and vertical migration into groundwater	R1: Future users [commercial / industrial] R2: Construction and maintenance workers R3: Adjacent site [residential and commercial / industrial] R4: Surface water [Kemps Creek]	Additional targeted intrusive investigation is recommended to further assess and potentially delineate the presence and significance of the COPC in soils (i.e. this SCI).

Source and COPC	Transport Pathway	Receptor	Risk Management Action
	P5: Lateral migration of groundwater providing base flow to water bodies P6: Inhalation, ingestion and absorption	R5: Groundwater R6: Terrestrial ecology	
S3: Former and existing structures Asbestos, SMF, lead (in paint) and PCB	P1: Ingestion and dermal contact P2: Inhalation of dust and/or vapours	R1: Future users [commercial / industrial R2: Construction and maintenance workers R3: Adjacent site [residential and commercial / industrial]	A hazardous building materials assessment is required for the existing buildings / structures. Hazardous materials, if present, will need to be removed / managed in accordance with relevant legislation and guidelines prior to demolition.

It is noted that that the sources described above are targeting AECs identified in DP (2021) and DP (2022). Refer to Section 10.2 below for the methodology in how these AECs have been assessed and addressed regarding this CSM.

10. Sampling and Analysis Quality Plan

10.1 Data Quality Objectives

The SCI was devised with reference to the seven-step data quality objective process which is provided in Appendix B Schedule B2, NEPC (2013). The data quality objective process is outlined in Appendix E.

10.2 Soil Sampling Rationale

Based on the CSM and data quality objectives (DQO) the following sampling rationale was adopted.

A combined systematic and judgemental sampling strategy based on NSW EPA *Contaminated Sites, Sampling Design Guidelines* (NSW EPA, 1995)[3] was adopted to determine borehole and test pit locations positioned as part of this SCI. The sampling locations targeted (judgemental) the AECs as discussed in earlier sections and shown on Drawing 2, Appendix A, whilst the sampling pattern adopted for each AEC was systematic to maximise coverage in combination with previous test locations. The borehole and test pit locations are shown on Drawings 5 and 5a, in Appendix A.

[3] Following completion of the field work, NSW EPA (1995) was superseded by the *Sampling Design Guidelines for Contaminated Land* (NSW EPA, 2022) which were gazetted in August 2022. Notwithstanding, the approach to the soil sampling rational at the time of the field was considered suitable and is considered to be generally consistent with the updated guidance.

The combined area of the AEC identified on Drawing 2, Appendix A is 4.3 ha. Table A of NSW EPA (1995) recommends a minimum of 51 sampling points for a site of 4.3 ha for site characterisation based on the detection of circular hot spots using a systemic grid sampling pattern. A total of 82 test locations were positioned across accessible areas of the site, targeting the AEC, to supplement existing contamination data from DP (2021) and DP (2022) and classify stockpiles on the northern property of the site.

The specific rationale for the test locations is as follows:

Test Pits TP1 to TP11, TP16 and TP21 (DP, 2022), TP101 to TP106, TP112 to TP117, TP120 to TP123, TP171 and TP177	Within the northern properties AEC (area of potential soil disturbance and / or placement filling) as shown on Drawing 2, Appendix A.
TP1 to TP20, Borehole BH21 and SS4 to SS9 (DP, 2021), TP140 to TP148 and TP150 to TP161	Within the southern properties AEC (area of potential soil disturbance and / or placement filling) as shown on Drawing 2, Appendix A.
SS1 to SS3, SS10, SS11 (DP, 2021) and TP162 to TP166	Within the footprint of the internal access road on the southern property of the site.
BH167 to BH169	Within the footprint of the residential house on the southern property of the site.
TP12 to TP14 (DP, 2022), TP110 and TP133 to TP135	Stockpile (SP) 1, approximately 2,500 m^3.
TP17 to TP20 (DP, 2022), TP107, TP118, TP124, TP136 and TP137	SP2, approximately 2,968 m^3.
TP111, TP132 and TP132A	SP3, approximately 155.6 m^3.
TP15 (DP, 2022), TP131 and TP131A	SP4, approximately 225.9 m^3.
TP171	SP5, approximately 6.4 m^3.
TP138 and TP138A	SP6, approximately 19.7 m^3.
TP130	SP7, approximately 23.1 m^3.
TP129	SP8, approximately 15.6 m^3.
SS1 and SS2 (DP, 2022)	SP9, approximately 54.8 m^3.
TP127 and TP128	SP10, approximately 41 m^3.
TP126 and TP126A	SP11, approximately 25.1 m^3.
TP125 and TP125A	SP12, approximately 26.4 m^3.
SS3 (DP, 2022) and TP172	SP13, approximately 50.8 m^3.

TP173 to TP175	SP14, approximately 103.2 m^3.
TP176	SP15, approximately 55.7 m^3.
TP170	SP16, approximately 30 m^3.
TP139	SP17, approximately 25 m^3.

Note: Stockpile volumes have been sourced from Land Partners site survey drawing SY075369.000.2.1 provided to DP by ESR. A copy of the survey is included in Appendix A. Note that stockpiles SP16 and SP17 were not captured by the survey and hence have been approximated by DP based on general observations (not a detailed measurement).

Soil samples were collected from each test pit and borehole at near surface then at regular intervals, changes in lithology or signs of contamination.

The general sampling methods are described in the field work methodology, included in Appendix F.

11. Site Assessment Criteria

The SAC applied in the current investigation are informed by the CSM (Section 9) which identified human and environmental receptors to potential contamination on the site. Analytical results are assessed (as a Tier 1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The investigation and screening levels applied in the current investigation comprise levels adopted for a generic industrial land use scenario. The derivation of the SAC is included in Appendix H and the adopted SAC are listed on the summary analytical results tables in Appendix I.

The preliminary waste classification was conducted with reference to the NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste* (NSW EPA, 2014). The waste classification criteria are outlined in Table I2, Appendix I.

12. Results

12.1 Field Work Results

The borehole and test pit logs for this SCI, DP (2021) and DP (2022) are included in Appendix G. The logs recorded the following general sub-surface profile:

Subsoils:

Concrete Hardstand: Concrete at test locations BH167 to BH169 to a depth of 0.2 m bgl.

Fill / Topsoil / Silty Clay:	Low plasticity, grey and dark brown, trace rootlets in TP1, TP2, TP5 to TP9 and TP11 to maximum depth of 0.4 m bgl, encountered at all locations apart from TP6, TP9 and BH21 (DP, 2021), TP3, TP4 and TP10 (DP, 2022), TP103, TP141, TP160, TP161 and BH167 to BH169. Trace timber was observed at TP122.
Fill / Silty Clay	Dark brown to brown clay filling at TP6, BH21, TP140 and BH167 to BH169 to depths of between 0.15 and 1.1 m bgl. Inclusions of organic and rootlets along with ash (TP6, BH21 and TP140), charcoal (TP6) metal (BH21), wood fragments (BH21) fabric (TP141), concrete, tile, plastic, wire and ACM (TP160), and concrete and plastic (TP161) were also observed.
Fill / Sandy Gravel:	Fine to coarse gravel and sand with trace metal, wire and plastic at TP177 to a depth of 0.5 m bgl.
Fill / Silty Gravelly Clay and Silty Clay:	Low to medium plasticity, dark brown silty clay with gravel observed for internal access road at locations SS1 to SS3, SS10 and SS11 (DP, 2021), and TP162 to TP166 to depths of between 0.2 to 0.3 m bgl.
Clay / Silty Clay:	Medium to high plasticity, grey, brown and yellow to red-brown, with trace gravel in all test pit locations to a depth of 3.0 m bgl.
Gravelly Clay:	Low plasticity, brown gravelly clay encountered between 2.0 to 3.0 m bgl in TP4 (DP, 2022).
Siltstone:	On the northern property (DP, 2022) siltstone bedrock was encountered in TP2 and TP3 from depths of 1.8 m and 1.9 m bgl respectively. Estimated as initially of very low to low strength. On the southern property (DP, 2021) weathered siltstone was encountered in TP4 at 1.0 m bgl until termination at 1.8 m bgl whilst TP1, TP2 and TP4 all terminated on weather siltstone.

Stockpiles:

SP1: Fill / Silty Clay:	Low to medium plasticity, dark brown clay, trace sand, gravel, rootlets and organics, inclusion of piece of cloth (possibly former topsoil).
SP2: Topsoil / Silty Clay / Clay:	Low to medium plasticity, dark brown, with to trace gravel, organics and rootlets, inclusion of piece of plastic (possibly former topsoil).
SP3: Sandy Clay / Silty Clay:	Low to medium plasticity, dark brown clay, trace gravel, rootlets, shells, timber, clinker, ash and ACM (in TP132 and TP132A).
SP4: Silty Clay / Sandy Clay / Clayey Sand / Silty Sand:	Low to medium plasticity, dark brown clay and fine to medium, dark brown sand, variable quantities of silt and gravel, trace shale gravel, organics, rootlets, shells, clinker and ACM (in TP131 and TP131A).
SP5: Sandy Gravel:	Fine to coarse grey gravel, fine to coarse sand, with concrete fragments, trace, metal, wire and plastic.
SP6: Silty Clay:	Low to medium, dark brown clay, trace sandstone gravel, rootlets, brick, terracotta, tile and ACM.

SP7: Silty Clay:	Low to medium plasticity, dark brown clay, trace rootlets, charcoal, clinker, styrofoam, plastic and glass.
SP8: Silty Clay:	Low plasticity, dark brown clay, trace gravel, rootlets, timber, styrofoam and plastic.
SP9: Silty Sand:	Silty sand with cobbles to boulders of concrete, rebar and reinforced concrete, trace clay.
SP10: Silty Clay:	Low to medium plasticity, dark brown clay, trace plastic, bitumen, fabric, glass, timber, tile, rubber, vinyl, wire and ACM (in TP128).
SP11: Silty Clay:	Low to medium plasticity, dark brown clay, trace rootlets, brick, tile, plastic, bitumen, ash and ACM (in TP126).
SP12: Silty Clay:	Low plasticity, dark brown clay, trace rootlets, brick, tile, glass, plastic and ACM.
SP13: Silty Sand / Sandy Gravel:	Silty sand and sandy gravel with cobbles to boulders of concrete, rebar and reinforced concrete, trace metal, wire, plastic.
SP14: Silty Clay:	Low plasticity, dark brown clay, with gravel, sandstone boulders, concrete, metal, tyre, plastic and wire.
SP15: Silty Clay:	Low plasticity, dark brown clay, with gravel, sandstone boulders, concrete, metal, plastic and wire.
SP16: Sandy Gravel:	Fine to coarse, dark grey gravel, with sand, concrete and trace metal, wire, styrofoam and plastic.
SP17: Silty Sand:	Fine to coarse, grey sand with sandstone, trace rootlets, hose, wire, plastic and fabric.

With the expectation of TP133-TP135, all test pits through stockpiles terminated in underlying natural clay / silty clay soils as described in the subsoils section as above. It is noted that fill across the broader investigation areas (i.e., outside of stockpile footprints and areas of obvious fill placement such as the internal access road) were logged as fill for this investigation given the potential for historical disturbance of near surface soils through placement of fill. In this regard, some of the near surface soils may be naturally occurring topsoil or a combination of topsoil and fill, however, this can be difficult to distinguish and hence as a conservative approach all near surface soils have been indicated in the logs as fill. This approach is not considered to have had a material impact on the results of this investigation.

No visual or olfactory evidence (e.g., staining and / or odours) was observed during the investigations to suggest the presence of gross chemical contamination within the soils at the site. Fragments of ACM, and general building rubble which can be an indicator for the potential presence of asbestos, were observed within some of the stockpiles (as noted above) and at TP160. In general, where ACM fragments were noted in test pits via general observations, the number of fragments in each pit tended to be low in quantity.

Groundwater seepage was observed whilst excavating between 2.5 m to 3 m bgl in the northern property at locations TP1, TP4, TP7 and TP8 as reported in DP (2022). No free groundwater was observed during excavation of test pits or drilling of boreholes for the current investigations test locations. It should be noted that groundwater levels are affected by climatic conditions and soil permeability and will therefore vary with time.

12.2 Laboratory Analytical Results

The results of laboratory analysis are summarised in the following tables in Appendix I:

- Table I1: Summary of Soil Laboratory Analysis Results for Site Suitability; and
- Table I2: Summary of Soil Laboratory Analysis Results for Preliminary Waste Classification.

The laboratory certificates of analysis together with the chain of custody and sample receipt information are provided in Appendix J.

13. Discussion

13.1 Soils

13.1.1 Site Suitability for *In Situ* Soils

The results of the soil contamination testing for samples collected within *in situ* soils, as summarised in Table I1 (Appendix I), indicated concentrations for BTEX, phenol, OCP, OPP and PCB in all samples were below PQL and the respective SAC. PAHs were detected in some soil samples but were all at low concentrations and within the SAC. Metals were detected in all soil samples and below the SAC. TRHs were detected above the PQL in some samples and the majority of these samples were below the SAC with the exception of:

- TRH fraction >C_{10}-C_{16} in sample TP160/0.1-0.2 m at 2,700 mg/kg which exceeded the management limit (ML) of 1,000 mg/kg and ecological screening level (EIL) of 170 mg/kg. Given that the concentration exceeds the SAC by >2.5 times, the impacted soil at this location represents a hotspot. Silica gel cleanup was undertaken on this sample and reported a TRH fraction >C_{10}-C_{16} concentration of 1,600 mg/kg which still exceeded the ML and EIL; and
- TRH fraction >C_{16}-C_{34} in sample TP160/0.1-0.2 at 2,900 mg/kg which exceeded the ESL of 2,500 mg/kg. The silica gel cleanup on the sample recorded a concentration of 1,700 mg/kg which was below the EIL.

A material sample identified as ‘ACM8’ was observed in the surface / near surface soils at test location TP160 which was confirmed to contain asbestos. No friable asbestos was detected in the corresponding soil sample (TP160/0.1-0.2 m) at the PQL of <0.001% w/w.

No other asbestos was detected by laboratory analysis in any test locations within subsoils. However, as asbestos has been detected within stockpiles at the site (as outlined in Section 13.1.2 below), it is noted that asbestos may be present in subsoils at the site in locations that have not been tested.

It is noted that material ACM9 collected from the surface adjacent to the residential house and appeared to be associated with the house eaves did not record the presence of asbestos.

13.1.2 Site Suitability for Stockpiles

The results of the soil contamination testing for samples collected within stockpiles (refer Section 10.2 for sample location numbers and respective stockpile numbers), as summarised in Table I1 (Appendix I), indicated concentrations for TRH, BTEX, phenol, OCP, OPP and PCB in all samples were below PQL and SAC. PAHs were detected in some soil samples but were all at low concentrations and within SAC. Metals were detected in all soil samples and the majority of these samples were below the SAC with the exception of:

- Samples TP127/0.4-0.5 m at SP10 which recorded a copper concentration of 1,900 mg/kg. This exceeded the EIL of 320 mg/kg; and
- Sample TP129/0.1-0.2 m at SP8 which recorded a zinc concentration of 1,200 mg/kg. This exceeded the EIL of 900 mg/kg.

Asbestos was detected by laboratory analysis in the following samples:

- Surface sample SS2 (DP 2022) at SP9 which recorded a friable asbestos concentration of 0.0033% w/w, above the commercial / industrial land use screening criteria of 0.001% w/w;
- ACM fragment samples ‘ACM1’ and ‘ACM4’ from TP125/0.9-1 m at SP12 which recorded positive identification for asbestos;
- TP125A/0.8-0.9 m at SP12 which recorded friable asbestos concentration of 0.0189% w/w, above the commercial / industrial land use screening criteria of 0.001% w/w;
- ACM fragment sample ‘ACM2’ from TP128/0.4-0.5 m at SP10 which recorded positive identification for asbestos;
- ACM fragment sample ‘ACM5’ from TP126/0.9-1 m at SP11 which recorded positive identification for asbestos;
- TP131/1.9-2 m at SP4 which recorded positive identification for asbestos (ACM) in both the soil sample and the corresponding fragment sample ‘ACM6’;
- ACM fragment sample ‘ACM7’ from TP132/0.9-1 m at SP3 which recorded positive identification for asbestos;
- TP138/0.1-0.2 m at SP6 which recorded friable asbestos concentration of 0.002% w/w, above the commercial / industrial land use screening criteria of 0.001% w/w; and
- TP138/0.5-0.6 m at SP6 which recorded friable asbestos concentration of <0.001% w/w/ (0.0026g) and below the commercial / industrial land use screening criteria of 0.001% w/w.

These results suggest an increased risk of encountering asbestos in any stockpiles containing building wastes (e.g., brick, clinker, concrete, metal, terracotta, tile and plastic) and in areas adjacent to the stockpiles.

13.1.3 Preliminary Waste Classification

In order to assess the potential waste classification for fill and natural soils should they be removed as part of the proposed development, a preliminary waste classification of fill soils in the test pits and boreholes was undertaken to assist project planning.

The NSW EPA (2014) *Waste Classification Guidelines* contains a six-step procedure for determining the type of waste and the waste classification. Part of the procedure, for materials not classified as special waste or pre-classified waste, is a comparison of analytical data initially against contaminant threshold (CT) values specific to a waste category. Alternatively, the data can be assessed against specific contaminant concentration (SCC) thresholds when used in conjunction with TCLP thresholds.

The CT, SCC, and TCLP values relevant to this preliminary waste classification are shown in Table I2, Appendix I.

The following Table 2 presents the results of the six-step procedure outlined in EPA (2014) for determining the type of waste and the preliminary waste classification. This process applies to the fill and stockpiles at the site.

Table 2: Six Step Classification

Step	Comments	Rationale
1. Is it special waste?	Yes (in part)*	No coal tar, clinical or related waste, or waste tyres were detected in any samples or observed on the site surface or in any of the test pits or boreholes *Asbestos was detected by the analytical laboratory at SS2 at SP9, TP125 and TP125A at SP12, TP126 at SP11, TP128 at SP10, TP131 at SP4, TP132 and TP132A at SP3, TP138 at SP6 and TP160.
2. Is it liquid waste?	No	Materials composed of a soil matrix.
3. Is the waste "pre-classified"?	No	The fill is not pre-classified with reference to NSW EPA (2014).
4. Does the Waste have hazardous waste characteristics	No	The fill was not observed to contain or considered at risk to contain explosives, gases, flammable solids, oxidising agents, organic peroxides, toxic substances, corrosive substances, coal tar, batteries, lead paint or dangerous goods containers.
5. Chemical Assessment	Conducted	Refer to Table I2 in Appendix I.
6. Is the waste putrescible or non-putrescible?	Non-putrescible	The fill does not contain materials considered to be putrescible[a].

Note: a Wastes that are generally not classified as putrescible include soils, timber, garden trimmings, agricultural, forest and crop materials, and natural fibrous organic and vegetative materials (NSW EPA, 2014).

As shown in the Table I2, Appendix I, the majority of the results were within the CT1 criteria for general solid waste with the exception of the highlighted results. TCLP analysis was undertaken on selected samples. The results were within the SCC1 and TCLP1 criteria for general solid waste as defined in EPA (2014).

It is noted that samples TP162/0.1-0.2 m and TP166/0-0.1 m recorded slight exceedances of the CT1 criteria for nickel with concentrations of 49 mg/kg and 56 mg/kg respectively. Given the low TCLP nickel concentration in sample TP140/0.1-0.2 m (<0.02 mg/L), that TP162 and TP166 are associated with the internal access driveway (on the southern the property), that this material is not anticipated to be subject

to excavation for off-site disposal and given the preliminary nature of the waste classification, these exceedances are not considered significant. Nickel (total and leachable concentrations) should form a focus of the testing for any future final waste classification for the internal access driveway material (if off-site disposal of this material is required).

Asbestos fragments were detected by the analytical laboratory at TP126/0.9-1 m at SP11, TP128/0.4-0.5 m at SP10, TP131/1.9-2 m at SP4 and TP132/0-0.1 m, TP132A/0.9-1 m at SP3, and *in* situ at TP160.

Fibrous asbestos and asbestos fines (FA/AF) were detected by the analytical laboratory at SS2 at SP9, TP125/0.9-1 m and TP125A/0.8-0.9 m at SP12, and TP1380.1-0.2 m and TP138/0.5-0.6 m at SP6.

Therefore, the *in situ* material surrounding TP160 and stockpiled materials at SP3, SP4, SP10 and SP11 are considered to have a preliminary waste classification of general solid waste - special waste (non-friable asbestos). Stockpiled materials at SP6, SP9 and SP12 are considered to have a preliminary waste classification of general solid waste - special waste (friable asbestos). The remaining fill and stockpiles have a preliminary waste classification of general solid waste (non-putrescible).

Natural samples recorded results consistent with background ranges and below the adopted screening criteria for VENM with the exception of natural soils at TP160. Contamination of the natural soils at TP160 are considered to be associated with the overlying fill and localised in nature.

Note: The information provided in this section does not constitute a formal waste classification for off-site disposal purposes. Should any fill or soils require off-site disposal a formal waste classification assessment must be undertaken and reported.

13.2 Groundwater and Surface Water

The topography of the site suggests that regional groundwater is likely to be at considerable depth and flow generally west towards Kemps Creek. Groundwater in this geology is typically of poor quality (i.e., saline / high dissolved salts) and low yield, and as the groundwater table is likely to be at considerable depth, this risk is considered to be low.

Furthermore, given the clay lithology observed to comprise the soils at the site and lack of widespread gross chemical contamination across the site inferred from the generally low concentrations of COPC in the majority of samples, the risk to surface water at the site is also considered to be low.

13.3 Data Quality Assurance and Quality Control

The data quality assurance and quality control (QA / QC) results are included in Appendix K. Based on the results of the field QA and field and laboratory QC, and evaluation against the data quality indicators (DQI) it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

14. Conclusions and Recommendations

The site history review and laboratory results from this and previous investigations indicate the risk of widespread gross chemical contamination is considered to be low in respect of the proposed industrial land use.

Based on the results of this investigation, the following is recommended:[4]

- Off-site disposal of stockpiles SP6, SP9 and SP12 where friable asbestos has been recorded as general solid waste - special waste (friable asbestos);
- Further assessment of stockpiles SP3, SP4, SP10 and SP11 where non-friable asbestos has been identified to assess the suitability of this material to be retained on-site without management requirements;
- Given the EIL exceedances for zinc and copper in stockpiles SP8 and SP10 respectively, these soils are to be placed at depth (i.e., below 2 m of the final surface levels), above the groundwater table and preferable not within landscaped areas or areas likely to be subject to disturbance in the future. For SP10 this also assumes this stockpile is suitable from an asbestos contamination perspective as per previous dot point;
- Whilst the remaining stockpiles are considered to be generally suitable for re-use within the site, given the inherent variability that can occur within stockpiled materials, the presence of building and other anthropogenic materials in the stockpiles and the results from other stockpiles on the site, DP considers a prudent site management measure which is strongly recommended is to also place all stockpiled materials retained on site at depth (i.e., below 2 m of the final surface levels), above the groundwater table and preferable not within landscaped areas or areas likely to be subject to disturbance in the future; and
- Delineation of the asbestos and hydrocarbon contaminated soils around TP160 and subsequent remediation via off-site disposal of impacted soil to landfill. The preliminary waste classification for this material is general solid waste - special waste (non-friable asbestos);
- Development of a remediation action plan that outlines the remediation and validation requirements for the relevant stockpiles and around TP160; and
- Development and implementation of as unexpected finds and asbestos finds protocol to be implemented during construction for the site.

The current results indicate that the majority of fill, not already mentioned above, is likely to be classified as general solid waste (non-putrescible) for the purpose of off-site disposal (if surplus to the development needs).

In summary, based on the site information obtained to date, DP considers that the site can be made suitable for the proposed industrial redevelopment from a contamination perspective subject to the recommendations outlined above.

[4] Recommendations provided based on ESR's preferred approach of not requiring material to be capped and managed under a long term environmental management plan for the site.

15. References

CRC CARE. (2017). *Risk-based Management and Remediation Guidance for Benzo(a)pyrene.* Technical Report no. 39: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

DP (2021). *Report on Pre-Purchase Due Diligence Preliminary Contamination Assessment, 1050-1064 Mamre Road, Kemps Creek, Proposed Industrial Development*. Reference 207450.01.R.001.Rev0, dated 29 September 2021.

DP (2022). *Report on Pre-Purchase Due Diligence Preliminary Contamination Assessment, 1030-1048 Mamre Road, Kemps Creek, Proposed Industrial Development*. Reference 211619.01.R.001.Rev0, dated 30 March 2022.

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

NSW EPA. (1995). *Sampling Design Guidelines for Contaminated Land.* NSW Environment Protection Authority.

NSW EPA. (2022). *Contaminated Sites, Sampling Design Guidelines.* NSW Environment Protection Authority.

NSW EPA. (2014). *Waste Classification Guidelines, Part 1: Classifying Waste.* NSW Environment Protection Authority.

NSW EPA. (2020). *Guidelines for Consultants Reporting on Contaminated Land.* Contaminated Land Guidelines: NSW Environment Protection Authority.

16. Limitations

Douglas Partners Pty Ltd (DP) has prepared this report for this project at 1030-1064 Mamre Road, Kemps Creek in general accordance with DP's proposal 211619.00.P.001.Rev0 dated 18 May 2022. The work was carried out under DP's Conditions of Engagement. This report is provided for the exclusive use of ESR Australia for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

The assessment of atypical safety hazards arising from this advice is restricted to the environmental components set out in this report and based on known project conditions and stated design advice and assumptions. While some recommendations for safe controls may be provided, detailed 'safety in design' assessment is outside the current scope of this report and requires additional project data and assessment.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report. This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

Asbestos has been detected by observation and laboratory analysis, either on the surface of the site, or in fill materials at the test locations sampled and analysed. Building demolition materials, such as concrete, brick, tile, metal and plastic, were, however, located in fill and above-ground stockpiles, and these are considered as indicative of the possible further presence of hazardous building materials (HBM), including asbestos.

Although the sampling plan adopted for this investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the site that have not been sampled and analysed. This is either due to undetected variations in ground conditions or to vegetation preventing visual inspection and reasonable access. It is therefore considered possible that HBM, including asbestos, may be present in unobserved or untested parts of the site, between and beyond sampling locations, and hence no warranty can be given that asbestos is not present in these areas.

Douglas Partners Pty Ltd

Appendix A

Drawings

Drawing 1: Site Location

Drawing 2: Areas of Environmental Concern

Drawing 3: Stockpile Footprints

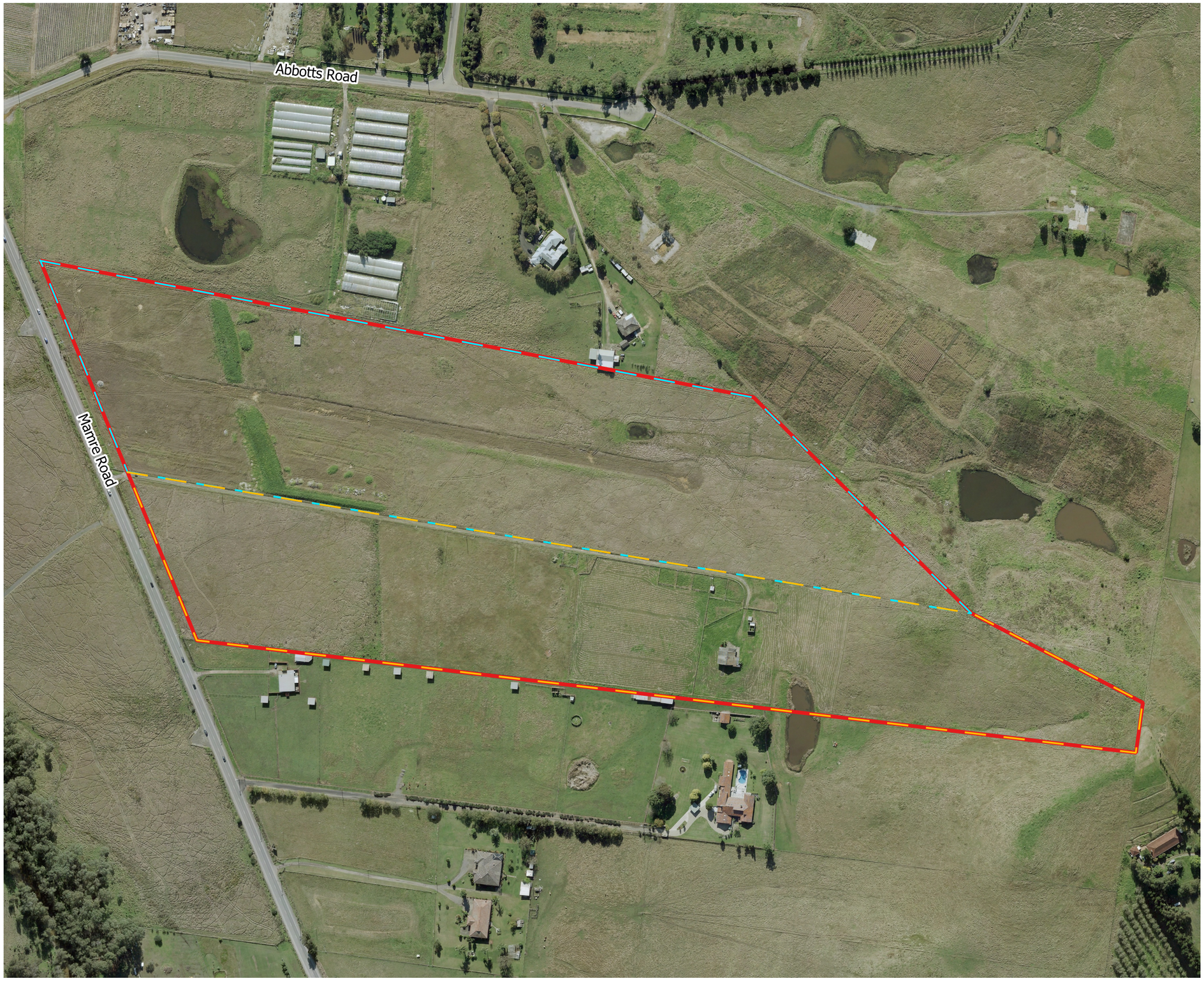
Drawing 4: Previous Test Locations

Drawing 5: Previous and Current Test Locations

Drawing 5a: Previous and Current Test Locations, and Stockpile Footprints

Drawing 6: Test Locations Exceeding Site Assessment Criteria

Drawing 7: Land Partners Plan Showing Stockpile Volumes





LOCALITY MAP

Notes:
1. Basemap from metromap.com.au.
2. Site and property boundaries inferred from NSW spatial services lot boundary.

Legend

- Site Boundary
- Property Boundaries
  - 1030-1048 Mamre Road
  - 1050-1064 Mamre Road

0 50 100 150 200 m

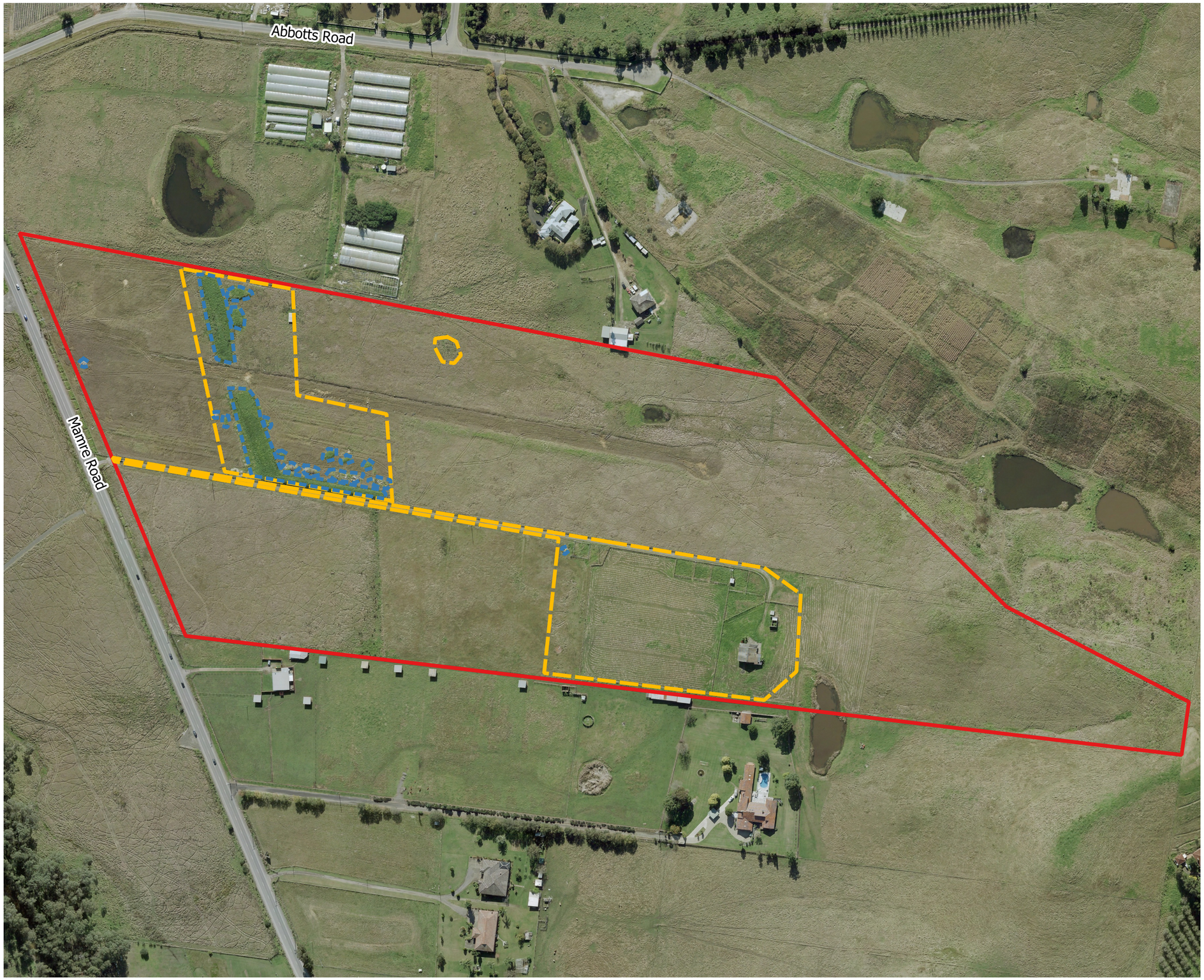
Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT:	ESR Australia		
OFFICE:	Sydney	DRAWN BY:	JH
SCALE:	1:3500 @ A3	DATE:	29.09.2022

TITLE: **Site Location**
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

N

PROJECT No:	211619.02
DRAWING No:	1
REVISION:	0





LOCALITY MAP

Notes:
1. Basemap from metromap.com.au
2. Site boundary inferred from NSW spatial services lot boundary.
3 Areas of Investigation are approximate only.
4. Stockpile footprints observed by DP on 01/08/2022 and are indicative only.

Legend

- Site Boundary
- Areas of Investigation / Potential Environmental Concern
- Stockpile footprints

0 50 100 150 200 m

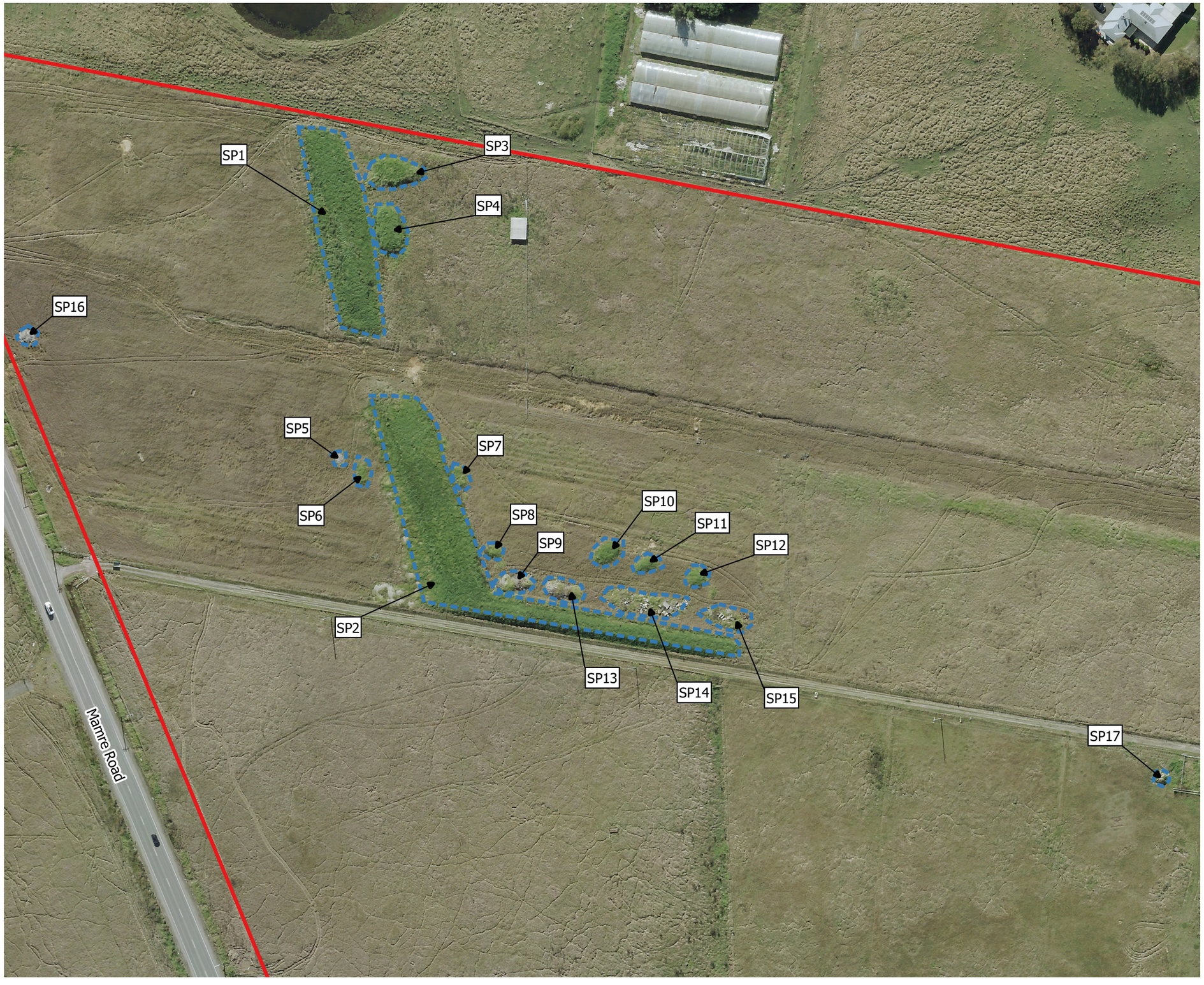
Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT:	ESR Australia		
OFFICE:	Sydney	DRAWN BY:	JH
SCALE:	1:3300 @ A3	DATE:	29.09.2022

TITLE: **Areas of Potential Environmental Concern**
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

N

PROJECT No:	211619.02
DRAWING No:	2
REVISION:	0





LOCALITY MAP

Notes:
1. Basemap from metromap.com.au
2. Site boundary inferred from NSW spatial services lot boundary.
3. Stockpile footprints surveyed 01/08/22 by DP and are indicative only.

Legend
- Site Boundary
- Stockpile Footprint

0 20 40 60 80 100 m

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT:	ESR Australia		
OFFICE:	Sydney	DRAWN BY:	JH
SCALE:	1:1400 @ A3	DATE:	29.09.2022

TITLE: **Stockpile Footprints**
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

N

PROJECT No:	211619.02
DRAWING No:	3
REVISION:	0





LOCALITY MAP

Notes:
1. Basemap from metromap.com.au
2. Site boundary inferred from NSW spatial services lot boundary.

Legend

- Site Boundary

DP (2021), 1050-1064 Mamre Road

- Surface Sample
- Borehole
- Test Pit

DP (2022), 1030-1048 Mamre Road

- Test Pit
- Surface Sample

0 50 100 150 200 m

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT:	ESR Australia		
OFFICE:	Sydney	DRAWN BY:	JH
SCALE:	1:3300 @ A3	DATE:	29.09.2022

TITLE: **Previous Test Locations**
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

N

PROJECT No:	211619.02
DRAWING No:	4
REVISION:	0





LOCALITY MAP

Notes:
1. Basemap from metromap.com.au
2. Site boundary inferred from NSW spatial services lot boundary.

Legend

- Site Boundary
- Current Areas of Investigation
- Current Investigation Test Pit
- Current Investigation Borehole

DP (2021), 1050-1064 Mamre Road

- Surface Sample
- Borehole
- Test Pit

DP (2022), 1030-1048 Mamre Road

- Test Pit
- Surface Sample

0 50 100 150 m

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT:	ESR Australia		
OFFICE:	Sydney	DRAWN BY:	JH
SCALE:	1:2100 @ A3	DATE:	29.09.2022

TITLE: **Previous and Current Test Locations within Areas of Investigation**
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

N

PROJECT No:	211619.02
DRAWING No:	5
REVISION:	0





LOCALITY MAP

Notes:
1. Basemap from metromap.com.au
2. Site boundary inferred from NSW spatial services lot boundary.
3. Stockpile footprints are approximate only.

Legend

- Site Boundary
- Current Investigation Test Pit

DP (2022), 1030-1048 Mamre Road

- Test Pit
- Surface Sample

0 10 20 30 40 50 m

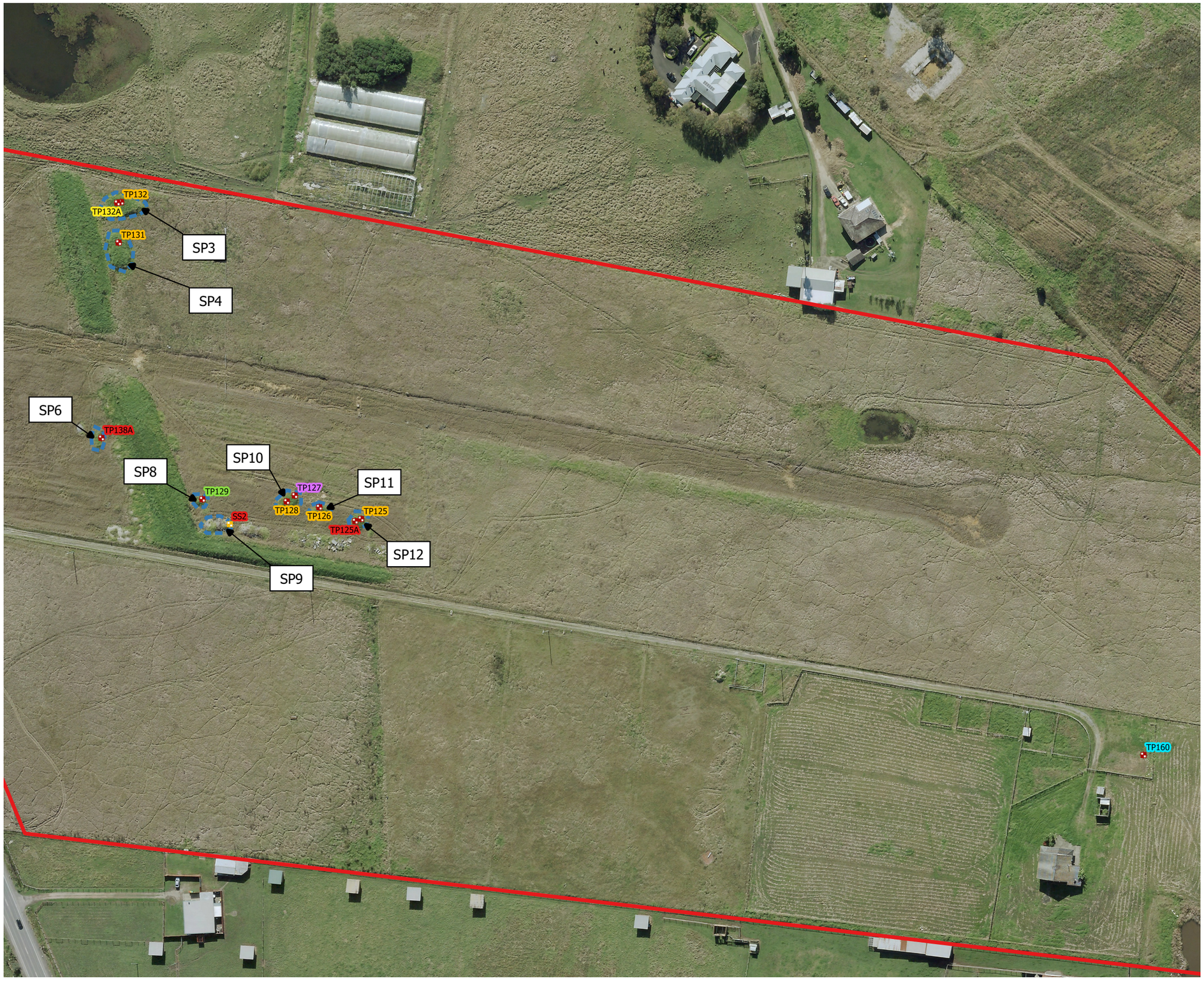
Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT:	ESR Australia		
OFFICE:	Sydney	DRAWN BY:	JH
SCALE:	1:900 @ A3	DATE:	29.09.2022

TITLE: **Previous and Current Test Locations and Stockpile Footprints**
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

N

PROJECT No:	211619.02
DRAWING No:	5a
REVISION:	0





LOCALITY MAP

Notes:
1. Basemap from metromap.com.au
2. Site boundary inferred from NSW spatial services lot boundary.
3. Stockpile footprints are approximate only.

Legend

- Site Boundary
- Stockpile
- Current Investigation Test Pit

DP (2022), 1030-1048 Mamre Road

- Surface Sample
- Metals EIL Exceedance
- Metals EIL and Asbestos (non-friable)
- TRH ML and EIL, and Asbestos (non-friable)
- Asbestos (non-friable)
- Asbestos (friable)
- ACM Observed

0 50 100 m

Douglas Partners
Geotechnics / Environment / Groundwater

CLIENT:	ESR Australia		
OFFICE:	Sydney	DRAWN BY:	JH
SCALE:	1:1800 @ A3	DATE:	04.10.2022

TITLE: **Test Locations and Stockpiles Exceeding Site Assessment Criteria**
Proposed Industrial Development
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

N

PROJECT No:	211619.02
DRAWING No:	6
REVISION:	0

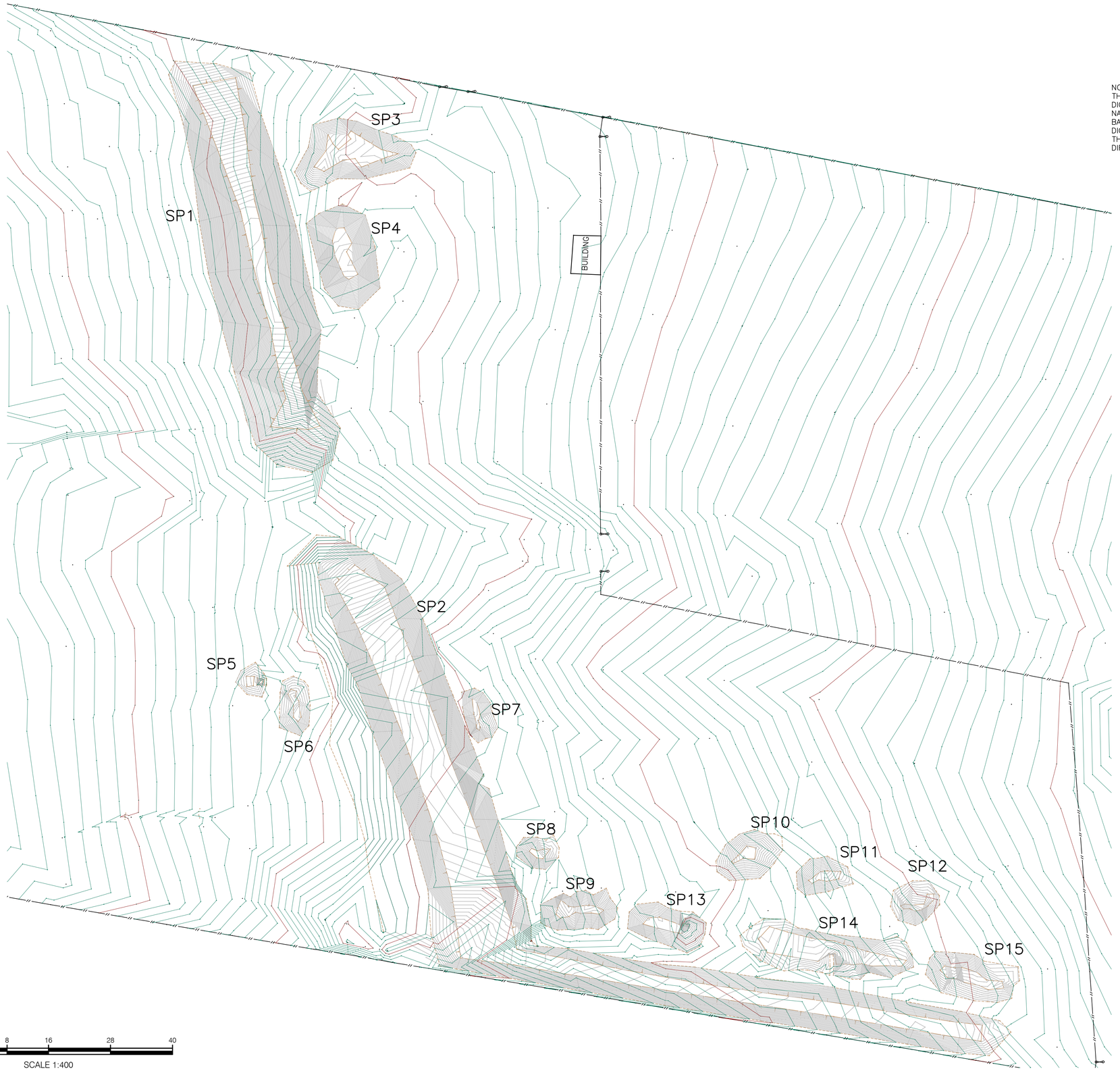
M.G.A



BEFORE YOU DIG www.byda.com.au

A Dial Before You Dig enquiry must be lodged at least two business days prior to starting any excavation or work site project.

GDA2020



4 0 8 16 28 40

SCALE 1:400

NOTE:
THE VOLUMES WERE CALCULATED BY CREATING A DIGITAL TERRAIN MODEL OVER THE SURROUNDING NATURAL SURFACE INCLUDING THE BOTTOM OF BANKS OF EACH OF THE STOCKPILES. A SECOND DIGITAL TERRAIN MODEL WAS CREATED USING ONLY THE STOCKPILES. THE VOLUMES ARE THE DIFFERENCE BETWEEN THE TWO MODELS.

Design: SY075647.000.6 ESR STOCKPILES – STOCKPILES
Natural: SY075647.000.6 ESR STOCKPILES – NATURAL SURFACE
Date of Calculation: 29/08/2022
Date of Survey: 17/08/2022

	Fill Area	Fill Volume
#	(m^2)	(m^3)
SP01	1326.3	2500.6
SP02	2212.4	2968.0
SP03	208.8	155.6
SP04	201.3	225.9
SP05	26.6	6.4
SP06	56.5	19.7
SP07	49.4	23.1
SP08	40.4	15.6
SP09	91.0	54.8
SP10	92.2	41.0
SP11	59.1	25.1
SP12	60.9	26.4
SP13	98.5	50.8
SP14	244.5	103.2
SP15	130.0	55.7

CLIENT

ESR

PROJECT

PLAN SHOWING STOCK PILE VOLUME OF LOT 3 IN DP250002

1030 MAMRE ROAD KEMPS CREEK

NOTES
Tree sizes are estimates only.
Only visible services have been located in this survey.
Service and utilities shown on plan have been located by physical evidence on site only and may not have been opened to verify the type of utility.
Neither excavation nor potholing have been carried out to confirm underground location. Service details should be confirmed with the relevant service authority during design and prior to any construction.
All dimensions must be verified on site prior to any construction.
The position of surveyed data has been located and is shown to topographic accuracies. If clearances to boundaries or other features are critical and dimensions are not shown further survey may be required.
The title boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.
Any construction on or near boundaries will require further survey in order that marks defining boundaries can be placed.

1	GKO	01/09/2022	INITIAL ISSUE

SYM	CODE	DESCRIPTION
■	APB	AUSPOST BOX
△	BM	BENCH MARK
◉	BO	BOLLARD
■	DJM	DRAINAGE MANHOLE
■	GUL	DRAINAGE GULLY PIT
☼	ELP	ELEC GARDEN LIGHT
⚿	EL	ELEC GREEN PILLAR
⊸	LPL	ELEC LIGHT POLE
▭	EP	ELECT SINGLE PIT
○	SPL	ELEC STAY POLE
⊘	PP	ELEC POWER POLE
⊸	PLP	POWER POLE/LIGHT
⊲	PTR	ELE POLE/TRANSFORM
▭	ETP	ELEC TWIN PIT
▭	EFP	ELEC FUSE BOX
▥	GMR	GAS METER
▥	GAS	GAS VALVE
▬	GM	GAS MAIN
⋈	MBX	MAIL BOX
◍	BIN	BIN
⊕	BOR	BOREHOLE
◈	FD	FUEL DIP
▬	SE	SEAT
⚑	FLG	FLAG POLE
⊸	AG	GATE

SYM	CODE	DESCRIPTION
⊕	OFM	OPTICAL FIBRE MARKER
▭	OFP	OPTICAL FIBRE PIT
◪	TDP	TELECOM DIST PILLAR
◔	TPL	TELECOM POLE
▰	TSP	TELECOM SINGLE PIT
▰	TTP	TELECOM TWIN PIT
◍	SLH	SEWER LAMP HOLE
◍	SMH	SEWER MANHOLE
◍	SVP	SEWER VENT PIPE
✳	TM	PALM TREE
✳	TS	SHRUB
✳	T	TREE
☼	CAM	SPEED CAMERA
▭	SCL	TRAFFIC CONTROLLER
⊠	SJX	TRAFFIC JUNCTION BOX
⊘	SGL	TRAFFIC LIGHT
⚑	BUS	BUS STOP SIGN
⊸	SI	TRAFFIC SIGN
⚿	US	UNKNOWN SERVICE
▭	WHY	WATER HYDRANT
Ⓜ	WMR	WATER METER
▭	WEP	WATER PUMP
⊛	WSV	WATER STOP VALVE
◪	WAV	WATER AIR VALVE
⊸	WTP	WATER TAP

Symbols shown are indicative only. The symbol size and orientation does not necessarily represent the real size or orientation of the feature.

DRAINAGE PIPE U/G
DRAIN
ELECT. CABLE A/G
ELEC. CABLE U/G
GAS PIPE
FENCE LINE
SEWERAGE PIPE
TELSTRA CABLE
WATER PIPE

LANDPARTNERS surveyors and planners

ISO 9001 Quality Management

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Rydalmere NSW 2116
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Dundas NSW 2117

p: (02) 9685 2000
e: info@landpartners.com.au
w: www.landpartners.com.au

HEIGHT DATUM: AHD	LOCAL AUTHORITY: PENRITH
HEIGHT ORIGIN: PM33560 RL 42.346	SCALE: 1:400 (A1)
MERIDIAN: MGA ZONE 56	CONTOUR INTERVAL: 0.1 Metre
CO-ORD SYSTEM: GDA 2020	SURVEYOR: LH — DATE OF SURVEY: 17/08/2022
CCAD FILE: ???	DRAWN: SF — DATE: 1/09/2022
AUTOCAD FILE: SY075369.000.2.1	CHECKED: GKO — DATE: 1/09/2022
ARCHIVE FILE	APPROVED: GKO — DATE: 1/09/2022

PLAN NUMBER

SY075369.000.2.1

SHEET 01 OF 01

CYG 0.6

I:\Projects - Current\SY075369.000 1030 Mamre Rd, Kemps Creek ESR\Cad files\Active\SY075369.000.2_Stockpile Volumes\SY075369.000.2.1.dwg

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Appendix B

About this Report

About this Report

Douglas Partners

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix C

Section 10.7 Planning Certificate

PENRITH CITY COUNCIL

Civic Centre
601 High Street, Penrith

PO Box 60 Penrith NSW 2751

Telephone: 02 4732 7777
Facsimile: 02 4732 7958

Email: pencit@penrithcity.nsw.gov.au

PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

Property No: 403325
Your Reference: JP:KM:138119
Contact No:

Issue Date: 09 August 2021
Certificate No: 21/04354

Issued to: Meehans Solicitors
PO Box 597
CAMPBELLTOWN NSW 2560

PRECINCT 222

DESCRIPTION OF LAND

County: CUMBERLAND **Parish: MELVILLE**

Location: 1030-1048 Mamre Road KEMPS CREEK NSW 2178
Land Description: Lot 3 DP 250002

- PART 1 PRESCRIBED MATTERS –

In accordance with the provisions of Section 10.7(2) of the Act the following information is furnished in respect of the abovementioned land:

1 NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

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

Penrith Local Environmental Plan No. 255 - Exempt and Complying Development, gazetted 24 March 2000, as amended, applies to land within the City of Penrith. (Note: This plan does not apply to the land to which Sydney Regional Environmental Plan No.30 - St Marys applies, except as provided by clause 43 of SREP No. 30 - St Marys.)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development, gazetted 29 June 2001, applies to the land.

Sydney Regional Environmental Plan No.9 - Extractive Industry (No.2), gazetted 15 September 1995, as amended, applies to the local government area of Penrith.

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997), gazetted 7 November 1997, as amended, applies to the local government area of Penrith (except land to which State Environmental Planning Policy (Penrith Lakes Scheme) 1989 applies).

The following State environmental planning policies apply to the land (subject to the exclusions noted below):

State Environmental Planning Policy No.19 - Bushland in Urban Areas. (Note: This policy does not apply to certain land referred to in the National Parks and Wildlife Act 1974 and the Forestry Act 1916.)

PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

State Environmental Planning Policy No.21 - Caravan Parks.
State Environmental Planning Policy No.33 - Hazardous and Offensive Development.
State Environmental Planning Policy No.50 - Canal Estate Development. (Note: This policy does not apply to the land to which State Environmental Planning Policy (Penrith Lakes Scheme) 1989 applies.
State Environmental Planning Policy No.55 - Remediation of Land.
State Environmental Planning Policy No.64 - Advertising and Signage.
State Environmental Planning Policy No.65 - Design Quality of Residential Apartment Development.
State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).
State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (Note: This policy applies to land within New South Wales that is land zoned primarily for urban purposes or land that adjoins land zoned primarily for urban purposes, but only as detailed in clause 4, 4A and 4B of the policy.)
State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
State Environmental Planning Policy (State Significant Precincts) 2005.
State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.
State Environmental Planning Policy (Infrastructure) 2007.
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
State Environmental Planning Policy (Affordable Rental Housing) 2009.
State Environmental Planning Policy (State and Regional Development) 2011.
State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017.
State Environmental Planning Policy (Educational Establishments and Child Care Centre Facilities) 2017.
State Environmental Planning Policy (Primary Production and Rural Development) 2019.
State Environmental Planning Policy (Western Sydney Aerotropolis) 2020.

State Environmental Planning Policy (Western Sydney Employment Area) 2009 applies to the land. Under the terms of this Policy the land is partly zoned Zone IN1 General Industrial and partly zoned Zone SP2 Infrastructure.

Zone IN1 General Industrial

1 Objectives of zone

- To facilitate a wide range of employment-generating development including industrial, manufacturing, warehousing, storage and research uses and ancillary office space.
- To encourage employment opportunities along motorway corridors, including the M7 and M4.
- To minimise any adverse effect of industry on other land uses.
- To facilitate road network links to the M7 and M4 Motorways.
- To encourage a high standard of development that does not prejudice the sustainability of other enterprises or the environment.
- To provide for small-scale local services such as commercial, retail and community facilities (including child care facilities) that service or support the needs of employment-generating uses in the zone.

2 Permitted without consent

Nil.

3 Permitted with consent

Building identification signs; Business identification signs; Depots; Environmental facilities; Environmental protection works; Food and drink premises; Freight transport facilities; Garden centres; Hardware and building supplies; Industrial retail outlets; Industrial training facilities; Industries (other than offensive or hazardous industries); Neighbourhood shops; Places of public worship; Recreation areas; Recreation facilities (indoor); Roads; Service stations;

Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres.

4 Prohibited

Any development not specified in item 2 or 3.

Zone SP2 Infrastructure

1 Objectives of zone

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

2 Permitted without consent

Nil

3 Permitted with consent

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

4 Prohibited

Any development not specified in item 2 or 3

Note 1: Land to which State Environmental Planning Policy (Western Sydney Employment Area) 2009 applies may be subdivided but only with consent. Consent is not required for subdivision detailed in Clause 14(2) of this Policy.

Note 2: Under the terms of Clause 15 of State Environmental Planning Policy (Western Sydney Employment Area) 2009 despite any other provision of this Policy, a person may, with consent, carry out development for the purposes of a child care centre on land to which this Policy applies.

1(2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act:

(Information is provided in this section only if a proposed environmental planning instrument that is or has been the subject of community consultation or on public exhibition under the Act will apply to the carrying out of development on the land.)

Draft State Environmental Planning Policy (Environment) applies to the land.

Draft State Environmental Planning Policy (Remediation of Land) applies to the land.

Draft State Environmental Planning Policy (Housing) 2021 applies to the land.

Draft State Environmental Planning Policy (Cumberland Plain Conservation) applies to the land.

Draft State Environmental Planning Policy (Educational Establishments and Child Care Centre Facilities) 2017 applies to the land.

Draft State Environmental Planning Policy (Design and Place) applies to the land.

Draft State Environmental Planning Policy (Primary Production and Rural Development) 2019 applies to the land.

Draft State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 applies to the land.

Draft State Environmental Planning Policy (Infrastructure) 2007 applies to the land.

1(3) The name of each development control plan that applies to the carrying out of development on the land:

Penrith Development Control Plan 2014 applies to the land.

2 ZONING AND LAND USE UNDER RELEVANT LEPs

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a SEPP or proposed SEPP) that includes the land in any zone (however described):

2(a)-(d) the identity of the zone; the purposes that may be carried out without development consent; the purposes that may not be carried out except with development consent; and the purposes that are prohibited within the zone. Any zone(s) applying to the land is/are listed below and/or in annexures.

(Note: If no zoning appears in this section see section 1(1) for zoning and land use details (under the Sydney Regional Environmental Plan or State Environmental Planning Policy that zones this property).)

Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development
In addition to any controls detailed above Penrith Local Environmental Plan No. 258 - Consent for Dwelling Houses and Other Development sets out further circumstances where development consent will be required for particular development. A copy of this LEP is attached.

2(e) whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed:

(Information is provided in this section only if any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed.)

2(f) whether the land includes or comprises critical habitat:

(Information is provided in this section only if the land includes or comprises critical habitat.)

2(g) whether the land is in a conservation area (however described):

(Information is provided in this section only if the land is in a conservation area (however described).)

2(h) whether an item of environmental heritage (however described) is situated on the land:

(Information is provided in this section only if an item of environmental heritage (however described) is situated on the land.)

2A ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

(Information is provided in this section only if the land is within any zone under State Environmental Planning Policy (Sydney Region Growth Centres) 2006.)

3 COMPLYING DEVELOPMENT

HOUSING CODE

(The Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

- The land is affected by a reservation for a public purpose. If the land is within the relevant zones complying development under the Housing Code **may not** be carried out on any part of the land that is reserved for a public purpose by an environmental planning instrument. Complying development **may** be carried out on any part of the land that is not reserved for a public purpose by an environmental planning instrument. For the purposes of this section "public purpose" means any land that is zoned either Zone E1, RE1, SP1 or SP2 under an environmental planning instrument or an equivalent zone in a non standard template planning instrument, or land that is subject to acquisition.
- The land is affected by a 25 ANEF contour or a higher ANEF contour. If the land is within the relevant zones complying development under the Housing Code **may not** be carried out on any part of the land that is in the 25 ANEF contour or a higher ANEF contour, unless the development is only for the erection of ancillary development, attached development or detached development or the alteration of or an addition to ancillary development, attached development or detached development. Complying development **may** be carried out on any part of the land that is not in the 25 ANEF contour or a higher ANEF contour. Contact Council for the location of the 25 ANEF contour or higher ANEF contour.

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

- The land is affected by a reservation for a public purpose. If the land is within the relevant zones complying development under the Rural Housing Code **may not** be carried out on any part of the land that is reserved for a public purpose by an environmental planning instrument. Complying development **may** be carried out on any part of the land that is not reserved for a public purpose by an environmental planning instrument. For the purposes of this section "public purpose" means any land that is zoned either Zone E1, RE1, SP1 or SP2 under an

environmental planning instrument or an equivalent zone in a non standard template planning instrument, or land that is subject to acquisition.

- The land is affected by a 25 ANEF contour or a higher ANEF contour. If the land is within the relevant zones complying development under the General Housing Code **may not** be carried out on any part of the land that is in the 25 ANEF contour or a higher ANEF contour, unless the development is only for the erection of ancillary development, attached development or detached development or the alteration of or an addition to ancillary development, attached development or detached development. Complying development **may** be carried out on any part of the land that is not in the 25 ANEF contour or a higher ANEF contour. Contact Council for the location of the 25 ANEF contour or higher ANEF contour.

LOW RISE HOUSING DIVERSITY CODE

(The Low Rise Housing Diversity Code only applies if the land is within Zones R1, R2, R3 or RU5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

- The land is affected by a reservation for a public purpose. If the land is within the relevant zones complying development under the Low Rise Housing Diversity Code **may not** be carried out on any part of the land that is reserved for a public purpose by an environmental planning instrument. Complying development **may** be carried out on any part of the land that is not reserved for a public purpose by an environmental planning instrument. For the purposes of this section "public purpose" means any land that is zoned either Zone E1, RE1, SP1 or SP2 under an environmental planning instrument or an equivalent zone in a non standard template planning instrument, or land that is subject to acquisition.
- The land is affected by a 25 ANEF contour or a higher ANEF contour. If the land is within the relevant zones complying development under the Low Rise Housing Diversity Code **may not** be carried out on any part of the land that is in the 25 ANEF contour or a higher ANEF contour, unless the development is only for the erection of ancillary development, attached development or detached development or the alteration of or an addition to ancillary development, attached development or detached development. Complying development **may** be carried out on any part of the land that is not in the 25 ANEF contour or a higher ANEF contour. Contact Council for the location of the 25 ANEF contour or higher ANEF contour.

GREENFIELD HOUSING CODE

(The Greenfield Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument, and if the land is identified as a Greenfield Housing Code Area by the Greenfield Housing Code Area Map.)

- The land is affected by a reservation for a public purpose. If the land is within the relevant zones, and if the land is identified as a Greenfield Housing Code Area by the Greenfield Housing Code Area Map complying development under the Greenfield Housing Code **may not** be carried out on any part of the land that is reserved for a public purpose by an environmental planning instrument. Complying development **may** be carried out on any part of

the land that is not reserved for a public purpose by an environmental planning instrument. For the purposes of this section "public purpose" means any land that is zoned either Zone E1, RE1, SP1 or SP2 under an environmental planning instrument or an equivalent zone in a non standard template planning instrument, or land that is subject to acquisition.

- The land is affected by a 25 ANEF contour or a higher ANEF contour. If the land is within the relevant zones, and if the land is identified as a Greenfield Housing Code Area by the Greenfield Housing Code Area Map complying development under the Greenfield Housing Code **may not** be carried out on any part of the land that is in the 25 ANEF contour or a higher ANEF contour, unless the development is only for the erection of ancillary development, attached development or detached development or the alteration of or an addition to ancillary development, attached development or detached development. Complying development **may** be carried out on any part of the land that is not in the 25 ANEF contour or a higher ANEF contour. Contact Council for the location of the 25 ANEF contour or higher ANEF contour.

HOUSING ALTERATIONS CODE

Complying development under the Housing Alterations Code **may** be carried out on the land.

GENERAL DEVELOPMENT CODE

Complying development under the General Development Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL ALTERATIONS CODE

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

SUBDIVISIONS CODE

Complying development under the Subdivisions Code **may** be carried out on the land.

DEMOLITION CODE

Complying development under the Demolition Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL (NEW BUILDINGS AND ADDITIONS) CODE

(The Commercial and Industrial (New Buildings and Additions) Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

- The land is affected by a reservation for a public purpose. If the land is within the relevant zones complying development under the Commercial and Industrial (New Buildings and Additions) Code **may not** be carried out on any part of the land that is reserved for a public purpose by an environmental planning instrument. Complying development **may** be carried out on any part of the land that is not reserved for a public purpose by an environmental planning instrument. For the purposes of this section "public purpose" means any land that is zoned

either Zone E1, RE1, SP1 or SP2 under an environmental planning instrument or an equivalent zone in a non standard template planning instrument, or land that is subject to acquisition.

FIRE SAFETY CODE

Complying development under the Fire Safety Code **may** be carried out on the land.

(NOTE: (1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.)

4 COASTAL PROTECTION

The land is not affected by the operation of sections 38 or 39 of the Coastal Protection Act 1979, to the extent that council has been so notified by the Department of Public Works.

5 MINE SUBSIDENCE

The land is not proclaimed to be a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961.

6 ROAD WIDENING AND ROAD REALIGNMENT

The land is affected by road widening or road realignment under
(a) Division 2 of Part 3 of the Roads Act 1993, or
(b) an environmental planning instrument, or
(c) a resolution of Council.
Note: Additional advice may be available in section 10.7(5) information.
The land may be affected by a proposed road shown on the State Environmental Planning Policy (Western Sydney Employment Area) 2009 Transport and Arterial Road Infrastructure Plan Map (sheet TA1 001). Contact the Department of Planning, Industry, and Environment for details.

7 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies
The land is affected by the Asbestos Policy adopted by Council.
The land is not affected by any other policy adopted by the council that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

(b) Other Public Authority Policies
The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.
The land is not affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates

issued by the council, that restricts the development of the land because of the likelihood of land slip, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

7A FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) Development on the land or part of the land (if such development is permissible on the land) is within the flood planning area and subject to flood related development controls.

(2) This land has not been identified as being between the flood planning area and the probable maximum flood.

Note: The land is subject to Penrith Development Control Plan 2014 Section C3.5 Flood Planning. On application and payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property.

8 LAND RESERVED FOR ACQUISITION

The land is affected by provisions under an environmental planning instrument, a deemed environmental planning instrument or a draft environmental planning instrument applying to the land that provides for acquisition by a public authority, as referred to in section 3.15 of the Act.

9 CONTRIBUTIONS PLANS

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

The Penrith City Local Open Space Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, excluding industrial areas and the release areas identified in Appendix B of the Plan (Penrith Lakes, Cranebrook, Sydney Regional Environmental Plan No. 30 - St Marys, Waterside, Thornton, the WELL Precinct, Glenmore Park and Erskine Park).

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

Penrith Citywide Section 7.12 Development Contributions Plan for non-residential development applies to all land in the City of Penrith LGA, with the exception of land within the Lambridge Estate, WELL Precinct and Penrith City Centre that are currently subject to other development contributions plans for non-residential development.

9A BIODIVERSITY CERTIFIED LAND

(Information is provided in this section only if the land is biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*.)

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10 BIODIVERSITY STEWARDSHIP SITES

(Information is provided in this section only if Council has been notified by the Chief Executive of the Office of Environment and Heritage that the land is land to which a biobanking stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016* relates.)

10A NATIVE VEGETATION CLEARING SET ASIDES

(Information is provided in this section only if Council has been notified of the existence of a set aside area by Local Land Services or it is registered in the public register under which section 60ZC of the *Local Land Services Act 2013* relates).

11 BUSH FIRE PRONE LAND

All of the land is identified as bush fire prone land according to Council records. Guidance as to restrictions that may be placed on the land as a result of the land being bush fire prone can be obtained by contacting Council. Such advice would be subject to further requirements of the NSW Rural Fire Services.

12 PROPERTY VEGETATION PLANS

(Information is provided in this section only if Council has been notified that the land is land to which a property vegetation plan approved under the *Native Vegetation Act 2003* applies and continues in force.)

13 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land.)

14 DIRECTIONS UNDER PART 3A

(Information is provided in this section only if there is a direction by the Minister in force under section 75P(2)(c1) of the Act (repealed on 1st October 2011) that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect.)

15 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

(Information is provided in this section only if:

(a) there is a current site compatibility certificate (seniors housing), of which the council is aware, issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land; and/or

(b) any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.)

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16 SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

(Information is provided in this section only if there is a valid site compatibility certificate (infrastructure), of which council is aware, in respect of proposed development on the land.)

17 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:
(a) there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land; and/or
(b) any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 have been imposed as a condition of consent to a development application in respect of the land.)

18 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

19 SITE VERIFICATION CERTIFICATES

(Information is provided in this section only if there is a current site verification certificate, of which council is aware, in respect of the land.)

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

(a) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

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Note: Section 10.7(5) information for this property may contain additional information regarding contamination issues.

20 LOOSE FILL ASBESTOS INSULATION

(Information is provided in this section only if there is a residential premises listed on the register of residential premises that contain or have contained loose-fill asbestos insulation (as required by Division 1A of Part 8 of the Home Building Act 1989))

21 AFFECTED BUILDING NOTICES AND BUILDING PRODUCT RECTIFICATION ORDERS

(Information is provided in this section only if Council is aware of any "affected building notice" and/or a "building product rectification order" in force for the land).

22 STATE ENVIRONMENTAL PLANNING POLICY – WESTERN SYDNEY AEROTROPOLIS 2020

The land may be subject to additional planning considerations under State Environmental Planning Policy (Western Sydney Aerotropolis) 2020:

	Planning Control	Affected?
(a)	Subject to an ANEF or ANEC contour of 20 or greater	Yes
(b)	Affected by the Lighting Intensity and Wind Shear Map	No
(c)	Affected by the Obstacle Limitation Surface Map	Yes
(d)	Affected by the "public safety area" on the Public Safety Area Map	No
(e)	Within the "3km zone" or the "13km zone" of the Wildlife Buffer Zone Map	Yes

Note: The Environmental Planning and Assessment Amendment Act 2017 commenced operation on the 1 March 2018. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017, and Environmental Planning and Assessment Regulation 2000.

Information is provided only to the extent that Council has been notified by relevant government departments.

10.7(5) Certificate
This Certificate is directed to the following relevant matters affecting the land

When information pursuant to section 10.7(5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 10.7(6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

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PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

Note:

- Council's 10.7(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au . Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

* Biodiversity Conservation Act 2016

When considering any development application Council must have regard to the Biodiversity Conservation Act 2016. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

* Preservation of Trees or Vegetation

Clause 32 of State Environmental Planning Policy (Western Sydney Employment Area) 2009 details requirements relating to the preservation of trees or vegetation.

* Agricultural Activities Within Rural Areas

This property is located in a rural area and there may be certain agricultural activities occurring that some people may find offensive (for example noise, dust and odours). This should be considered if you purchase the subject property or build a dwelling thereon.
If you do purchase the subject property or build a dwelling, the potential impact that your activities (for example pets, inadequate fencing, drainage, litter and poor weed control) might have on the agricultural activities in the area should also be considered.

* Preservation of Trees and Vegetation

See Chapter C2 of Penrith Development Control Plan 2014 for specific controls relating to the preservation of trees and vegetation.

* Development Control Plan General Information

Penrith Development Control Plan 2014 which applies to the land, sets out requirements for a range of issues that apply across the Penrith Local Government Area, including:

- Site Planning and Design Principles
- Vegetation Management
- Water Management
- Land Management
- Waste Management
- Landscape Design
- Culture and Heritage
- Public Domain
- Advertising and Signage
- Transport, Access and Parking
- Subdivision
- Noise and Vibration, and
- Infrastructure and Services.

The Development Control Plan also specifies requirements relating to various types of land uses including:

- Rural Land Uses
- Residential Development
- Commercial and Retail Development, and
- Industrial Development

as well as for a number of specific activities, including child care centres; health consulting rooms; educational establishments; parent friendly amenities; places of public worship; vehicle repair stations; cemeteries, crematoria and funeral homes; extractive industries; and telecommunication facilities.

The Development Control Plan also details requirements relating to key precincts within the Penrith Local Government Area, including:

- Caddens
- Claremont Meadows Stage 2
- Cranebrook
- Emu Heights
- Emu Plains
- Erskine Business Park
- Glenmore Park
- Kingswood
- Mulgoa Valley
- Orchard Hills
- Penrith
- Penrith Health and Education Precinct
- Riverlink Precinct
- St Clair,
- St Marys / St Marys North, and
- Sydney Science Park.

Penrith Development Control Plan 2014 may be accessed at https://www.penrithcity.nsw.gov.au/Building-and-Development/Planning-and-Zoning/Planning-Controls/Development-Control-Plans/

* Draft Mamre Road Precinct Development Control Plan applies to the land.

*** Western Sydney Airport**

The land the subject of this certificate is in the vicinity of the proposed Badgery's Creek airport site and is located within the Australian Noise Exposure Forecast (ANEF) shown on the map in Appendix U of the 1985 draft environmental impact statement for the second Sydney Airport.
The land is affected by the **20 - 25 ANEF and the 25 - 30 ANEF**.
In regard to land affected by the ANEF Clause 7.9 of Penrith Local Environmental Plan No.2010 states:

"**7.9 Development of land in the flight paths of the site reserved for the proposed Second Sydney Airport**

(1) The objective of this clause is to ensure that development in the vicinity of the proposed Badgery's Creek airport site:
(a) has regard to the use or potential future use of the site as an airport, and

Schedule 2 Amendment of Penrith Local Environmental Plan 1997 (Penrith City Centre)

(Clause 4 (2) (b))

[1] Clause 9 Zone objectives and development control table
Omit from item (b) (i) **Without development consent** for Zone No 2 (f) in the Development Control Table:

- dwelling-houses

[2] Clause 9, table
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 2 (f):

- buildings or other structures ordinarily associated with dwelling-houses
- demolition of buildings or other structures
- dwelling-houses

[3] Clause 20 Development of land within Zone No 3 (a)
Insert "where the new use does not involve structural or internal alterations or external buildings works" after the words "or take away food shops".

Schedule 3 Amendment of Penrith Local Environmental Plan 1998 (Urban Land)

(Clause 4 (2) (c))

[1] Clause 9 Zone objectives and development control table
Omit wherever occurring from item (b) (i) **Without development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e) in the Development Control Table:

- dwelling houses

[2] Clause 9, table
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zones Nos 2 (a1), 2 (a), 2 (b), 2 (c), 2 (d) and 2 (e):

- buildings or other structures ordinarily associated with dwelling houses
- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- dwelling houses
- internal structural work in bed and breakfast establishments

[3] Clause 9, table
Insert in alphabetical order in item b (ii) **Only with development consent** for Zones Nos 2 (r) and 2 (r1);

- buildings or other structures ordinarily associated with dwelling houses
- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- structural or internal alterations to bed and breakfast establishments

[4] Clause 9, table
Insert in alphabetical order in item (b) (ii) **Only with development consent** for Zone No 3 (f):

- changes of building use (as defined in the Act)
- demolition of buildings or other structures
- external building work associated with an existing land use carried out with consent
- structural or internal alterations to a building or other structure erected with consent or building approval

(c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and

(d) does not involve Crown building work as defined in section 116G of the Act.

8 Subdivisions require development consent

(1) A subdivision of land must not be carried out without development consent.

(2) This clause applies if the subdivision of land:

(a) does not require development consent because of another environmental planning instrument, and

(b) is not prohibited by another environmental planning instrument, and

(c) is not identified in *Penrith Local Environmental Plan No 255 - Exempt and Complying Development* as exempt development, and

(d) does not involve Crown building work as defined in section 116G of the Act.

Schedule 1 Amendment of Penrith Planning Scheme Ordinance

(Clause 4 (2) (a))

[1] Clause 4 Interpretation
Omit the definition of ***Country dwelling.***

[2] Clause 26 Erection or use of buildings or works
Omit "country dwellings;" from Column III for Zone No 1 of the Table to the clause.

[3] Clause 26, Table
Omit "dwelling-houses other than country dwellings and rural dwellings;" from Column V for Zone No. 1.

[4] Clause 26, Table
Omit "Dwelling-houses other than semi-detached and terrace buildings." from Column III for Zone No 2(a).

[5] Clause 26, Table
Omit "Residential buildings." from Column III for Zone No 2 (b).

[6] Clause 26, Table
Omit "Dwelling-houses other than semi-detached or terrace buildings." from Column III for Zone No 2 (c).

[7] Clause 26, Table
Omit ";dwelling-houses attached to and used in conjunction with shops" from Column III for Zone No 3 (c).

[8] Clause 26, Table
Omit "Purposes" from Column IV for Zone No 3(c).

Insert instead "Buildings or other structures ordinarily associated with dwelling houses; changes of building use (as defined in the *Environmental Planning and Assessment Act 1979)*; dwelling-houses attached to and used in conjunction with shops; demolition of buildings or other structures; land uses and premises".

[9] Clause 26, Table
Insert "; structural or internal alterations to, or external building work in association with, commercial premises or refreshment rooms" after "roads" in Column IV for Zone No 3(c).

[10] Clause 38 Development in residential zones
Omit the clause.

[11] Clause 46 Variation of area required for country dwelling
Omit the clause.

(b) *State Environmental Planning Policy No 27 - Prison Sites,*

(c) *Sydney Regional Environmental Plan No 9 - Extractive Industry,*

(d) *Sydney Regional Environmental Plan No. 11 - Penrith Lakes Scheme,*

(e) *Sydney Regional Environmental Plan No 20 - Hawkesbury-Nepean River (No 2-1997),*

(f) *Sydney Regional Environmental Plan No 30 - St Marys,* or

(g) *Penrith Local Environmental Plan No 255 - Exempt and Complying Development,*

to land to which this plan applies.

5 Definitions

(1) In this plan:

a building or structure ordinarily associated with a dwelling house means a garage, carport, pergola, swimming pool, and the like, and includes alterations and additions to an existing dwelling house.

change of building use has the same meaning as in the Act.

Note. At the commencement of this plan, a ***change of building use*** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

dwelling means a room or number of rooms occupied or used, or so constructed or adapted as to be capable of being occupied or used, as a separate domicile.

dwelling house means a dwelling which is the only dwelling erected on an allotment of land.

subdivision of land has the same meaning as in the Act.

the Act means the *Environmental Planning and Assessment Act 1979.*

(2) The list of contents and notes in this plan are not part of this plan.

6 Dwelling houses require development consent

(1) The erection of a dwelling house must not be carried out without development consent.

(2) This clause applies to residentially zoned land within the City of Penrith.

(3) This clause applies if the development:

(a) does not require development consent because of another environmental planning instrument, and

(b) is not prohibited by another environmental planning instrument.

7. Miscellaneous development that requires development consent

(1) The following development must not be carried out without development consent:

(a) erection of a building or structure ordinarily associated with a dwelling house, or

(b) development that results in a change of building use, or

(c) demolition of a building or structure, or

(d) structural, internal or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops.

(2) This clause applies if the development:

(a) does not require development consent because of another environmental planning instrument, and

(b) is not prohibited by another environmental planning instrument, and

Attachment

Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development

1 Name of plan

This plan is *Penrith Local Environmental Plan No 258 - Consent for Dwelling Houses and Other Development.*

2 Aims of plan

This plan aims to:

(a) require development consent for dwelling houses on residentially zoned land within the City of Penrith, and

(b) require development consent for dwelling houses on land within the Non-urban zone under the *Penrith Planning Scheme Ordinance* and on land within the Special Business zone under *Penrith Local Environmental Plan 1997 (Penrith City Centre),* and

(c) require development consent for dwelling houses attached to and used in conjunction with shops on land within the Neighbourhood Business zone under the *Penrith Planning Scheme Ordinance,* and

(d) require development consent for the following:

(i) the erection of a building or structure ordinarily associated with a dwelling house,
(ii) a change of building use,

Note. At the commencement of this plan, **a change of building use** meant a change of use of a building from a use that the *Building Code of Australia* recognises as appropriate to one class of building to a use that the *Building Code of Australia* recognises as appropriate to a different class of building.

(iii) demolition of a building or structure,
(iv) carrying out structural alterations to a building, internal alterations to a building, or external building work in association with business premises, a bed and breakfast establishment, office premises, commercial premises or take away food shops,
(v) the subdivision of land,

to the extent to which such development does not already require development consent because of another environmental planning instrument in order to be carried out.

3 Land to which plan applies

This plan applies to all land within the City of Penrith.

4 Relationship to other environmental planning instruments

(1) In the event of an inconsistency between this plan and any other local environmental planning instrument or deemed environmental planning instrument, this plan shall prevail to the extent of the inconsistency, subject to section 36 (4) of the Act.

(2) This plan amends:

(a) *Penrith Planning Scheme Ordinance* in the manner set out in Schedule 1,

(b) *Penrith Local Environmental Plan 1997 (Penrith City Centre)* in the manner set out in Schedule 2, and

(c) *Penrith Local Environmental Plan 1998 (Urban Land)* in the manner set out in Schedule 3.

(3) This plan does not affect the application of:

(a) *State Environmental Planning Policy No 3 - Castlereagh Liquid Waste Disposal Depot,*

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PLANNING CERTIFICATE UNDER SECTION 10.7

Environmental Planning and Assessment Act, 1979

Please note:

Certain amendments to the Environmental Planning and Assessment Act 1979 No 203 (Act) commenced on 1 March 2018.

The Environmental Planning and Assessment (Amendment) Act 2017 No 60 makes structural changes to the Act and, as a consequence, the Act has been renumbered in a decimal format. For example, Section 149 Planning Certificates have become Section 10.7 Certificates. Some of the information in this certificate may refer to the previous version of the Act.

Council is committed to updating all relevant documents in a timely manner. This will include planning instruments, applications, approvals, orders, certificates, forms and other associated documents in both printed and electronic versions. Council is required to implement these changes and regrets any inconvenience caused to the local business, industry and the community.

(b) does not hinder or have any other adverse impact on the development or operation of an airport on that site.

(2) This clause applies to development that:

(a) is on land that:

(i) is near the proposed Badgery's Creek airport site, and

(ii) is in an ANEF contour of 20 or greater, and

(b) the consent authority considers is likely to be adversely affected by aircraft noise.

(3) Before determining a development application for development to which this clause applies, the consent authority:

(a) must consider whether the development will result in an increase in the number of dwellings or people affected by aircraft noise, and

(b) must consider the location of the development in relation to the criteria set out in Table 2.1 (Building Site Acceptability Based on ANEF Zones) in AS 2021-2000, and

(c) must be satisfied that the development will meet AS 2021-2000 with respect to interior noise levels for the purposes of:

(i) if the development will be in an ANEF contour or 20 or greater - child care centres, educational establishments, entertainment facilities, hospitals, places of public worship, public administration buildings or residential accommodation, and

(ii) if the development will be in an ANEF contour of 25 or greater - commercial premises, hostels or hotel or motel accommodation.

(4) In this clause:

ANEF contour means a noise exposure contour shown as an ANEF contour on the map in Appendix U of the draft environmental impact statement for the Second Sydney Airport, copies of which are deposited in the Office of the Council and of the Commonwealth Department of Infrastructure, Transport, Regional Development and Local Government.

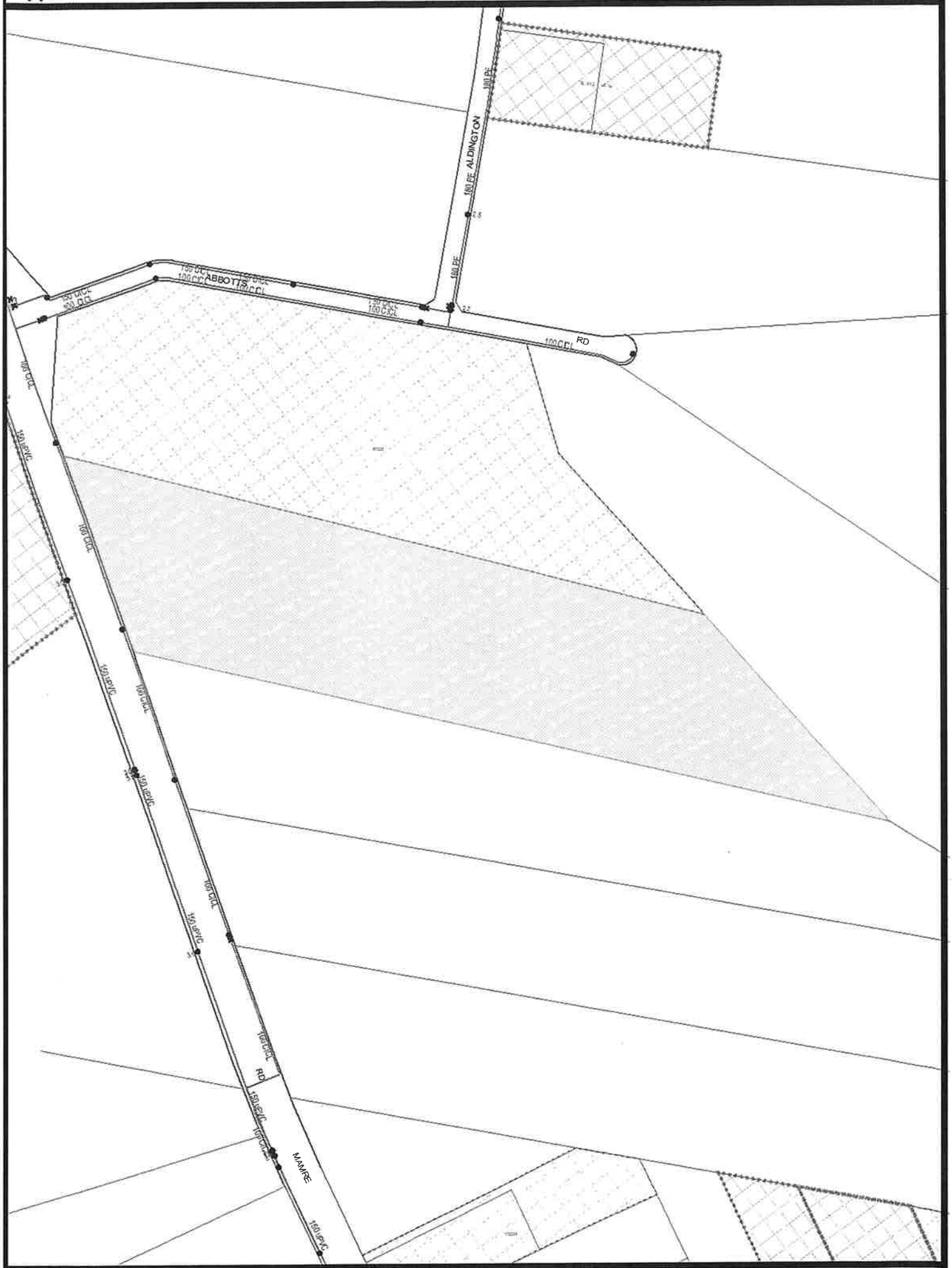
AS 2021-2000 means AS 2021-2000, *Acoustics-Aircraft noise intrusion-Building siting and construction."*

(Note: The Australian Government announced on 15 April 2014 that Badgerys Creek will be the site for a new airport for Western Sydney. On 12 December 2016, the Government announced the approval of the Airport Plan, authorising Stage 1 of the Western Sydney Airport. Stage 1 comprises a single runway and facilities to cater for up to 10 million passengers a year. This approval follows an assessment of the Airport Plan and its Environmental Impact Statement by the Environment Minister. Enquiries regarding the Western Sydney Airport should be made with the Department of Infrastructure and Regional Development. (Website: <http://westernsydneyairport.gov.au>))

Warwick Winn
General Manager

PER

Application No. 9586925 Created on Mar 29, 2017 12:14:45 PM


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Appendix D

Site Photographs



Photo 1: Residential house at 1050-1064 Mamre Road, facing south



Photo 2: Empty horse and tool sheds north of the residential house, facing east

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	1
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 3: Fenced off paddocks at 1050-1064 Mamre Road, facing west



Photo 4: Area of previously stored shipping containers and building materials near TP160, facing west

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	2
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 5: Internal access road at 1050-1064 Mamre Road, facing west



Photo 6: Eastern portion of 1030-1048 Mamre Road, facing north-west

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	3
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT: ESR Australia	DATE	Oct 2022



Photo 7: Two stockpiles of soil (SP1 and SP2) at the western portion of 1030-1048 Mamre Road, facing east



Photo 8: Southern stockpile SP2, facing south-east

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	4
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT: ESR Australia	DATE	Oct 2022



Photo 9: Area east of SP1 and SP2, facing north



Photo 10: Area east of SP2, facing south

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	5
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 11: SP3 and SP4 (foreground) and SP1 (background)



Photo 12: Southern portion of SP2

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	6
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT: ESR Australia	DATE	Oct 2022



Photo 13: SP3



Photo 14: SP4

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	7
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 15: SP5 (foreground) and northern portion of SP2 (background)



Photo 16: SP6

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	8
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT: ESR Australia	DATE	Oct 2022



Photo 17: SP7



Photo 18: SP8

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	9
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 19: SP9 (right) and SP13 (left)



Photo 20: SP10

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	10
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 21: SP11



Photo 22: SP12

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	11
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 23: Eastern portion of SP14



Photo 24: Western portion of SP14

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	12
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022



Photo 25: - SP15



Photo 26: SP16

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs**	PROJECT:	211619.02
	Proposed Industrial Development	PLATE No:	13
	1030-1064 Mamre Rd, Kemps Creek	REV:	0
	CLIENT ESR Australia	DATE	Oct 2022

Appendix E

Data Quality Objectives

Appendix E
Data Quality Objectives
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

E1.0 Data Quality Objectives

This supplementary contamination investigation has been devised broadly in accordance with the seven-step data quality objective (DQO) process which is provided in Appendix B, Schedule B2 of NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013).

Step	Summary
1: State the problem	The objective of the investigation was to further assess the contamination status of the site (in particular within the investigation areas), with respect to the proposed land use, supplementing the findings of previous investigations by DP as summarised in the report. The report is being undertaken as the land is to have a change in land use and will be developed for commercial/industrial purposes. A conceptual site model (CSM) has been prepared (Section 9) for the proposed development. The project team consisted of experienced environmental engineers and scientists working in the roles of Project Principal, Project Reviewer, Project Manager, field staff.
2: Identify the decisions / goal of the study	The site history has identified possible contaminating previous uses which are identified in the CSM (Section 9). The CSM identifies the associated contaminants of potential concern (COPC) and the likely impacted media. The site assessment criteria (SAC) for each of the COPC are detailed in Appendix H. The decision is to establish whether or not the analytical results fall below the SAC. On this basis, an assessment of the site's suitability from a contamination perspective has been derived and a decision made on whether (or not) further assessment and / or remediation will be required.
3: Identify the information inputs	Inputs to the investigation were the reports reported as a result of previous investigations, field observations and the results of analysis of samples to measure the concentrations of COPC identified in the CSM (Section 9) at the site using NATA accredited laboratories and methods, where possible. The SAC for each of the COPC are detailed in Appendix H.
4: Define the study boundaries	The lateral boundaries of the site and investigation area are shown on Drawings 1 and 2, Appendix A. The vertical boundaries are to the extent of contamination impact as determined from the site history assessment and site observations. The assessment is limited to the timeframe over which the field investigation was undertaken. Constraints to the assessment are identified and discussed in the conclusions of the report, Section 14.

Step	Summary
5: Develop the analytical approach (or decision rule)	The decision rule was to compare all analytical results with SAC (Appendix H, based on NEPC (2013)). Where guideline values are absent, other sources of guideline values accepted by NEPC (2013) were adopted where possible. Where a sample result exceeded the adopted criterion, where suitable a further site-specific assessment will be made as to the risk posed by the presence of that contaminant(s). Initial comparisons will be with individual results then, where required, summary statistics (including mean, standard deviation and 95% upper confidence limit (UCL) of the arithmetic mean (95% UCL)) to assess potential risks posed by the site contamination. Quality control results are to be assessed according to their relative percent difference (RPD) values. For field duplicates, triplicates and laboratory results, RPDs should generally be below 30%; for field blanks and rinsates, results should be at or less than the limits of reporting (NEPC, 2013). The field and laboratory quality assurance assessment is included in Appendix J.
6: Specify the performance or acceptance criteria	Baseline condition: Contaminants at the site exceed human health and environmental SAC and pose a potentially unacceptable risk to receptors (null hypothesis). Alternative condition: Contaminants at the site comply with human health and environmental SAC and as such, do not pose a potentially unacceptable risk to receptors (alternative hypothesis). Unless conclusive information from the collected data is sufficient to reject the null hypothesis, it is assumed that the baseline condition is true.
7: Optimise the design for obtaining data	As the purpose of the sampling program is to assess for potential contamination across the investigation area, the sampling program is reliant on professional judgement to identify and sample the potentially affected areas, identified in the report as AEC. Further details regarding the proposed sampling plan are presented in Section 10.

E2.0 References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

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Appendix F

Field Work Methodology

Appendix F
Field Work Methodology
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

F1.0 Guidelines

The following key guideline consulted for the field work methodology was NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013).

F2.0 Soil Sampling

Soil sampling was carried out in general accordance with DP's standard operating procedures. The general sampling and sample management procedures comprised:

- Collection of soil samples directly from the wall of the pit (where safe to do so), excavator bucket or the hand auger at the nominated sample depth;
- Transferring of samples into laboratory-prepared glass jars with Teflon lined lids by hand, capping immediately and minimising headspace within the sample jar;
- Collection of ~500 ml samples for FA and AF analysis (where undertaken);
- Wearing of new disposable nitrile glove for each sample point thereby minimising potential for cross-contamination;
- Collection of 10% replicate samples for QC purposes;
- Labelling of sample containers with individual and unique identification details, including project number, sample location and sample depth (where applicable);
- Placement of samples into cooled, insulated and sealed container for transport to the laboratory; and
- Use of chain of custody documentation.

F3.0 References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

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Appendix G

Logs and Explanatory Notes

Sampling Methods

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Sampling

Sampling is carried out during drilling or test pitting to allow engineering examination (and laboratory testing where required) of the soil or rock.

Disturbed samples taken during drilling provide information on colour, type, inclusions and, depending upon the degree of disturbance, some information on strength and structure.

Undisturbed samples are taken by pushing a thin-walled sample tube into the soil and withdrawing it to obtain a sample of the soil in a relatively undisturbed state. Such samples yield information on structure and strength, and are necessary for laboratory determination of shear strength and compressibility. Undisturbed sampling is generally effective only in cohesive soils.

Test Pits

Test pits are usually excavated with a backhoe or an excavator, allowing close examination of the in-situ soil if it is safe to enter into the pit. The depth of excavation is limited to about 3 m for a backhoe and up to 6 m for a large excavator. A potential disadvantage of this investigation method is the larger area of disturbance to the site.

Large Diameter Augers

Boreholes can be drilled using a rotating plate or short spiral auger, generally 300 mm or larger in diameter commonly mounted on a standard piling rig. The cuttings are returned to the surface at intervals (generally not more than 0.5 m) and are disturbed but usually unchanged in moisture content. Identification of soil strata is generally much more reliable than with continuous spiral flight augers, and is usually supplemented by occasional undisturbed tube samples.

Continuous Spiral Flight Augers

The borehole is advanced using 90-115 mm diameter continuous spiral flight augers which are withdrawn at intervals to allow sampling or in-situ testing. This is a relatively economical means of drilling in clays and sands above the water table. Samples are returned to the surface, or may be collected after withdrawal of the auger flights, but they are disturbed and may be mixed with soils from the sides of the hole. Information from the drilling (as distinct from specific sampling by SPTs or undisturbed samples) is of relatively low reliability, due to the remoulding, possible mixing or softening of samples by groundwater.

Non-core Rotary Drilling

The borehole is advanced using a rotary bit, with water or drilling mud being pumped down the drill rods and returned up the annulus, carrying the drill cuttings. Only major changes in stratification can be determined from the cuttings, together with some information from the rate of penetration. Where drilling mud is used this can mask the cuttings and reliable identification is only possible from separate sampling such as SPTs.

Continuous Core Drilling

A continuous core sample can be obtained using a diamond tipped core barrel, usually with a 50 mm internal diameter. Provided full core recovery is achieved (which is not always possible in weak rocks and granular soils), this technique provides a very reliable method of investigation.

Standard Penetration Tests

Standard penetration tests (SPT) are used as a means of estimating the density or strength of soils and also of obtaining a relatively undisturbed sample. The test procedure is described in Australian Standard 1289, Methods of Testing Soils for Engineering Purposes - Test 6.3.1.

The test is carried out in a borehole by driving a 50 mm diameter split sample tube under the impact of a 63 kg hammer with a free fall of 760 mm. It is normal for the tube to be driven in three successive 150 mm increments and the 'N' value is taken as the number of blows for the last 300 mm. In dense sands, very hard clays or weak rock, the full 450 mm penetration may not be practicable and the test is discontinued.

The test results are reported in the following form.

- In the case where full penetration is obtained with successive blow counts for each 150 mm of, say, 4, 6 and 7 as:

  4,6,7
  N=13

- In the case where the test is discontinued before the full penetration depth, say after 15 blows for the first 150 mm and 30 blows for the next 40 mm as:

  15, 30/40 mm

The results of the SPT tests can be related empirically to the engineering properties of the soils.

Dynamic Cone Penetrometer Tests / Perth Sand Penetrometer Tests

Dynamic penetrometer tests (DCP or PSP) are carried out by driving a steel rod into the ground using a standard weight of hammer falling a specified distance. As the rod penetrates the soil the number of blows required to penetrate each successive 150 mm depth are recorded. Normally there is a depth limitation of 1.2 m, but this may be extended in certain conditions by the use of extension rods. Two types of penetrometer are commonly used.

- Perth sand penetrometer - a 16 mm diameter flat ended rod is driven using a 9 kg hammer dropping 600 mm (AS 1289, Test 6.3.3). This test was developed for testing the density of sands and is mainly used in granular soils and filling.
- Cone penetrometer - a 16 mm diameter rod with a 20 mm diameter cone end is driven using a 9 kg hammer dropping 510 mm (AS 1289, Test 6.3.2). This test was developed initially for pavement subgrade investigations, and correlations of the test results with California Bearing Ratio have been published by various road authorities.

Description and Classification Methods

The methods of description and classification of soils and rocks used in this report are generally based on Australian Standard AS1726:2017, Geotechnical Site Investigations. In general, the descriptions include strength or density, colour, structure, soil or rock type and inclusions.

Soil Types

Soil types are described according to the predominant particle size, qualified by the grading of other particles present:

Type	Particle size (mm)
Boulder	>200
Cobble	63 - 200
Gravel	2.36 - 63
Sand	0.075 - 2.36
Silt	0.002 - 0.075
Clay	<0.002

The sand and gravel sizes can be further subdivided as follows:

Type	Particle size (mm)
Coarse gravel	19 - 63
Medium gravel	6.7 - 19
Fine gravel	2.36 – 6.7
Coarse sand	0.6 - 2.36
Medium sand	0.21 - 0.6
Fine sand	0.075 - 0.21

Definitions of grading terms used are:

- Well graded - a good representation of all particle sizes
- Poorly graded - an excess or deficiency of particular sizes within the specified range
- Uniformly graded - an excess of a particular particle size
- Gap graded - a deficiency of a particular particle size with the range

The proportions of secondary constituents of soils are described as follows:

In fine grained soils (>35% fines)

Term	Proportion of sand or gravel	Example
And	Specify	Clay (60%) and Sand (40%)
Adjective	>30%	Sandy Clay
With	15 – 30%	Clay with sand
Trace	0 - 15%	Clay with trace sand

In coarse grained soils (>65% coarse)
- with clays or silts

Term	Proportion of fines	Example
And	Specify	Sand (70%) and Clay (30%)
Adjective	>12%	Clayey Sand
With	5 - 12%	Sand with clay
Trace	0 - 5%	Sand with trace clay

In coarse grained soils (>65% coarse)
- with coarser fraction

Term	Proportion of coarser fraction	Example
And	Specify	Sand (60%) and Gravel (40%)
Adjective	>30%	Gravelly Sand
With	15 - 30%	Sand with gravel
Trace	0 - 15%	Sand with trace gravel

The presence of cobbles and boulders shall be specifically noted by beginning the description with 'Mix of Soil and Cobbles/Boulders' with the word order indicating the dominant first and the proportion of cobbles and boulders described together.

Soil Descriptions

Cohesive Soils

Cohesive soils, such as clays, are classified on the basis of undrained shear strength. The strength may be measured by laboratory testing, or estimated by field tests or engineering examination. The strength terms are defined as follows:

Description	Abbreviation	Undrained shear strength (kPa)
Very soft	VS	<12
Soft	S	12 - 25
Firm	F	25 - 50
Stiff	St	50 - 100
Very stiff	VSt	100 - 200
Hard	H	>200
Friable	Fr	-

Cohesionless Soils

Cohesionless soils, such as clean sands, are classified on the basis of relative density, generally from the results of standard penetration tests (SPT), cone penetration tests (CPT) or dynamic penetrometers (PSP). The relative density terms are given below:

Relative Density	Abbreviation	Density Index (%)
Very loose	VL	<15
Loose	L	15-35
Medium dense	MD	35-65
Dense	D	65-85
Very dense	VD	>85

Soil Origin

It is often difficult to accurately determine the origin of a soil. Soils can generally be classified as:

- Residual soil - derived from in-situ weathering of the underlying rock;
- Extremely weathered material – formed from in-situ weathering of geological formations. Has soil strength but retains the structure or fabric of the parent rock;
- Alluvial soil – deposited by streams and rivers;
- Estuarine soil – deposited in coastal estuaries;
- Marine soil – deposited in a marine environment;
- Lacustrine soil – deposited in freshwater lakes;
- Aeolian soil – carried and deposited by wind;
- Colluvial soil – soil and rock debris transported down slopes by gravity;
- Topsoil – mantle of surface soil, often with high levels of organic material.
- Fill – any material which has been moved by man.

Moisture Condition – Coarse Grained Soils

For coarse grained soils the moisture condition should be described by appearance and feel using the following terms:

- Dry (D) Non-cohesive and free-running.
- Moist (M) Soil feels cool, darkened in colour.
  Soil tends to stick together.
  Sand forms weak ball but breaks easily.
- Wet (W) Soil feels cool, darkened in colour.
  Soil tends to stick together, free water forms when handling.

Moisture Condition – Fine Grained Soils

For fine grained soils the assessment of moisture content is relative to their plastic limit or liquid limit, as follows:

- ‘Moist, dry of plastic limit’ or ‘w <PL’ (i.e. hard and friable or powdery).
- ‘Moist, near plastic limit’ or ‘w ≈ PL (i.e. soil can be moulded at moisture content approximately equal to the plastic limit).
- ‘Moist, wet of plastic limit’ or ‘w >PL’ (i.e. soils usually weakened and free water forms on the hands when handling).
- ‘Wet’ or ‘w ≈LL’ (i.e. near the liquid limit).
- ‘Wet’ or ‘w >LL’ (i.e. wet of the liquid limit).

Rock Strength

Rock strength is defined by the Unconfined Compressive Strength and it refers to the strength of the rock substance and not the strength of the overall rock mass, which may be considerably weaker due to defects.

The Point Load Strength Index $Is_{(50)}$ is commonly used to provide an estimate of the rock strength and site specific correlations should be developed to allow UCS values to be determined. The point load strength test procedure is described by Australian Standard AS4133.4.1-2007. The terms used to describe rock strength are as follows:

Strength Term	Abbreviation	Unconfined Compressive Strength MPa	Point Load Index * $Is_{(50)}$ MPa
Very low	VL	0.6 - 2	0.03 - 0.1
Low	L	2 - 6	0.1 - 0.3
Medium	M	6 - 20	0.3 - 1.0
High	H	20 - 60	1 - 3
Very high	VH	60 - 200	3 - 10
Extremely high	EH	>200	>10

* Assumes a ratio of 20:1 for UCS to $Is_{(50)}$. It should be noted that the UCS to $Is_{(50)}$ ratio varies significantly for different rock types and specific ratios should be determined for each site.

Degree of Weathering

The degree of weathering of rock is classified as follows:

Term	Abbreviation	Description
Residual Soil	RS	Material is weathered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are no longer visible, but the soil has not been significantly transported.
Extremely weathered	XW	Material is weathered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are still visible
Highly weathered	HW	The whole of the rock material is discoloured, usually by iron staining or bleaching to the extent that the colour of the original rock is not recognisable. Rock strength is significantly changed by weathering. Some primary minerals have weathered to clay minerals. Porosity may be increased by leaching, or may be decreased due to deposition of weathering products in pores.
Moderately weathered	MW	The whole of the rock material is discoloured , usually by iron staining or bleaching to the extent that the colour of the original rock is not recognisable, but shows little or no change of strength from fresh rock.
Slightly weathered	SW	Rock is partially discoloured with staining or bleaching along joints but shows little or no change of strength from fresh rock.
Fresh	FR	No signs of decomposition or staining.
Note: If HW and MW cannot be differentiated use DW (see below)		
Distinctly weathered	DW	Rock strength usually changed by weathering. The rock may be highly discoloured, usually by iron staining. Porosity may be increased by leaching or may be decreased due to deposition of weathered products in pores.

Rock Descriptions

Degree of Fracturing

The following classification applies to the spacing of natural fractures in diamond drill cores. It includes bedding plane partings, joints and other defects, but excludes drilling breaks.

Term	Description
Fragmented	Fragments of <20 mm
Highly Fractured	Core lengths of 20-40 mm with occasional fragments
Fractured	Core lengths of 30-100 mm with occasional shorter and longer sections
Slightly Fractured	Core lengths of 300 mm or longer with occasional sections of 100-300 mm
Unbroken	Core contains very few fractures

Rock Quality Designation

The quality of the cored rock can be measured using the Rock Quality Designation (RQD) index, defined as:

$$\text{RQD \%} = \frac{\text{cumulative length of 'sound' core sections} \geq \text{100 mm long}}{\text{total drilled length of section being assessed}}$$

where 'sound' rock is assessed to be rock of low strength or stronger. The RQD applies only to natural fractures. If the core is broken by drilling or handling (i.e. drilling breaks) then the broken pieces are fitted back together and are not included in the calculation of RQD.

Stratification Spacing

For sedimentary rocks the following terms may be used to describe the spacing of bedding partings:

Term	Separation of Stratification Planes
Thinly laminated	< 6 mm
Laminated	6 mm to 20 mm
Very thinly bedded	20 mm to 60 mm
Thinly bedded	60 mm to 0.2 m
Medium bedded	0.2 m to 0.6 m
Thickly bedded	0.6 m to 2 m
Very thickly bedded	> 2 m

Symbols & Abbreviations

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Introduction

These notes summarise abbreviations commonly used on borehole logs and test pit reports.

Drilling or Excavation Methods

C	Core drilling
R	Rotary drilling
SFA	Spiral flight augers
NMLC	Diamond core - 52 mm dia
NQ	Diamond core - 47 mm dia
HQ	Diamond core - 63 mm dia
PQ	Diamond core - 81 mm dia

Water

▷	Water seep
▽	Water level

Sampling and Testing

A	Auger sample
B	Bulk sample
D	Disturbed sample
E	Environmental sample
U_{50}	Undisturbed tube sample (50mm)
W	Water sample
pp	Pocket penetrometer (kPa)
PID	Photo ionisation detector
PL	Point load strength Is(50) MPa
S	Standard Penetration Test
V	Shear vane (kPa)

Description of Defects in Rock

The abbreviated descriptions of the defects should be in the following order: Depth, Type, Orientation, Coating, Shape, Roughness and Other. Drilling and handling breaks are not usually included on the logs.

Defect Type

B	Bedding plane
Cs	Clay seam
Cv	Cleavage
Cz	Crushed zone
Ds	Decomposed seam
F	Fault
J	Joint
Lam	Lamination
Pt	Parting
Sz	Sheared Zone
V	Vein

Orientation

The inclination of defects is always measured from the perpendicular to the core axis.

h	horizontal
v	vertical
sh	sub-horizontal
sv	sub-vertical

Coating or Infilling Term

cln	clean
co	coating
he	healed
inf	infilled
stn	stained
ti	tight
vn	veneer

Coating Descriptor

ca	calcite
cbs	carbonaceous
cly	clay
fe	iron oxide
mn	manganese
slt	silty

Shape

cu	curved
ir	irregular
pl	planar
st	stepped
un	undulating

Roughness

po	polished
ro	rough
sl	slickensided
sm	smooth
vr	very rough

Other

fg	fragmented
bnd	band
qtz	quartz

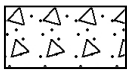
Symbols & Abbreviations

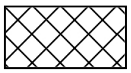
Graphic Symbols for Soil and Rock

General

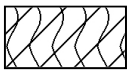

Asphalt

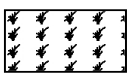

Road base

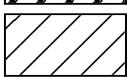

Concrete


Filling

Soils


Topsoil

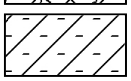

Peat


Clay


Silty clay

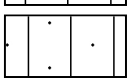

Sandy clay

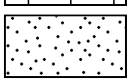

Gravelly clay

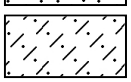

Shaly clay

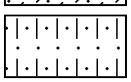

Silt


Clayey silt


Sandy silt

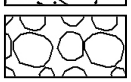

Sand


Clayey sand


Silty sand


Gravel

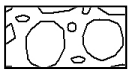

Sandy gravel


Cobbles, boulders

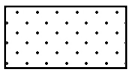

Talus

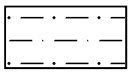
Sedimentary Rocks

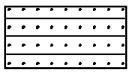

Boulder conglomerate

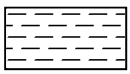

Conglomerate


Conglomeratic sandstone

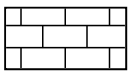

Sandstone


Siltstone

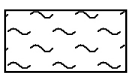

Laminite

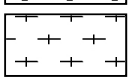

Mudstone, claystone, shale

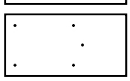

Coal


Limestone

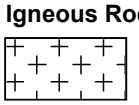
Metamorphic Rocks

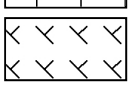

Slate, phyllite, schist

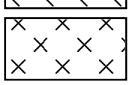

Gneiss

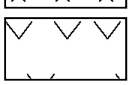

Quartzite

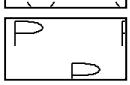
Igneous Rocks


Granite


Dolerite, basalt, andesite


Dacite, epidote


Tuff, breccia


Porphyry

Appendix G1

Current Investigation Logs

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 44.4 AHD
EASTING: 295812
NORTHING: 6251300

PIT No: 101
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
44	0.2	FILL/ Silty CLAY: medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
		Silty CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, w<PL, apparently firm, residual		E	0.2				
					0.3				
				E	0.6				
	0.7	Pit discontinued at 0.7m Target depth reached			0.7				
	1								1
43									
	2								2
42									
	3								3
41									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 44.4 AHD
EASTING: 295819
NORTHING: 6251272

PIT No: 102
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
44	0.2	FILL/ Silty CLAY: low to medium plasticity, dark brown, with rootlets, w~PL		E	0.1				
		Silty CLAY: medium to high plasticity, red-brown, with silt, trace fine to medium gravel, w~PL, apparently stiff, residual		E	0.2				
					0.3				
				E	0.6				
					0.7				
	0.8	Pit discontinued at 0.8m Target depth reached							
	1								
43									
	2								
42									
	3								
41									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 44.4 AHD
EASTING: 295835
NORTHING: 6251232

PIT No: 103
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
44		CLAY: medium to high plasticity, red-brown, trace rootlets, w<PL, apparently firm to stiff, residual		E	0.0				5 10 15 20
					0.1				
				E	0.5				
					0.6				
	0.9	Pit discontinued at 0.9m Target depth reached							
	1								1
43									
	2								2
42									
	3								3
41									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.1 AHD
EASTING: 295846
NORTHING: 6251217

PIT No: 104
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
45		FILL / SIlty CLAY: medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
	0.4	CLAY: medium to high plasticity, red-brown, trace silt, w<PL, apparently firm to stiff, residual		E	0.4 0.5				
	1 1.0			E	0.9 1.0				1
44		Pit discontinued at 1.0m Target depth reached							
	2								2
43									
	3								3
42									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 44.9 AHD
EASTING: 295846
NORTHING: 6251178

PIT No: 105
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm) 5 10 15 20
44	0.1	FILL / Silty CLAY: low to medium plasticity, dark brown, with rootlets, w~PL		E	0.0				
				E	0.1				
		CLAY: medium to high plasticity, red-brown, trace fine gravel, w~PL, apparently firm to stiff, residual (possibly alluvial)			0.2				
				E	0.7				
	0.9				0.8				
	1	Pit discontinued at 0.9m Target depth reached							1
43	2								2
42	3								3
41									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.1 AHD
EASTING: 295850
NORTHING: 6251156

PIT No: 106
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
45	0.0	FILL / Silty CLAY: medium plasticity, dark brown, with rootlets, w~PL		E	0.0				
	0.2	CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, with silt, w<PL, apparently firm to stiff, residual (possibly alluvial)		E	0.2				
					0.3				
				E	0.7				
	0.8	Pit discontinued at 0.8m Target depth reached			0.8				
44	1								1
43	2								2
42	3								3

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.2 AHD
EASTING: 295885
NORTHING: 6251156

PIT No: 107
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47		FILL / Silty CLAY: low plasticity, dark brown, trace rootlets and fine to medium gravel, w~PL (possibly former topsoil)		E	0.0				
					0.2				
				E	0.5				
					0.7				
	1	1.0							1
46		CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, w<PL, apparently firm to stiff, residual		E	1.0				
					1.2				
				E	1.5				
					1.7				
		1.8							
		Pit discontinued at 1.8m Target depth reached							
	2								2
45									
	3								3
44									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.8 AHD
EASTING: 295878
NORTHING: 6251176

PIT No: 108
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm) 5 10 15 20
46	0.0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, w~PL (possibly former topsoil)		E	0.0				
	0.2				0.2				
	0.4	CLAY: medium to high plasticity, red-brown, trace fine to medium gravel and silt, w~PL, apparently firm, residual		E	0.4				
	0.6				0.6				
	0.9			E	0.9				
	1.0				1.0				
	1.2	Pit discontinued at 1.2m Target depth reached							

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.4 AHD
EASTING: 295871
NORTHING: 6251198

PIT No: 109
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0	FILL / Silty CLAY: low plasticity, dark brown, with rootlets, w>PL (possibly former topsoil)		E	0.0				
					0.2				
				E	0.5				
	0.7	CLAY: medium to high plasticity, red-brown, trace rootlets and fine to medium gravel, w~PL, apparently stiff, residual		E	0.7				
	1				0.9				1
45				E	1.3				
	1.5	Pit discontinued at 1.5m Target depth reached			1.5				
	2								2
44									
	3								3
43									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.7 AHD
EASTING: 295846
NORTHING: 6251252

PIT No: 110
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, w~PL (possibly former topsoil)		E	0.0				
					0.2				
				E	0.5				
					0.7				
	1			E	1.0				1
					1.2				
	1.3				1.3				
45		CLAY: medium to high plasticity, red-brown, with fine to medium gravel, w<PL, apparently stiff, residual		E	1.5				
					1.8				
				E	1.9				
	2	2.0							2
		Pit discontinued at 2.0m Target depth reached							
44	3								3
43									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.8 AHD
EASTING: 295861
NORTHING: 6251296

PIT No: 111
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0	FILL / Sandy CLAY: low to medium plasticity, dark brown, with fine to medium sand, trace rootlets and timber, w~PL		E	0.0				
					0.2				
				E	0.5				
					0.7				
	0.9	CLAY: medium to high plasticity, red-brown, with silt, w<PL, apparently stiff, residual		E	0.9				
	1				1.1				1
				E	1.4				
					1.6				
45	1.8	Pit discontinued at 1.8m Target depth reached							
	2								2
44	3								3
43									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.1 AHD
EASTING: 295884
NORTHING: 6251295

PIT No: 112
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.25	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets and fine to medium gravel, w>PL		E	0.0 0.2				
		CLAY: medium to high plasticity, red-brown, with silt, trace fine to medium gravel, w~PL, apparently firm to stiff, residual		E	0.25 0.35				
45	1			E	0.7 0.9				1
	1.2	Pit discontinued at 1.2m Target depth reached							
44	2								2
43	3								3

5 10 15 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.0 AHD
EASTING: 295879
NORTHING: 6251272

PIT No: 113
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets and fine to medium gravel, w>PL		E	0.0				
					0.2				
	0.3	Silty CLAY: medium to high plasticity, red-brown, trace rootlets and fine to medium gravel, w~PL, apparently firm to stiff, residual		E	0.3				
					0.5				
				E	0.8				
45	1				1.0				1
	1.15	Pit discontinued at 1.15m Target depth reached							
44	2								2
43	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.3 AHD
EASTING: 295881
NORTHING: 6251250

PIT No: 114
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0	FILL / Silty CLAY: low to medium plasticity, dark brown, with rootlets, trace fine to medium gravel, w~PL		E	0.0				
					0.2				
	0.3	Silty CLAY: medium to high plasticity, red-brown, trace rootlets and fine to medium gravel, w~PL, apparently firm to stiff, residual		E	0.3				
					0.5				
				E*	0.8				
	1				1.0				1
	1.1	Pit discontinued at 1.1m Target depth reached							
45									
	2								2
44									
	3								3
43									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD1/20220718 collected at 0.8-1.0m

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.8 AHD
EASTING: 295885
NORTHING: 6251221

PIT No: 115
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm) 5 10 15 20
		CLAY: medium to high plasticity, red-brown mottled grey, trace rootlets and fine to medium gravel, w~PL, apparently stiff, residual		E	0.0				
					0.2				
				E	0.5				
	0.7				0.7				
45		Pit discontinued at 0.7m Target depth reached							
	1								1
44									
	2								2
43									
	3								3
42									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.5 AHD
EASTING: 295893
NORTHING: 6251203

PIT No: 116
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
									5 10 15 20
		FILL / Silty CLAY: low plasticity, dark brown, with fine to medium gravel, trace rootlets, w~PL		E	0.0				
					0.2				
	0.4	CLAY: medium to high plasticity, red-brown, trace silt and rootlets, w<PL, apparently firm to stiff, residual		E	0.4				
46					0.6				
				E	0.9				
	1.0	Pit discontinued at 1.0m Target depth reached			1.0				
45									
44									
43									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.7 AHD
EASTING: 295902
NORTHING: 6251177

PIT No: 117
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm) 5 10 15 20
46	0.0	FILL /Silty CLAY: low to medium to high plasticity, dark brown, with fine to medium gravel, trace rootlets, w~PL		E	0.0				
					0.2				
	0.45	CLAY: medium to high plasticity, red-brown, with fine to medium gravel, trace silt, w~PL, apparently firm to stiff, residual		E	0.45				
					0.6				
	1			E	0.9				1
					1.0				
	1.2	Pit discontinued at 1.2m Target depth reached							
45	2								2
44	3								3
43									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.0 AHD
EASTING: 295919
NORTHING: 6251138

PIT No: 118
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0.0	FILL / SIlty CLAY: low plasticity, dark brown, with rootlets, trace fine to medium gravel, w~PL (possibly former topsoil)		E	0.0				
					0.2				
				E	0.5				
					0.7				
47	1			E	1.0				1
					1.2				
	1.5	CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, w<PL, apparently firm to stiff, residual		E	1.5				
					1.7				
46	2			E	2.0				2
	2.2	Pit discontinued at 2.2m Target depth reached			2.2				
45	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.4 AHD
EASTING: 295946
NORTHING: 6251150

PIT No: 119
PROJECT No: 211619.02
DATE: 18/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0.0	FILL / Silty CLAY: low to medium to high plasticity, dark brown, trace fine to medium gravel, rootlets, terracotta, timber, tiles and concrete fragments, w~PL		E*	0.0				
	0.2	CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, with silt, trace rootlets, w<PL, apparently firm to stiff, residual		E	0.2				
					0.4				
				E	0.7				
					0.9				
46	1								1
	1.6	Pit discontinued at 1.6m Target depth reached							
45	2								2
44	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD2/20220718 collected at 0-0.2m

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.1 AHD
EASTING: 295958
NORTHING: 6251173

PIT No: 120
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48		FILL / SIlty CLAY: low plasticity, dark brown, trace rootlets, w~PL			0.1				
				E	0.2				
	0.3	CLAY: high plasticity, red-brown, with silt, w~PL, apparently stiff, residual			0.3				
				E*	0.4				
					0.8				
				E	0.9				
	1 1.0	Pit discontinued at 1.0m Target depth reached							1
47									
	2								2
46									
	3								3
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD1/20220719 collected at 0.3-0.4m

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.3 AHD
EASTING: 295957
NORTHING: 6251189

PIT No: 121
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0.3	FILL / SIlty CLAY: medium to high plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		CLAY: high plasticity, red-brown, trace silt and rootlets, w>PL, apparently stiff, residual		E	0.3 0.4				
	1			E	0.8 0.9				1
47	1.1	Pit discontinued at 1.1m Target depth reached							
	2								2
46									
	3								3
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.5 AHD
EASTING: 295974
NORTHING: 6251185

PIT No: 122
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0.1	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets and timber, w~PL		E	0.1				
	0.2				0.2				
	0.3	CLAY: high plasticity, red-brown, trace rootlets, w>PL, apparently stiff, residual		E*	0.3				
	0.4				0.4				
	0.8			E	0.8				
	0.9				0.9				
47	1.2	Pit discontinued at 1.2m Target depth reached							
46									
45									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD2/20220719 collected at 0.3-0.4m

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.6 AHD
EASTING: 295978
NORTHING: 6251169

PIT No: 123
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0.3	FILL / Silty CLAY: low to medium to high plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		CLAY: high plasticity, red-brown, trace silt and rootlets, w>PL, apparently firm to stiff, residual		E	0.3 0.4				
	1			E	0.8 0.9				1
47	1.2	Pit discontinued at 1.2m Target depth reached							
	2								2
46									
	3								3
45									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 49.1 AHD
EASTING: 295964
NORTHING: 6251131

PIT No: 124
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
49	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, w~PL (possibly former topsoil)		E	0.1				
					0.2				
				E	0.4				
					0.5				
				E	0.9				
48	1				1.0				1
				E	1.4				
					1.5				
	1.8	Silty CLAY: medium to high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E*	1.8				
					1.9				
47	2			E	2.3				2
					2.4				
	3.0	Pit discontinued at 3.0m Target depth reached							3
46									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD3/20220719 collected at 1.8-1.9m. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 49.0 AHD
EASTING: 295964
NORTHING: 6251153

PIT No: 125
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
49		FILL / Silty CLAY: low plasticity, dark brown, with fine to medium gravel and brick fragments, trace rootlets, glass, plastic and ACM fragments, w~PL		E	0.1				
					0.2				
				E	0.4				
					0.5				
				E	0.9		Material samples ACM1 and ACM4		
48	1 1.0	CLAY: medium to high plasticity, red-brown, with silt, w~PL, apparently firm to stiff, residual		E	1.0				1
				E	1.1				
				E	1.4				
					1.5				
47	2 2.0	Pit discontinued at 2.0m Target depth reached							2
46	3								3

5 10 15 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.6 AHD
EASTING: 295961
NORTHING: 6251152

PIT No: 125A
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48		FILL / Silty CLAY: low plasticity, dark brown, trace fine to medium gravel, rootlets, brick, hose, glass, plastic and ACM fragments, w~PL		E	0.5				
				E	0.6				
					0.8				
					0.9				
	1 1.0								1
47		CLAY: medium to high plasticity, red-brown, with silt, w~PL, apparently firm to stiff, residual							
	2 2.0	Pit discontinued at 2.0m Target depth reached							2
46									
	3								3
45									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.5 AHD
EASTING: 295944
NORTHING: 6251159

PIT No: 126
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48		FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, fine to medium gravel, trace rootlets, brick, tile, bitumen, ash, plastic and ACM fragments, w~PL		E	0.1				
					0.2				
				E	0.4				
					0.5				
				E	0.9		Material sample ACM5		
47	1 1.0	Silty CLAY: medium to high plasticity, brown mottled red grading to red-brown, trace rootlets, w~PL, apparently firm to stiff (possibly alluvial)		E*	1.0				1
					1.1				
				E	1.4				
					1.5				
	1.8	Pit discontinued at 1.8m Target depth reached							
46	2								2
45	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD4/20220719 collected at 1.0-1.1m. ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.3 AHD
EASTING: 295944
NORTHING: 6251155

PIT No: 126A
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48		FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, fine to medium gravel, bitumern, ash, brick, tile and plastic fragemnts, w~PL		E	0.5 0.6				
				E	0.8 0.9				
	1								1
47	1.0	Silty CLAY: medium to high plasticity, red-brown, w~PL, apparently firm to stiff, residual (possibly alluvial)							
	1.8	Pit discontinued at 1.8m Target depth reached							
	2								2
46									
	3								3
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.3 AHD
EASTING: 295933
NORTHING: 6251164

PIT No: 127
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48		FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, plastic, rubber, bitumen, fabric, vinyl and wire fragments, w~PL		E	0.1				
					0.2				
				E	0.4		Material sample ACM3		
					0.5				
				E	0.9				
	1 1.0			E	1.0				1
47		CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, with silt, w~PL, apparently firm to stiff, residual		E	1.1				
				E	1.4				
	1.5	Pit discontinued at 1.5m Target depth reached			1.5				
	2								2
46									
	3								3
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.2 AHD
EASTING: 295929
NORTHING: 6251161

PIT No: 128
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, fine to medium sand, fine to medium igneous gravel, plastic, glass, timber, wire, tile and ACM fragments, w~PL		E	0.1				
					0.2				
				E	0.4		Material sample ACM2		
					0.5				
	1			E	1.0				1
	1.1	Silty CLAY: medium to high plasticity, red-brown, with silt, trace rootlets and fine to medium gravel, w~PL, apparently firm to stiff, residual		E	1.1				
47					1.2				
					1.6				
				E	1.7				
	1.9	Pit discontinued at 1.9m Target depth reached							
	2								2
46									
	3								3
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.2 AHD
EASTING: 295891
NORTHING: 6251162

PIT No: 129
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, fine to medium gravel, timber, styrofoam and plastic fragments, w~PL		E	0.1				
					0.2				
				E	0.4				
					0.5				
				E	0.9				
46	1				1.0				1
				E	1.4				
	1.5	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL apparently stiff, residual		E*	1.5				
					1.6				
				E	1.9				
	2 2.0	Pit discontinued at 2.0m Target depth reached			2.0				2
45									
	3								3
44									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD5/20220719 collected at 1.5-1.6m. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.9 AHD
EASTING: 295879
NORTHING: 6251189

PIT No: 130
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	1	FILL /Silty CLAY: low to medium plasticity, dark brown, trace rootlets, medium to fine gravel, styrofoam, plastic, glass, charcoal and clinker fragments, w~PL							
	1.2								
45	2	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual							
	2.1	Pit discontinued at 2.1m Target depth reached							
44	3								
43									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.1 AHD
EASTING: 295852
NORTHING: 6251280

PIT No: 131
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0	FILL / Silty SAND: fine to coarse, dark brown, with clay, trace fine to medium shale gravel, rootlets, shells, clinker, concrete and ACM fragments, moist		E	0.1				
					0.2				
				E	0.4				
					0.5				
				E	0.9				
47	1				1.0				1
				E	1.4		Material sample ACM6		
					1.5				
				E	1.9				
46	2				2.0				2
				E	2.4				
	2.5	FILL / Silty CLAY: low to medium plasticity, dark grey, with fine to medium gravel, w~PL		E	2.5				
					2.6				
	3								3
	3.0	CLAY: medium to high plasticity, red-brown, with silt, trace fine to medium gravel, w~PL, apparently firm to stiff, residual		E*	3.0				
45					3.1				
				E	3.4				
	3.5	Pit discontinued at 3.5m Target depth reached			3.5				

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD6/20220719 collected at 3.0-3.1m. ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.9 AHD
EASTING: 295850
NORTHING: 6251281

PIT No: 131A
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	1	FILL / Silty SAND: fine to medium, dark brown, with silt, trace fine to medium shale gravel, rootlets, shells, clinker and concrete fragments, moist		E	0.4 0.5				1
46	2			E	1.4 1.5				2
	2.5	FILL / Silty CLAY: low to medium plasticity, dark grey, with fine to medium gravel, w~PL							
45	3								3
	3.0	CLAY: medium to high plasticity, red-brown, with silt, trace fine to medium gravel, w~PL, apparently firm to stiff, residual							
	3.5	Pit discontinued at 3.5m Target depth reached							
44									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.2 AHD
EASTING: 295853
NORTHING: 6251299

PIT No: 132
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0	FILL / Silty CLAY: low plasticity, dark brown and red-brown, fine to coarse sand, trace fine to medium gravel, rootlets, shells, clinker, ash, timber and ACM fragments, w~PL		E	0.1				
					0.2				
				E	0.4				
					0.5				
				E	0.9		Material sample ACM7		
46	1				1.0				1
				E	1.4				
					1.5				
				E	1.7				
	1.8	CLAY: medium to high plasticity, red-brown, with silt, trace rootlets, w~PL, apparently stiff, residual			1.8				
				E	1.9				
45	2				2.0				2
				E	2.4				
	2.5	Pit discontinued at 2.5m Target depth reached			2.5				
44	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.1 AHD
EASTING: 295851
NORTHING: 6251299

PIT No: 132A
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0	FILL / Silty Sandy CLAY: low plasticity, dark brown and red-brown, fine to coarse sand, trace fine to medium gravel, rootlets, shells, clinker, ash, timber and ACM fragments, w~PL		E	0.4				
				E	0.5				
46	1								1
				E	1.4				
				E	1.5				
	1.8	CLAY: medium to high plasticity, red-brown, with silt, trace rootlets, w~PL, apparently stiff, residual							
45	2								2
	2.5	Pit discontinued at 2.5m Target depth reached							
44	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.5 AHD
EASTING: 295832
NORTHING: 6251295

PIT No: 133
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets and fine to medium gravel, w~PL (possibly former tropsoil)		E	0.1				
					0.2				
				E	0.6				
					0.7				
	1			E	1.2				1
					1.3				
47									
				E	1.9				
	2				2.0				2
46		Below 2.5m: no rootlets							
				E	2.9				
	3				3.0				3
	3.4	Pit discontinued at 3.4m Limit of excavator reach							
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 49.4 AHD
EASTING: 295836
NORTHING: 6251280

PIT No: 134
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
49	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets and fine to medium gravel, w~PL (possibly former tropsoil)		E	0.1				
					0.2				
				E	0.6				
					0.7				
				E	0.9				
48	1				1.0				1
				E	1.9				
	2				2.0				2
47				E	2.9				
	3	Below 3.0m: no rootlets			3.0				3
46				E	3.4				
	3.5	Pit discontinued at 3.5m Limit of excavator reach			3.5				

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 49.3 AHD
EASTING: 295840
NORTHING: 6251262

PIT No: 135
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
49	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, w~PL (possibly former topsoil)		E	0.1				
					0.2				
				E	0.5				
					0.6				
	1			E	1.0				1
					1.1				
48				E*	1.5				
					1.6				
	2								2
47									
				E	2.5				
					2.6				
	3								3
46				E	3.5				
	3.6	Pit discontinued at 3.6m Limit of excavator reach			3.6				

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD7/20220719 collected at 1.5-1.6m. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.3 AHD
EASTING: 295861
NORTHING: 6251200

PIT No: 136
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets and fine to medium gravel, w~PL (possibly former topsoil)		E	0.1				
					0.2				
				E	0.5				
					0.6				
	1			E	1.0				1
					1.1				
47				E	1.5				
					1.6				
	2			E	2.0				2
					2.1				
46				E	2.5				
					2.6				
	2.8	CLAY: medium to high plasticity, red-brown, with silt, w~PL, apparently firm to stiff, residual		E	2.8				
					2.9				
	3 3.0	Pit discontinued at 3.0m Target depth reached							3
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.5 AHD
EASTING: 295868
NORTHING: 6251179

PIT No: 137
PROJECT No: 211619.02
DATE: 19/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0	FILL / Silty CLAY: low plasticity, dark brown, trace rootlets, w~PL (possibly former topsoil)		E	0.1				
					0.2				
				E	0.5				
					0.6				
	1			E	1.0				1
					1.1				
47				E	1.5				
					1.6				
	2								2
46				E	2.5				
					2.6				
	3								3
45	3.5	Silty CLAY: medium to high plasticity, red-brown, w~PL, apparently firm to stiff, residual		E	3.5				
	3.6	Pit discontinued at 3.6m Target depth reached			3.6				

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.4 AHD
EASTING: 295843
NORTHING: 6251192

PIT No: 138
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
45		FILL / Silty CLAY: low to medium plasticity, dark brown, with rootlets, trace fine to medium sandstone gravel, brick, terracotta, tiles, shells and ACM fragments, w~PL		E	0.1				
					0.2				
				E	0.5				
					0.6				
				E	0.9				
44	1.0	CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual		E	1.0				
				E	1.1				
	1.5	Pit discontinued at 1.5m Target depth reached		E	1.4				
					1.5				
43									
42									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.5 AHD
EASTING: 295844
NORTHING: 6251190

PIT No: 138A
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
45	0.0	FILL / Silty CLAY: low to medium plasticity, dark brown, with rootlets, trace fine to medium sandstone gravel, shells, brick, terracotta, tile and ACM fragments, w~PL		E	0.7 0.8				
	1.0	CLAY: medium to high plasticity, red-brown, trace silt and rootlets, w~PL, apparently firm to stiff, residual							
44	1.5	Pit discontinued at 1.5m Target depth reached							
43									
42									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: ACM = Asbestos containing material. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 53.3 AHD
EASTING: 296129
NORTHING: 6251082

PIT No: 139
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
53	0	FILL / Silty SAND: fine to coarse, grey, with sandstone boulders, fine to coarse sandstone gravel, trace rootlets, hose, wire, plastic and fabric fragments, moist		E	0.1				
					0.2				
				E	0.5				
					0.6				
	1			E	1.0				1
					1.1				
	1.2	FILL / Silty CLAY: medium plasticity, dark brown, trace fine to medium gravel, w>PL		E	1.2				
52					1.3				
	1.4	Silty CLAY: high plasticity, red-brown, trace fine to medium gravel, shale and siltstone, w~PL, apparently stiff to hard, residual		E*	1.4				
					1.5				
					1.9				
	2			E	2.0				2
	2.1	Pit discontinued at 2.1m Target depth reached							
51									
	3								3
50									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD1/20220720 collected at 1.4-1.5m. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 54.3 AHD
EASTING: 296157
NORTHING: 6251078

PIT No: 140
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
54	0.1	FILL / Silty CLAY: low to medium plasticity, dark brown, with fine to medium gravel, trace rootlets and ash, w~PL		E	0.1				
	0.2				0.2				
	0.3	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.3				
	0.4				0.4				
	0.8			E	0.8				
	0.9	Pit discontinued at 0.9m Target depth reached			0.9				
53	1								1
52	2								2
51	3								3

5 10 15 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 52.7 AHD
EASTING: 296134
NORTHING: 6251015

PIT No: 141
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
52	0.3	FILL / Silty CLAY: medium to high plasticity, dark brown, with fine to medium igneous and sandstone gravel, trace rootlets and fabric fragments, w~PL		E	0.1 0.2				
		Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4 0.5				
	1			E	0.9 1.0				1
	1.2	Pit discontinued at 1.2m Target depth reached							
51	2								2
50	3								3
49									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 54.3 AHD
EASTING: 296157
NORTHING: 6250988

PIT No: 142
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
54	0.3	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		Silty CLAY: medium to high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual		E	0.3 0.4				
	1.0	Pit discontinued at 1.0m Target depth reached		E	0.8 0.9				
53									
52									
51									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20; 1, 2, 3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 54.2 AHD
EASTING: 296160
NORTHING: 6251017

PIT No: 143
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
54		FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
					0.2				
	0.4	Silty CLAY: medium to high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual		E	0.4				
					0.5				
				E	0.9				
	1 1.0	Pit discontinued at 1.0m Target depth reached			1.0				1
53									
	2								2
52									
	3								3
51									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 55.4 AHD
EASTING: 296176
NORTHING: 6251073

PIT No: 144
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
55	0.3	FILL / Silty CLAY: medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		CLAY: medium to high plasticity, red-brown, with silt, trace rootlets, w~PL, apparently stiff, residual		E*	0.3 0.4				
	1			E	0.8 0.9				1
	1.1	Pit discontinued at 1.1m Target depth reached							
54	2								2
53	3								3
52									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD2/20220720 collected at 0.3-0.4m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 56.8 AHD
EASTING: 296204
NORTHING: 6251040

PIT No: 145
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
56	0.3	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual		E	0.3 0.4				
	0.9			E	0.8 0.9				
	1	Pit discontinued at 0.9m Target depth reached							
55	2								
54	3								
53									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 56.8 AHD
EASTING: 296198
NORTHING: 6250992

PIT No: 146
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
56	0.3	FILL / Silty CLAY: medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
	1	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual		E	0.3 0.4				
	1.1	Pit discontinued at 1.1m Target depth reached		E	0.8 0.9				
55	2								
54	3								
53									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 59.7 AHD
EASTING: 296247
NORTHING: 6251002

PIT No: 147
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
59	0.2	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
		Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.2				
					0.3				
				E	0.7				
	0.8	Pit discontinued at 0.8m Target depth reached			0.8				
	1								1
58									
	2								2
57									
	3								3
56									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 59.3 AHD
EASTING: 296242
NORTHING: 6251044

PIT No: 148
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
59	0.2	FILL / Silty CLAY: high plasticity, dark brown, trace rootlets and fine to medium gravel, w~PL		E	0.1				
		CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual			0.2				
				E	0.3				
					0.4				
				E	0.8				
	1.0				0.9				
	1	Pit discontinued at 1.0m Target depth reached							1
58									
	2								2
57									
	3								3
56									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 50.2 AHD
EASTING: 296029
NORTHING: 6251255

PIT No: 149
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
50	0.3	FILL / Silty SAND: fine to medium, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		FILL / Silty CLAY: medium plasticity, dark brown, trace rootlets and fine to medium gravel, w~PL		E	0.4 0.5				
49	1.0	Silty CLAY: high plasticity, red-brown, w~PL, apparently stiff, residual		E E	0.9 1.0 1.1				
	1.6	Pit discontinued at 1.6m Target depth reached		E	1.5 1.6				
48									
47									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20; 1, 2, 3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 60.4 AHD
EASTING: 296262
NORTHING: 6251060

PIT No: 150
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
60	0.3	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		CLAY: high plasticity, red-brown, with silt, trace rootlets, w~PL, apparently stiff, residual		E	0.3 0.4				
	1			E	0.8 0.9				1
	1.1	Pit discontinued at 1.1m Target depth reached							
59	2								2
58	3								3
57									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 62.2 AHD
EASTING: 296287
NORTHING: 6251040

PIT No: 151
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
62	0.1	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
	0.2				0.2				
	0.3	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.3				
	0.4				0.4				
		Below 0.7m: red-brown mottled grey							
	0.8			E	0.8				
	0.9				0.9				
61	1.0	Pit discontinued at 1.0m Target depth reached							
60									
59									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 62.9 AHD
EASTING: 296293
NORTHING: 6251025

PIT No: 152
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
62	0	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
					0.2				
	0.4	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4				
					0.5				
	1			E	0.9				1
					1.0				
61	1.1	Pit discontinued at 1.1m Target depth reached							2
60	2								3
59	3								

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 61.1 AHD
EASTING: 296269
NORTHING: 6251010

PIT No: 153
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
61		FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
	0.4	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4 0.5				
				E	0.8 0.9				
60	1.0	Pit discontinued at 1.0m Target depth reached							
59									
58									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20; 1, 2, 3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 60.1 AHD
EASTING: 296266
NORTHING: 6250981

PIT No: 154
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
60	0.4	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
	1.0	CLAY: high plasticity, red-brown, with silt, trace rootlets, w~PL, apparently firm to stiff, residual		E E	0.4 0.5 0.9				
59	1	Pit discontinued at 1.0m Target depth reached			1.0				1
58	2								2
57	3								3

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 60.3 AHD
EASTING: 296280
NORTHING: 6250965

PIT No: 155
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
60	0.4	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		CLAY: high plasticity, red-brown, with silt, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4 0.5				
59	1.0	Pit discontinued at 1.0m Target depth reached		E	0.9 1.0				
58									
57									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 61.2 AHD
EASTING: 296298
NORTHING: 6250963

PIT No: 156
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
61	0.0	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
					0.2				
	0.4	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4				
					0.5				
				E	0.9				
	1.0	Pit discontinued at 1.0m Target depth reached			1.0				

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 63.5 AHD
EASTING: 296315
NORTHING: 6250988

PIT No: 157
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
63	0.4	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4 0.5				
62	1.0	Pit discontinued at 1.0m Target depth reached		E	0.9 1.0				
61									
60									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 64.5 AHD
EASTING: 296320
NORTHING: 6251012

PIT No: 158
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
64	0.1	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
	0.2				0.2				
	0.4	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual		E	0.4				
	0.5				0.5				
	0.9			E	0.9				
63	1.0	Pit discontinued at 1.0m Target depth reached			1.0				
62									
61									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 64.8 AHD
EASTING: 296322
NORTHING: 6251028

PIT No: 159
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
64	0.1	FILL / Silty CLAY: low to medium plasticity, dark brown, trace rootlets, w~PL		E	0.1				
	0.2				0.2				
	0.4	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4				
	0.5				0.5				
	0.9			E	0.9				
63	1.0	Pit discontinued at 1.0m Target depth reached			1.0				
62									
61									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20; 1, 2, 3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 64.7 AHD
EASTING: 296324
NORTHING: 6251044

PIT No: 160
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
64	0.2	FILL / Silty CLAY: low to medium plasticity, dark brown, trace fine to coarse gravel, rootlets, tile, concrete, plastic, wire and ACM fragments, w~PL		E	0.1		Material sample ACM8		
		Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual		E	0.2				
					0.3				
				E	0.7				
	0.9				0.8				
	1	Pit discontinued at 0.9m Target depth reached							
63									
	2								
62									
	3								
61									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Material Sample ACM8 collected from surface

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 64.0 AHD
EASTING: 296316
NORTHING: 6251050

PIT No: 161
PROJECT No: 211619.02
DATE: 20/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
64	0.2	FILL / Silty CLAY: low to medium plasticity, dark brown, trace fine to medium gravel, rootlets, tile, concrete and plastic fragments, w~PL		E	0.1				
		Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently stiff, residual			0.2				
				E	0.3				
					0.4				
					0.8				
				E	0.9				
63	1.0	Pit discontinued at 1.0m Target depth reached							
62	2								
61	3								

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 62.8 AHD
EASTING: 296303
NORTHING: 6251058

PIT No: 162
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
		FILL / Silty Gravelly CLAY: low plasticity, dark brown, fine to medium gravel, trace rootlets, w~PL		E	0.1				
	0.2	Silty CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, w~PL, apparently firm to stiff, residual		E	0.2				
					0.3				
				E	0.6				
	0.7	Pit discontinued at 0.7m Target depth reached			0.7				

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 57.2 AHD
EASTING: 296206
NORTHING: 6251082

PIT No: 163
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
57	0.1	FILL / Silty Gravelly CLAY: medium plasticity, dark brown, fine to medium gravel, trace sand and rootlets, w~PL		E	0.1				
	0.2				0.2				
	0.3	Silty CLAY: medium to high plasticity, red-brown, trace fine to medium gravel, w~PL, apparently firm to stiff, residual		E	0.3				
	0.4				0.4				
	0.8			E	0.8				
	0.9				0.9				
1	1.0	Pit discontinued at 1.0m Target depth reached							
56	2								
55	3								
54									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 51.0 AHD
EASTING: 296090
NORTHING: 6251101

PIT No: 164
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
51		FILL / Silty CLAY: medium to high plasticity, dark brown, with fine to medium gravel, fine to coarse sand, trace rootlets, tile, plastic and wire fargments, w~PL		E	0.1 0.2				
	0.3	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.3 0.4				
				E	0.8				
	0.9	Pit discontinued at 0.9m			0.9				
50	1	Target depth reached							1
49	2								2
48	3								3

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.3 AHD
EASTING: 295898
NORTHING: 6251133

PIT No: 165
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.1	FILL / Silty Sandy CLAY: low plasticity, dark brown, with fine to medium gravel and fine to coarse sand, trace rootlets, tile, plastic and wire fragments, w~PL		E	0.1				
	0.2				0.2				
	0.3	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.3				
	0.4				0.4				
	0.8			E	0.8				
	0.9	Pit discontinued at 0.9m Target depth reached			0.9				
45	1								1
44	2								2
43	3								3

5 10 15 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 43.3 AHD
EASTING: 295762
NORTHING: 6251156

PIT No: 166
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm) 5 10 15 20
43	0.0			E	0.0				
	0.1	FILL / Gravelly SAND: fine to medium, dark grey, fine to medium gravel, moist			0.1				
		FILL / SAND: fine to coarse, yellow-brown, with crushed sandstone and fine to medium sandstone gravel, moist		E	0.2				
	0.3	FILL / Silty CLAY: medium plasticity, dark brown, trace fine to medium gravel, w~PL		E	0.3				
					0.4				
	0.5	Silty CLAY: high plasticity, red-brown, w~PL, apparently firm to stiff, residual		E	0.5				
					0.6				
42	1								1
				E	1.0				
					1.1				
	1.7	Pit discontinued at 1.7m Target depth reached							
41	2								2
40	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 63.0 AHD
EASTING: 296282
NORTHING: 6250996
DIP/AZIMUTH: 90°/--

BORE No: 167
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
63	0	CONCRETE							
	0.2	FILL / Silty CLAY: low to medium plasticity, dark brown, trace fine to medium gravel, w~PL		E	0.2 0.3				
				E	0.7 0.8				
	0.9	Silty CLAY: high plasticity, red-brown, w~PL, apparently firm to stiff, residual (possibly alluvial)		E*	0.9 1.0				
62	1								1
				E	1.4				
	1.5	Bore discontinued at 1.5m Target depth reached			1.5				
61	2								2
60	3								3

RIG: Handtools **DRILLER:** PJ **LOGGED:** PJ **CASING:** Nil

TYPE OF BORING: Dia-core to 0.2m, hand auger to 1.5m

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Location coordinates are in MGA94 Zone 56. *Blind replicate BD1/20220721 collected from 0.9-1.0m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 63.0 AHD
EASTING: 296287
NORTHING: 6250993
DIP/AZIMUTH: 90°/--

BORE No: 168
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
63	0.2	CONCRETE							
		FILL / Silty CLAY: medium plasticity, dark brown, w~PL		E	0.2 0.3				
				E	0.7 0.8				
62	1								1
	1.1	Silty CLAY: high plasticity, red-brown, w~PL, apparently firm to stiff, residual		E	1.1 1.2				
				E	1.6 1.7				
	1.8	Bore discontinued at 1.8m Target depth reached							
61	2								2
60	3								3

RIG: Handtools **DRILLER:** PJ **LOGGED:** PJ **CASING:** Nil

TYPE OF BORING: Dia-core to 0.2m, hand auger to 1.8m

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Location coordinates are in MGA94 Zone 56.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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BOREHOLE LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 64.0 AHD
EASTING: 296281
NORTHING: 6250988
DIP/AZIMUTH: 90°/--

BORE No: 169
PROJECT No: 211619.02
DATE: 21/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
64		CONCRETE							
	0.2	FILL / Silty CLAY: high plasticity, light brown, with fine to medium gravel, w~PL		E	0.2				
	0.3	Silty CLAY: high plasticity, red-brown mottled grey, high plasticity, with fine to medium gravel, w~PL, apparently soft to firm, residual		E	0.3				
					0.4				
				E	0.6				
	0.7	Bore discontinued at 0.7m Target depth reached			0.7				
63	1								1
62	2								2
61	3								3

RIG: Handtools **DRILLER:** PJ **LOGGED:** PJ **CASING:** Nil

TYPE OF BORING: Dia-core to 0.2m, hand auger to 1.8m

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Location coordinates are in MGA94 Zone 56.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 43.5 AHD
EASTING: 295723
NORTHING: 6251239

PIT No: 170
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
43	0	FILL / Sandy GRAVEL: fine to coarse, grey, sand fine to coarse, with concrete, trace metal, wire, plastic and styrofoam		E	0.1				
					0.2				
				E	0.6				
					0.7				
	1			E	1.1				1
42	1.2	Silty CLAY: medium to high plasticity, red-brown, trace rootlets, w>PL, apparently stiff, residual (possibly alluvial)			1.2				
				E*	1.3				
					1.4				
				E	1.7				
	1.8	Pit discontinued at 1.8m Target depth reached			1.8				
41	2								2
	3								3
40									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD1/20220727 collected from 1.3-1.4m. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.2 AHD
EASTING: 295834
NORTHING: 6251195

PIT No: 171
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
45	0	FILL / Sandy GRAVEL: fine to coarse, grey, sand fine to coarse, with concrete fragments, trace metal, wire and plastic fragments, moist		E	0.1				
					0.2				
				E	0.4				
	0.5	CLAY: medium to high plasticity, red-brown, with silt, trace rootlets, w>PL, apparently stiff, residual			0.5				
				E	0.6				
					0.7				
44	1			E	1.1				1
					1.2				
	1.5	Pit discontinued at 1.5m Target depth reached							
43	2								2
42	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.0 AHD
EASTING: 295918
NORTHING: 6251147

PIT No: 172
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0	FILL / Sandy GRAVEL: fine to coarse, grey, sand fine to coarse, with concrete, trace rootlets, metal, wire and plastic fragments, moist		E	0.1				
					0.2				
				E	0.8				
					0.9				
47	1								1
					1.6				
				E	1.7				
	1.8	CLAY: medium to high plasticity, red-brown, with silt, trace rootlets, w>PL, apparently firm to stiff, residual							
46	2			E	1.9				2
					2.0				
	2.5	Pit discontinued at 2.5m Target depth reached							
45	3								3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.8 AHD
EASTING: 295934
NORTHING: 6251145

PIT No: 173
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0	FILL / Silty CLAY: low plasticity, dark brown, with fine to coarse gravel, sandstone blocks, concrete slabs and igneous blocks, trace rootlets, metal, plastic and wire fragments, w~PL		E	0.1				
					0.2				
				E	0.6				
					0.7				
	0.9	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	1.1				
	1				1.2				1
	1.4	Pit discontinued at 1.4m Target depth reached							
46	2								2
45	3								3
44									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.0 AHD
EASTING: 295946
NORTHING: 6251143

PIT No: 174
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48		FILL / Silty CLAY: low plasticity, dark brown, with fine to coarse gravel, sandstone blocks, concrete slabs and igneous blocks, trace rootlets, tyre, metal, plastic and wire fragments, w~PL		E	0.1 0.2				
				E*	0.6 0.7				
47	0.9 1	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	1.1 1.2				1
	1.6	Pit discontinued at 1.6m Target depth reached							
46	2								2
45	3								3

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD2/20220727 collected from 0.6-0.7m. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.3 AHD
EASTING: 295959
NORTHING: 6251141

PIT No: 175
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0.1	FILL / Silty CLAY: low plasticity, dark brown, with fine to coarse gravel, sandstone blocks, concrete slabs and igneous blocks, trace rootlets, metal, plastic and wire, w~PL		E	0.1				
	0.2				0.2				
	0.6			E	0.6				
	0.7				0.7				
47	1.0	Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual							
	1.1			E	1.1				
	1.2				1.2				
	1.6	Pit discontinued at 1.6m Target depth reached							

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.8 AHD
EASTING: 295970
NORTHING: 6251138

PIT No: 176
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0	FILL / Silty CLAY: medium plasticity, dark brown, with fine to coarse gravel, sandstone blocks, concrete slabs and igneous blocks, trace rootlets, metal, plastic and wire fragments, w~PL		E	0.1				
					0.2				
				E	0.6				
					0.7				
	0.9	CLAY: high plasticity, red-brown, with silt, trace rootlets, w~PL, apparently firm to stiff, residual							
	1			E*	1.1				1
					1.2				
	1.5	Pit discontinued at 1.5m Target depth reached							
47	2								2
46	3								3
45									

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Blind replicate BD3/20220727 collected from 1.1-1.2m. Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.6 AHD
EASTING: 295931
NORTHING: 6251187

PIT No: 177
PROJECT No: 211619.02
DATE: 27/7/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0.3	FILL / Silty CLAY: medium plasticity, dark brown, trace rootlets, w~PL		E	0.1 0.2				
		Silty CLAY: high plasticity, red-brown, trace rootlets, w~PL, apparently firm to stiff, residual		E	0.4 0.5				
				E	0.9				
46	1.0	Pit discontinued at 1.0m Target depth reached			1.0				
45									
44									

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20; 1, 2, 3

RIG: 8T Excavator (KX080-3) 600mm Toothed Bucket

LOGGED: PJ

SURVEY DATUM: MGA94 Zone 56

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated through stockpile.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Appendix G2

DP (2021) Logs and Surface Sample Record

TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 43.1 AHD
EASTING: 295786.1
NORTHING: 6251046.3

PIT No: TP1
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
43	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL, firm		E/D	0.1		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, orange-brown, w<PL, stiff to very stiff, residual			0.2				
					0.4				
				E/D	0.5		PID = <5		
				B	0.6				
					0.9				
42	1			E/D	1.0		PID = <5		1
					1.1				
				D	1.5				
					1.6				
41	2 2.0	Silty CLAY CI-CH: medium to high plasticity, orange and pale grey, trace angular sitlstone gravel, w<PL, very stiff, residual Below 2.3m: pale grey trace orange, hard		D	2.0				2
					2.1				
				D	2.4				
	2.5	Pit discontinued at 2.5m Excavator refusal on weathered siltstone			2.5				
40	3								3
39	4								4

RIG: 5-Tonne Excavator (600mm wide bucket)
LOGGED: NB
SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, CBR bulk sample 0.4-0.9m

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.7 AHD
EASTING: 295889.6
NORTHING: 6251078.3

PIT No: TP2
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
45	0.25	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL, firm		E/D	0.1 0.2		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, orange-brown, w<PL, stiff to very stiff, residual		E/D	0.5 0.6		PID = <5		
44	1			E/D	1.0 1.1		PID = <5		
		Below 1.5m: orange-yellow-grey, trace angular siltstone, hard		D	1.5 1.6				
	2			D	2.0				
43	2.1	Pit discontinued at 2.1m Excavator refusal on weathered siltstone			2.1				
42	3								
41	4								

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: NB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.7 AHD
EASTING: 296015.4
NORTHING: 6251000.7

PIT No: TP3
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
47	0.3	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, trace sub-angular siltstone gravel, with organics and rootlets, w<PL, firm		E/D	0.1 0.2		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, orange, trace sub-angular siltstone gravel, w<PL, stiff to very stiff, residual		B E/D	0.3 0.5 0.6		PID = <5		
	1			E/D	1.0 1.1		PID = <5		1
46	1.4	Silty CLAY CI-CH: medium to high plasticity, orange and yellow-brown, with sub-angular sitlstone gravel, w<PL, stiff to very stiff, residual		D	1.5 1.6				
	2	2.0 Silty CLAY CI-CH: medium to high plasticity, pale grey and orange, w<PL, stiff to hard, residual		D	2.0 2.1				2
45				D	2.4 2.5				
	3	3.0 Pit discontinued at 3.0m Target depth achieved							3
44	4								4
43									

RIG: 5-Tonne Excavator (600mm wide bucket)
LOGGED: NB
SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, CBR bulk sample 0.3-0.6m

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 52.1 AHD
EASTING: 296126.3
NORTHING: 6251048.1

PIT No: TP4
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
52	0.3	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL, firm		E*/D	0.1 0.2		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, yellow-brown, w<PL, stiff to very stiff, residual		E/D	0.5 0.6		PID = <5		
51	1.0	SILTSTONE: dark grey and pale grey, very low strength, highly weathered with extremely weathered clay bands, Bringelly Shale		E/D	1.0 1.1		PID = <5		
				D	1.7				
	1.8	Pit discontinued at 1.8m Excavator refusal on weathered siltstone			1.8				
50	2								2
49	3								3
48	4								4

5 10 15 20

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: NB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, *Blind replicate 06092021DP1 collected from 0.1-0.2m, Push-tube sample taken at 0.5m

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 57.4 AHD
EASTING: 296217.3
NORTHING: 6250969.3

PIT No: TP5
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
57	0.25	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL, firm		E/D	0.1 0.2		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, orange, trace sub-angular siltstone gravel, w<PL, stiff, residual		E/D	0.5 0.6		PID = <5		
				B					
56	1.0	Silty CLAY CI-CH: medium to high plasticity, pale grey, with angular siltstone gravel, w<PL, very stiff, residual (extremely weathered rock)		E/D	1.0 1.1		PID = <5		
		Below 1.4m: hard		D	1.4				
	1.5	Pit discontinued at 1.5m Excavator refusal on weathered siltstone			1.5				

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: NB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, CBR bulk sample 0.4-0.9m

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 60.5 AHD
EASTING: 296259.7
NORTHING: 6251024.7

PIT No: TP6
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
60	0.3	FILL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, trace ash and charcoal, w<PL, very stiff		E*/D	0.1 0.2		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, orange, w<PL, very stiff, residual		E/D	0.5 0.6		PID = <5		
59	1.0	Silty CLAY CI-CH: medium to high plasticity, pale grey, with angular siltstone gravel, w<PL, very stiff to hard, residual (extremely weathered rock)		E/D	1.0 1.1		PID = <5		
	1.3	Pit discontinued at 1.3m Excavator refusal on weathered siltstone							
58									
57									
56									

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20; 1, 2, 3, 4

RIG: 5-Tonne Excavator (600mm wide bucket)
LOGGED: NB
SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, *Blind replicate 06092021DP2 collected from 0.1-0.2m, Push-tube sample taken at 0.5m

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 83.1 AHD
EASTING: 296496.4
NORTHING: 6251000.2

PIT No: TP7
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
83	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL, firm		E/D	0.1		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, orange-yellow, trace angular siltstone gravel,w<PL, stiff to very stiff, residual			0.2				
				E/D	0.5		PID = <5		
					0.6				
82	1.0	Silty CLAY CI-CH: medium to high plasticity, pale grey, with angular siltstone gravel, w<PL, very stiff to hard, residual (extremely weathered rock)		D	1.0				
					1.1				
				D	1.4				
	1.5	Pit discontinued at 1.5m Excavator refusal on weathered siltstone			1.5				
81									
80									
79									

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: 5-Tonne Excavator (600mm wide bucket)
LOGGED: NB
SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 89.1 AHD
EASTING: 296584.6
NORTHING: 6250920.5

PIT No: TP8
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
89	0.1	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL, firm		E/D	0.1 0.2		PID = <5		
	0.4	Silty CLAY CI-CH: medium to high plasticity, orange, trace sub-angular gravel, w<PL, stiff, residual (possible colluvium)		E/D	0.5		PID = <5		
	0.6	Silty CLAY CI-CH: medium to high plasticity, dark orange-yellow,w<PL, stiff to very stiff, residual		B	0.6				
88	1			D	1.0 1.1				1
				D	1.4 1.5				
	1.6	Pit discontinued at 1.6m Excavator refusal on weathered siltstone							
87	2								2
86	3								3
85	4								4

RIG: 5-Tonne Excavator (600mm wide bucket)
LOGGED: NB
SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPSCBR bulk sample 0.5-1.0m

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 93.3 AHD
EASTING: 296631.1
NORTHING: 6250940.9

PIT No: TP9
PROJECT No: 207450.00
DATE: 6/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
93	0.1	FILL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL, firm		E/D	0.1		PID = <5		
	0.2				0.2				
	0.5	Below 0.5m: trace ash		E/D	0.5		PID = <5		
	0.6	Silty CLAY CI-CH: medium to high plasticity, dark orange-yellow,w<PL, stiff to very stiff, residual			0.6				
92	1.0			D	1.0				
	1.1				1.1				
	1.4			D	1.4				
	1.5	Pit discontinued at 1.5m Excavator refusal on weathered siltstone			1.5				
91	2								
90	3								
89	4								

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: NB

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 93.3 AHD
EASTING: 296609.1
NORTHING: 6250919.6

PIT No: TP10
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
93	0.3	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1 0.2		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, brown, w<PL		E*	0.5 0.6		PID = <5		
	0.8	Pit discontinued at 0.8m Target depth achieved							
92	1								1
91	2								2
90	3								3
89	4								4

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, *Blind replicate BD1/20210907 collected from 0.5-0.6m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 67.9 AHD
EASTING: 296369.5
NORTHING: 6250953.3

PIT No: TP11
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
67	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1		PID = <5		
		Silty CLAY Cl-CH: medium to high plasticity, red-brown, w<PL			0.2				
				E	0.5		PID = <5		
					0.6				
	0.9	Pit discontinued at 0.9m Target depth achieved							
66	1								1
65	2								2
64	3								3
63	4								4

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 67.7 AHD
EASTING: 296347.3
NORTHING: 6250981.1

PIT No: TP12
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
67	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, red-brown mottled pale brown, w<PL			0.2				
		Below 0.4m: grading to pale brown mottled red		E*	0.5		PID = <5		
	1.0				0.6				
		Pit discontinued at 1.0m Target depth achieved							

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, *Blind replicate BD2/20210907 collected from 0.5-0.6m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 64.7 AHD
EASTING: 296317.9
NORTHING: 6250957.4

PIT No: TP13
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
64	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, red-brown mottled pale brown, w<PL			0.2				
				E	0.5		PID = <5		
	0.8				0.6				
		Pit discontinued at 0.8m Target depth achieved							

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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BOREHOLE LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 63.4 AHD
EASTING: 296279.8
NORTHING: 6251056.2
DIP/AZIMUTH: 90°/--

BORE No: BH14
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	VWP Construction Details
63	0.3	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1 0.2		PID = <5		
	0.7	Silty CLAY CI-CH: medium to high plasticity, red-brown mottled pale brown, w<PL		E	0.4 0.5		PID = <5		
		Bore discontinued at 0.7m Auger refusal on stiff clay							
62	1								
61	2								
60	3								
59	4								

RIG: Hand tools **DRILLER:** JH **LOGGED:** JH **CASING:** No casing

TYPE OF BORING: Hand auger to 0.7 m.

WATER OBSERVATIONS: No free groundwater observed whilst drilling

REMARKS: Coordinates and levels obtained via differential GPS

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 60.7 AHD
EASTING: 296230.6
NORTHING: 6251061.3

PIT No: TP15
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
60	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, red-brown mottled pale brown, w<PL			0.2				
				E	0.5		PID = <5		
	1.0				0.6				
		Pit discontinued at 1.0m Target depth achieved							

5 10 15 20

1 2 3 4

59 58 57 56

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 55.4 AHD
EASTING: 296179.7
NORTHING: 6251055.7

PIT No: TP16
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm) 5 10 15 20
55	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1		PID = <5		
		Silty CLAY Cl-CH: medium to high plasticity, pale brown mottled red-brown, w<PL			0.2				
				E*	0.5		PID = <5		
	0.8				0.6				
		Pit discontinued at 0.8m Target depth achieved							
54	1								1
53	2								2
52	3								3
51	4								4

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, *Blind replicate BD4/20210907 collected from 0.5-0.6m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 52.1 AHD
EASTING: 296116.7
NORTHING: 6250988.9

PIT No: TP17
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
52	0.2	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1		PID = <5		
		Silty CLAY CI-CH: medium to high plasticity, red-brown mottled pale brown, w<PL			0.2				
				E	0.5		PID = <5		
	0.7	Pit discontinued at 0.7m Target depth achieved			0.6				
51	1								1
50	2								2
49	3								3
48	4								4

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 53.3 AHD
EASTING: 296142.6
NORTHING: 6251083.2

PIT No: TP18
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
53	0.25	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1 0.2		PID = <5		
		Silty CLAY Cl-CH: medium to high plasticity, red-brown mottled pale brown, w<PL		E*	0.5 0.6		PID = <5		
	0.8	Pit discontinued at 0.8m Target depth achieved							
52	1								1
51	2								2
50	3								3
49	4								4

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 5-Tonne Excavator (600mm wide bucket)
LOGGED: JH
SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, *Blind replicate BD3/20210907 collected from 0.5-0.6m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 58.1 AHD
EASTING: 296219.9
NORTHING: 6251010.5

PIT No: TP19
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
58	0.1	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1 0.2		PID = <5		
	0.3	Silty CLAY CI-CH: medium to high plasticity, red-brown mottled grey, w<PL		E*	0.5 0.6		PID = <5		
	0.9	Pit discontinued at 0.9m Target depth achieved							
57	1								1
56	2								2
55	3								3
54	4								4

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 5-Tonne Excavator (600mm wide bucket)

LOGGED: JH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS, *Blind replicate BD5/20210907 collected from 0.5-0.6m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 55.4 AHD
EASTING: 296176.7
NORTHING: 6251002.9

PIT No: TP20
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
55	0.3	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL		E	0.1 0.2		PID = <5		
	0.9	Silty CLAY CI-CH: medium to high plasticity, red-brown mottled pale grey, w<PL		E	0.5 0.6		PID = <5		
54	1	Pit discontinued at 0.9m Target depth achieved							
53	2								
52	3								
51	4								

RIG: 5-Tonne Excavator (600mm wide bucket)
LOGGED: JH
SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed whilst excavating

REMARKS: Coordinates and levels obtained via differential GPS

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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BOREHOLE LOG

CLIENT: ESR Australia Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: 1050-1064 Mamre Road, Kemps Creek

SURFACE LEVEL: 63.7 AHD
EASTING: 296323.3
NORTHING: 6251053.5
DIP/AZIMUTH: 90°/--

BORE No: BH21
PROJECT No: 207450.00
DATE: 7/9/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	VWP Construction Details
63.7	0.0	FILL/Silty CLAY: medium plasticity, brown, with ash, metal and wood fragments, trace rootlets, w<PL		E	0.0		PID = <5		
	0.1				0.1				
63.55	0.15	SILTY CLAY CL: medium plasticity, brown, w<PL							
	0.3			E	0.3		PID = <5		
63.3	0.4	Bore discontinued at 0.4m Auger refusal on stiff clay			0.4				
63	1								1
62	2								2
61	3								3
60	4								4
59									

RIG: Hand tools **DRILLER:** JH **LOGGED:** JH **CASING:** No casing
TYPE OF BORING: Hand auger to 0.4 m.
WATER OBSERVATIONS: No free groundwater observed whilst drilling
REMARKS: Coordinates and levels obtained via differential GPS

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Project:	Pre-Purchase Due Diligence Assessment	**Project No.:**	207450.01
Client:	ESR Australia Pty Ltd	**Date:**	Sep-21
Location:	1050-1064 Mamre Rd, Kemps Creek	**Field Staff:**	JH

Surface Sample Record

Sample ID	Location	PID (ppm)	Description
SS1	Western portion of the internal access road.	<5	FILL/Gravelly SAND: medium to coarse, brown, shale gravel, trace cement, brick and tile fragments, dry
SS2	Western centre of the internal access road.	<5	FILL/Gravelly SAND: medium to coarse, brown, shale gravel, trace cement, brick and tile fragments, dry
SS3	Eastern portion of the internal access road.	<5	FILL/Gravelly SAND: medium to coarse, brown, shale gravel, trace cement, brick and tile fragments, dry
SS4	Western paddock opposite Mamre Road.	<5	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL
SS5	Western paddock opposite Mamre Road.	<5	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL
SS6	Centre paddock.	<5	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL
SS7	Centre paddock.	<5	TOPSOIL/Silty CLAY CL: low to medium plasticity, dark brown, with organics and rootlets, w<PL
SS8	Centre paddock.	<5	FILL/Silty Clay: medium plasticity, dark brown, with organics and rootlets, trace sandstone cobbles and gravel, brick and tile fragments, W~PL
SS9	Centre paddock.	<5	FILL/Silty Clay: medium plasticity, dark brown, with organics and rootlets, trace sandstone cobbles and gravel, brick and tile fragments, W~PL
SS10	Internal access road, north of residential house.	<5	FILL/Gravelly SAND: medium to coarse, brown, shale gravel, trace cement, brick and tile fragments, dry
SS11	Eastern centre of the internal access road.	<5	FILL/Gravelly SAND: medium to coarse, brown, shale gravel, trace cement, brick and tile fragments, dry

Appendix G3

DP (2022) Logs

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 58.9 AHD
EASTING: 296309
NORTHING: 6251198

PIT No: TP1
PROJECT No: 211619.00
DATE: 13/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
58	0.0	TOPSOIL/Silty CLAY: low plasticity, grey, approximately 30% silt, trace grass and grass roots, w>PL, moist, soft		A	0.0				
	0.2	CLAY CI: medium plasticity, grey brown, trace silt, moist, w~PL, apparently firm, residual (possibly alluvial)			0.2				
				A	0.4		Bulk sample collected at 0.3-0.8m		
	0.5	CLAY CH: high plasticity, pale brown, w~PL, stiff, residual			0.5				
					0.9				
	1			A	1.0				1
		Below 1.2m: becoming very stiff							
					1.4				
				A					
	1.5	CLAY CH: high plasticity, mottled brown pale grey, w~PL, apparently very stiff, residual			1.5				
57					1.9				
	2			A	2.0				2
					2.4				
				A	2.5				
					2.9				
56				A					
	3				3.0				3
	3.0	Below 3.0m: becoming wet Pit discontinued at 3.0m - Limit of excavation						13-12-21	
55	4								4
54									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: Free groundwater observed at 3.0m

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 61.7 AHD
EASTING: 296306
NORTHING: 6251094

PIT No: TP2
PROJECT No: 211619.00
DATE: 13/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
61	0.0	TOPSOIL/Silty CLAY: low plasticity, grey, approximately 30% silt, trace grass and grass roots, w~PL, apparently soft		A/E	0.0		PID<5ppm		
	0.2	CLAY CI: medium plasticity, orange brown, trace silt, w~PL, firm, residual		A/E	0.2 0.4 0.5		PID<5ppm		
	0.8	CLAY CH: high plasticity, mottled brown pale grey, w~PL, stiff, residual At 1.2m: very stiff		A	0.9 1.0				1
60	1.8	SILTSTONE/CLAY: low plasticity, approximately 20% ironstone band, w<PL, hard, residual (possibly extremely weathered siltstone)		A	1.4 1.5				2
	2.1	Pit discontinued at 2.1m - Bucket refusing		A	1.9 2.0				
59									3
58									4
57									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 56.5 AHD
EASTING: 296245
NORTHING: 6251152

PIT No: TP3
PROJECT No: 211619.00
DATE: 13/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
									5 10 15 20
		CLAY CH: high plasticity, pale brown, w~PL, firm, residual		A/E	0.0 0.2		PID<5ppm		
	0.4	CLAY CI: medium plasticity, red brown and orange brown, trace silt and ironstone gravel, w~PL, stiff, residual		A/E	0.4 0.5		PID<5ppm		
56									
	1	Below 1.2m: becoming yellow brown and very stiff to hard		A	0.9 1.0				1
				A	1.4 1.5				
55	1.9	SILTSTONE: pale grey brown, very low and low to medium strength, Bringelly Shale		A	1.9 2.0				
	2								2
	2.2	Pit discontinued at 2.2m							
54									
	3								3
53									
	4								4
52									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 53.6 AHD
EASTING: 296161
NORTHING: 6251173

PIT No: TP4
PROJECT No: 211619.00
DATE: 13/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
53	0.0	CLAY CH: high plasticity, pale brown, w=PL, firm to stiff, residual (possibly alluvial)		A/E	0.0		PID<5ppm		
					0.2				
	0.4	CLAY CI: medium plasticity, pale grey brown, trace silt and ironstone gravel, w~PL, stiff, residual (possibly alluvial)		A/E	0.4		PID<5ppm		
					0.5				
	0.9	CLAY CL: low plasticity, pale brown, approximately 20% ironstone gravel and silt, w~PL, very stiff, residual (possibly alluvial)		A	0.9				
52	1				1.0				1
				A	1.4				
					1.5				
				A	1.9				
	2	2.0	Gravelly CLAY CL: low plasticity, brown, >30% ironstone gravel and silt, w>PL, hard, residual (possibly alluvial)		2.0				2
51		Below 2.5m: becoming wet						13-12-21	
				A	2.9				
	3	3.0	Pit discontinued at 3.0m		3.0				3
50	4								4
49									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: Free groundwater observed at 2.5m

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.7 AHD
EASTING: 295946
NORTHING: 6251162

PIT No: TP5
PROJECT No: 211619.00
DATE: 13/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
47	0.2	TOPSOIL/Silty CLAY: low plasticity, grey, trace grass roots, w~PL, soft to firm		A/E	0.0		PID<5ppm		
		CLAY CI: medium plasticity, orange/yellow brown, trace silt and ironstone gravel, w=PL, firm to stiff, residual (possibly alluvial)			0.2				
				A/E	0.4		PID<5ppm Bulk sample collected at 0.3-0.8m		
	0.75	CLAY CI: medium plasticity, red brown, slightly silty, trace ironstone gravel, w<PL, stiff to very stiff, residual (possibly alluvial)			0.5				
1				A	0.9				1
					1.0				
				A	1.4				
46					1.5				
2				A	1.9				2
					2.0				
	2.5	CLAY CI: medium plasticity, yellow brown, approximately 20% ironstone gravel, w<PL, apparently hard, residual (possibly alluvial)							
45				A	2.9				
3	3.0	Pit discontinued at 3.0m			3.0				3
44									
4									4
43									

Dynamic Penetrometer Test (blows per 150mm): 5, 10, 15, 20

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.4 AHD
EASTING: 295861
NORTHING: 6251228

PIT No: TP6
PROJECT No: 211619.00
DATE: 13/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
45	0.1	TOPSOIL/Silty CLAY: medium plasticity, pale grey, w<PL, firm		A/E*	0.0–0.1		PID<5ppm		
		CLAY CI: medium plasticity, orange brown, slightly silty, w~PL, stiff, residual (possibly alluvial)		A/E	0.4–0.5		PID<5ppm		
	0.5	CLAY CH: high plasticity, grey brown, w~PL, stiff, residual (possibly alluvial)		A	0.9–1.0				
44	1			A	1.4–1.5				
	1.5	CLAY CH: high plasticity, mottled brown pale grey, w~PL, very stiff, residual		A	1.9–2.0				
43	2			A	2.9–3.0				
	3	3.0 Pit discontinued at 3.0m							
42	4								
41									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Field replicate BD1/20211213 taken from 0.0-0.1m.

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 42.4 AHD
EASTING: 295717
NORTHING: 6251227

PIT No: TP7
PROJECT No: 211619.00
DATE: 13/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
									5 10 15 20
42	0.15	TOPSOIL/Silty CLAY: low plasticity, grey, trace grass roots, w>PL, soft		A/E	0.0 0.1		PID<5ppm		
		CLAY CI: medium plasticity, pale grey brown, trace ironstone gravel, w~PL, stiff to very stiff, alluvial		A/E	0.4 0.5		PID<5ppm Bulk sample collected at 0.3-0.8m		
41	1.2	Silty CLAY CL: low plasticity, orange brown, w~PL, very stiff, alluvial		A	0.9 1.0				
				A	1.4 1.5				
40				A	1.9 2.0			13-12-21	
39	3.0	Pit discontinued at 3.0m		A	2.9 3.0				
38									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: Free groundwater observed at 2.5m

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 52.8 AHD
EASTING: 296124
NORTHING: 6251229

PIT No: TP8
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
52	0.0	TOPSOIL/Silty CLAY: low plasticity, grey, trace grass roots, w~PL, very soft		A/E	0.0		PID<5ppm		
	0.2	CLAY CI: medium plasticity, yellow brown, trace ironstone gravel, w~PL, stiff, alluvial		A/E	0.2		PID<5ppm		
					0.4				
				U_{50}	0.5		pp = 300		
	0.7	Silty CLAY CL: low plasticity, orange brown, w~PL, stiff and very stiff, alluvial			0.8				
51	1			A	0.9				1
					1.0				
					1.4				
				A	1.5				
					1.9				
	2.0	Silty CLAY CL: low plasticity, pale grey brown, trace ironstone, w~PL, very stiff to hard, alluvial		A	2.0				2
50		Below 2.5m: becoming soft and wet						14-12-21	
	3				2.9				3
	3.0	Pit discontinued at 3.0m		A	3.0				
49	4								4
48									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: Free groundwater observed at 2.5m

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.1 AHD
EASTING: 295931
NORTHING: 6251295

PIT No: TP9
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
47	0.15	TOPSOIL/Silty CLAY: low plasticity, grey, trace grass roots, w~PL, soft		A/E*	0.0 0.1		PID<5ppm		
		Silty CLAY CI: medium plasticity, orange brown, trace fine ironstone gravel, w~PL, stiff then very stiff, alluvial		A/E	0.4 0.5		PID<5ppm		
46	0.9 1	Silty CLAY CI: medium plasticity, pale grey brown, w<PL, very stiff to hard, alluvial		A	0.9 1.0				1
				A	1.4 1.5				
				A	1.9				
45	2.0 2	CLAY CH: high plasticity, pale grey and brown, trace decomposed organic matter, w<PL, hard, lumpy, alluvial			2.0				2
	2.7	Pit discontinued at 2.7m on hard clay							
44	3								3
43	4								4

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: *Field replicate BD2/20211214 taken from 0.0-0.1m.

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 43.7 AHD
EASTING: 295775
NORTHING: 6251319

PIT No: TP10
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per 150mm)
43	0.0	Silty CLAY CL: low plasticity, pale grey brown, trace grass roots, w<PL, firm, alluvial		A/E	0.0		PID<5ppm		
					0.2				
	0.3	Silty CLAY CL: low plasticity, orange brown, trace fine ironstone gravel, w<PL, stiff to very stiff, alluvial		A/E	0.4		PID<5ppm		
					0.5				
				U_{50}	0.75				
	0.8	CLAY CI: medium plasticity, mottled brown pale grey, trace silt, w~PL, very stiff, alluvial							
				A	0.9				
42	1.0				1.0				
					1.4				
				A					
	1.5	CLAY CH: high plasticity, mottled brown and pale grey, w~PL, very stiff to hard, alluvial			1.5				
					1.9				
				A					
41	2.0				2.0				
					2.7				
				A					
	2.8	Pit discontinued at 2.8m			2.8				
40	3.0								
39	4.0								

RIG: 3.5T Excavator with 450mm bucket

LOGGED: SI

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 42.2 AHD
EASTING: 295719
NORTHING: 6251294

PIT No: TP11
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
42	0.1	TOPSOIL/Silty CLAY: low plasticity, grey, trace grass roots, w~PL		E	0.0		PID<5ppm		
		CLAY CI: medium plasticity, grey-brown, trace silt, decomposed organic matter, w~PL			0.1				
				E	0.4		PID<5ppm		
	0.5	Pit discontinued at 0.5m - Target depth reached			0.5				
41	1								1
40	2								2
39	3								3
38	4								4

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 3.5T Excavator with 450mm bucket

LOGGED: VV/DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.0 AHD
EASTING: 295824
NORTHING: 6251297

PIT No: TP12
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46		FILL/CLAY: low plasticity, dark brown, with silt, trace grass roots and rootlets, w<PL, (possibly former topsoil)		E	0.0 0.1		PID<5ppm		
	0.4	FILL/Silty CLAY: low plasticity, brown, trace rootlets, w~PL, (possibly former topsoil)		E	0.4 0.5		PID<5ppm		
45	1								1
				E	1.4 1.5		PID<5ppm		
44	2								2
	2.0	Pit discontinued at 2.0m - Limit of excavation							
43	3								3
42	4								4

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.1 AHD
EASTING: 295831
NORTHING: 6251268

PIT No: TP13
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0			E	0.0		PID<5ppm		
		FILL/CLAY: low plasticity, brown, with silt, trace grass roots and rootlets, w<PL, (possibly former topsoil)			0.1				
	0.3	FILL/Silty CLAY: low plasticity, light brown, trace rootlets and piece of cloth, w~PL, (possibly former topsoil)		E	0.4		PID<5ppm		
					0.5				
45	1			E	1.0		PID<5ppm		1
					1.2				
44	2			E	2.0		PID<5ppm		2
					2.2				
	2.5	Pit discontinued at 2.5m - Limit of excavation							
43	3								3
42	4								4

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.8 AHD
EASTING: 295843
NORTHING: 6251273

PIT No: TP14
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0	FILL/CLAY: low plasticity, dark brown, with silt, trace grass roots and rootlets, w~PL, (possibly former topsoil)		E	0.0 0.1		PID<5ppm		
	0.3	FILL/CLAY: low plasticity, dark grey clay, trace silt and rootlets, w~PL, (possibly former topsoil)		E	0.4 0.5		PID<5ppm		
45	1			E	1.4 1.5		PID<5ppm		
	2.0	Pit discontinued at 2.0m - Limit of excavation							
44	2								
43	3								
42	4								

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 46.4 AHD
EASTING: 295848
NORTHING: 6251274

PIT No: TP15
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
46	0.0	FILL/Sandy CLAY: low plasticity, dark brown, fine to coarse sand, trace silt, grass roots, rootlets and shell fragments, w~PL		E	0.0 0.1		PID<5ppm		
	0.3	FILL/Clayey SAND: fine to coarse, brown, trace silt, rootlets and shell fragments, moist		E*	0.4 0.5		PID<5ppm		
45	1			E	1.5 1.7		PID<5ppm		
	2.0	Pit discontinued at 2.0m - Limit of excavation							
44	2								
43	3								
42	4								

Dynamic Penetrometer Test (blows per mm): 5, 10, 15, 20

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile. *Field replicate BD3/20211214 taken from 0.4-0.5m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 45.7 AHD
EASTING: 295852
NORTHING: 6251185

PIT No: TP16
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
45	0.0	FILL/Clayey GRAVEL: medium to coarse shale and ironstone, grey mottled brown, trace shale cobbles and rootlets, dry		E	0.0		PID<5ppm		
	0.2				0.2				
	0.4			E	0.4		PID<5ppm		
	0.5				0.5				
	0.7	CLAY CI: medium plasticity, brown, trace ironstone gravel, w<PL, stiff to very stiff, residual, (possibly alluvial)		E	0.7		PID<5ppm		
	0.9				0.9				
	1.0	Pit discontinued at 1.0m - Target depth reached							

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.5 AHD
EASTING: 295858
NORTHING: 6251205

PIT No: TP17
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0.0	FILL/CLAY: low plasticity, brown, with silt, trace grass roots and rootlets, w<PL, (possibly former topsoil)		E	0.0		PID<5ppm		
	0.2				0.2				
	0.8	At 0.8m: piece of plastic		E	0.8		PID<5ppm		
	1.0				1.0				
46	1.3	FILL/CLAY: low plasticity, light grey and brown, with silt, trace rootlets, w~PL, (possibly former topsoil)							
	1.6			E	1.6		PID<5ppm		
	1.8				1.8				
	2.2	Below 2.0m: increasing silt to form silty clay		E	2.2		PID<5ppm		
45	2.4	Pit discontinued at 2.4m - Limit of excavation			2.4				
44									
43									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.6 AHD
EASTING: 295867
NORTHING: 6251181

PIT No: TP18
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0.0	FILL/CLAY: low plasticity, pale grey and brown, with silt, trace grass roots and rootlets, w<PL, (possibly former topsoil)		E*	0.0		PID<5ppm		
					0.2				
	0.3	FILL/Silty CLAY: low plasticity, brown, trace rootlets, w~PL, (possibly former topsoil)							
	1			E	0.7		PID<5ppm		1
					0.9				
47				E	1.5		PID<5ppm		
					1.7				
	2			E	2.0		PID<5ppm		2
					2.2				
	2.4	Pit discontinued at 2.4m - Limit of excavation							
46	3								3
45	4								4
44									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile. *Field replicate BD4/20211214 taken from 0.0-0.2m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 47.8 AHD
EASTING: 295892
NORTHING: 6251140

PIT No: TP19
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
47	0	FILL/Silty CLAY: low plasticity, brown, trace grass roots and rootlets, w~PL, (possibly former topsoil)		E	0.0		PID<5ppm		
					0.2				
				E	0.7		PID<5ppm		
	1				0.9				1
	1.6	FILL/CLAY: low plasticity, grey, with silt, trace rootlets, w~PL, (possibly former topsoil)		E	1.7		PID<5ppm		
46	1.9	CLAY CL-CI: low to medium plasticity, brown, trace fine to medium ironstone gravel, w~PL, stiff to very stiff, residual (possibly alluvial)			1.9				
	2			E	2.0		PID<5ppm		2
	2.2	Pit discontinued at 2.2m - Target depth reached			2.2				
45	3								3
44	4								4
43									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 48.9 AHD
EASTING: 295942
NORTHING: 6251132

PIT No: TP20
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
48	0.0	FILL/CLAY: low plasticity, grey and brown, with silt, trace grass roots and rootlets, w~PL, (possibly former topsoil)		E	0.0		PID<5ppm		
					0.2				
				E	0.6		PID<5ppm		
	0.8	Silty CLAY CL: low plasticity, brown, trace rootlets, w~PL			0.8				
	1			E*	1.0		PID<5ppm		1
					1.2				
47				E	1.7		PID<5ppm		
	2				1.9				2
	2.0	Pit discontinued at 2.0m - Target depth reached							
46	3								3
45	4								4
44									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Test pit excavated into stockpile. *Field replicate BD5/20211214 taken from 1.0-1.2m.

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

TEST PIT LOG

CLIENT: ESR Australia
PROJECT: Proposed Industrial Development
LOCATION: 1030 Mamre Road, Kemps Creek

SURFACE LEVEL: 55.2 AHD
EASTING: 296190
NORTHING: 6251199

PIT No: TP21
PROJECT No: 211619.00
DATE: 14/12/2021
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Dynamic Penetrometer Test (blows per mm)
55	0.0	TOPSOIL/CLAY: low plasticity, dark grey and dark brown, with silt, trace grass roots and rootlets, w~PL		E	0.0		PID<5ppm		
					0.2				
	0.3	CLAY CL: low plasticity, dark brown to brown, trace silt and rootlets, w~PL, alluvial			0.4		PID<5ppm		
				E					
					0.6				
	1								1
					1.0		PID<5ppm		
54				E					
	1.2	Pit discontinued at 1.2m - Target depth reached			1.2				
	2								2
53									
	3								3
52									
	4								4
51									

RIG: 3.5T Excavator with 450mm bucket

LOGGED: DIH

SURVEY DATUM: MGA94

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Appendix H

Site Assessment Criteria

Appendix H
Site Assessment Criteria
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

H1.0 Introduction

H1.1 Guidelines

The following key guidelines were consulted for deriving the site assessment criteria (SAC):

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013).
- CRC CARE *Health screening levels for petroleum hydrocarbons in soil and groundwater* (CRC CARE, 2011).
- CRC CARE. *Risk-based remediation and management guidance for benzo(a)pyrene* (CRC CARE, 2017).

H1.2 General

The SAC applied for the current investigation are informed by the CSM which identified human and environmental receptors to potential contamination at the site. Analytical results are assessed (as a Tier 1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The following inputs are relevant to the selection and/or derivation of the SAC:

- Land use: commercial / industrial. Corresponding to land use category 'D', commercial / industrial such as shops, offices, factories and industrial sites.
- Soil type: clay.

H2.0 Soils

H2.1 Health Investigation and Screening Levels

The generic health investigation levels (HIL) and health screening levels (HSL) are considered to be appropriate for the assessment of human health risk via all relevant pathways of exposure associated with contamination at the site. The adopted soil HIL and HSL for the contaminants of concern are in Table 1 and Table 2.

Table 1: Health Investigation Levels (mg/kg)

Contaminant	HIL-D
Metals	
Arsenic	3000
Cadmium	900
Chromium (VI)	3600
Copper	240 000
Lead	1500
Mercury (inorganic)	730
Nickel	6000
Zinc	400 000
PAH	
B(a)P TEQ	40
Total PAH	4000
Phenols	
Phenol	240 000
Pentachlorophenol	660
OCP	
DDT+DDE+DDD	3600
Aldrin and dieldrin	45
Chlordane	530
Endosulfan	2000
Endrin	100
Heptachlor	50
HCB	80
Methoxychlor	2500
OPP	
Chlorpyrifos	2000
PCB	
PCB	7

Table 2: Health Screening Levels (mg/kg)

Contaminant	HSL-D
CLAY	**0 m to <1 m**
Benzene	4
Toluene	NL
Ethylbenzene	NL
Xylenes	NL
Naphthalene	NL
TRH F1	310
TRH F2	NL

Notes: TRH F1 is TRH C_6-C_{10} minus BTEX

TRH F2 is TRH >C_{10}-C_{16} minus naphthalene

The soil saturation concentration (Csat) is defined as the soil concentration at which the porewater phase cannot dissolve any more of an individual chemical. The soil vapour that is in equilibrium with the porewater will be at its maximum. If the derived soil HSL exceeds Csat, a soil vapour source concentration for a petroleum mixture could not exceed a level that would results in the maximum allowable vapour risk for the given scenario. For these scenarios, no HSL is presented for these chemicals and the HSL is shown as 'not limiting' or 'NL'

The HSL for direct contact derived from CRC CARE (2011) are in Table 3.

Table 3: Health Screening Levels for Direct Contact (mg/kg)

Contaminant	DC HSL-D	DC HSL-IMW
Benzene	430	1100
Toluene	99 000	120 000
Ethylbenzene	27 000	85 000
Xylenes	81 000	130 000
Naphthalene	11 000	29 000
TRH F1	26 000	82 000
TRH F2	20 000	62 000
TRH F3	27 000	85 000
TRH F4	38 000	120 000

Notes: TRH F1 is TRH C_6-C_{10} minus BTEX

TRH F2 is TRH >C_{10}-C_{16} minus naphthalene

IMW intrusive maintenance worker

H2.2 Asbestos in Soil

The HSL for asbestos in soil are based on likely exposure levels for different scenarios published in NEPC (2013) for the following forms of asbestos:

- Bonded asbestos containing material (ACM); and
- Fibrous asbestos and asbestos fines (FA and AF).

The HSL are in Table 4.

Table 4: Health Screening Levels for Asbestos

Form of Asbestos	HSL-D
ACM	0.05%
FA and AF	0.001%
FA and AF and ACM	No visible asbestos for surface soil *

Notes: Surface soils defined as top 100 mm.
* Based on site observations at the sampling points and the analytical results of surface samples.

H2.3 Ecological Investigation Levels

Ecological investigation levels (EIL) and added contaminant limits (ACL), where appropriate, have been derived in NEPC (2013) for arsenic, copper, chromium (III), nickel, lead, zinc, DDT and naphthalene. The adopted EIL, derived using the interactive (excel) calculation spreadsheet on the NEPM toolbox website are shown in Table 6, with inputs into their derivation shown in Table 5.

Table 5: Inputs to the Derivation of the Ecological Investigation Levels

Variable	Input	Rationale
Age of contaminants	"Aged" (>2 years)	
pH	6.6	Measured average from current and previous investigations (DP 2021 and 2022).
CEC	13.2 $cmol_c/kg$	Measured average from current and previous investigations (DP (2021) and DP (2022)).
Clay content	60%	Assumed based on observed lithology
Traffic volumes	High	
State / Territory	NSW	

Table 6: Ecological Investigation Levels (mg/kg)

Contaminant	EIL-D
Metals	
Arsenic	160
Copper	320
Nickel	350
Chromium III	1200
Lead	1800
Zinc	900
PAH	
Naphthalene	370
OCP	
DDT	640

H2.4 Ecological Screening Levels

Ecological screening levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. The adopted ESL are shown in Table 7.

Table 7: Ecological Screening Levels (mg/kg)

Contaminant	Soil Type	ESL-D
Benzene	Fine	95
Toluene	Fine	135
Ethylbenzene	Fine	185
Xylenes	Fine	95
TRH F1	Coarse/ Fine	215*
TRH F2	Coarse/ Fine	170*
TRH F3	Fine	2500
TRH F4	Fine	6600
B(a)P	Fine	172#

Notes: ESL are of low reliability except where indicated by * which indicates that the ESL is of moderate reliability

TRH F1 is TRH C_6-C_{10} minus BTEX

TRH F2 is TRH >C_{10}-C_{16} including naphthalene

ESL screening criteria for benzo(a)pyrene based on high reliability data from CRC Care Technical Report No. 39 Risk-based management and remediation guidance for benzo(a)pyrene.

H2.5 Management Limits

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

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

The adopted management limits are in Table 8.

Table 8: Management Limits (mg/kg)

Contaminant	Soil Type	ML-D
TRH F1	Fine	800
TRH F2	Fine	1000
TRH F3	Fine	5000
TRH F4	Fine	10 000

Notes: TRH F1 is TRH C_6-C_{10} including BTEX
TRH F2 is TRH >C_{10}-C_{16} including naphthalene

H3.0 References

CRC CARE. (2011). *Health screening levels for petroleum hydrocarbons in soil and groundwater.* Parts 1 to 3, Technical Report No. 10: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

CRC CARE. (2017). *Risk-based management and remediation guidance for benzo(a)pyrene.* Technical Report No. 39: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

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Appendix I

Summary Results Tables

Appendix I1

Table I1: Summary of Laboratory Results for Site Suitability

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Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH								Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
Previous Investigation (DP, 2021) - 1050-1064 Mamre Road																																						
TP2	0.1 - 0.2 m	Natural	7/09/2021	11	<0.4	22	14	25	<0.1	9	27	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP4	0.1 - 0.2 m	Natural	7/09/2021	10	<0.4	19	12	21	<0.1	8	30	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP6	0.1 - 0.2 m	Fill	7/09/2021	7	<0.4	13	16	15	<0.1	7	28	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP6	0.5 - 0.6 m	Natural	7/09/2021	5	<0.4	10	18	9	<0.1	4	20	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP8	0.1 - 0.2 m	Natural	7/09/2021	6	<0.4	17	30	17	<0.1	19	52	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP8	0.5 - 0.6 m	Natural	7/09/2021	5	<0.4	19	26	16	<0.1	19	49	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP9	0.5 - 0.6 m	Fill	7/09/2021	11	<0.4	18	22	16	<0.1	16	40	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP10	0.1 - 0.2 m	Natural	7/09/2021	5	<0.4	17	33	14	<0.1	13	32	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP10	0.5 - 0.6 m	Natural	7/09/2021	8	<0.4	19	33	18	<0.1	20	53	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP12	0.1 - 0.2 m	Natural	7/09/2021	7	<0.4	13	15	15	<0.1	9	27	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP12	0.5 - 0.6 m	Natural	7/09/2021	6	<0.4	14	38	16	<0.1	17	51	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
BD2	0.5-0.6 m	Natural	7/09/2021	6	<0.4	13	34	15	<0.1	15	45	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
BH14	0.1 - 0.2 m	Natural	7/09/2021	10	<0.4	19	24	19	<0.1	6	24	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
BH14	0.4 - 0.5 m	Natural	7/09/2021	10	<0.4	18	23	13	<0.1	5	21	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP18	0.1 - 0.2 m	Natural	7/09/2021	9	<0.4	20	13	25	<0.1	6	23	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP18	0.5 - 0.6 m	Natural	7/09/2021	6	<0.4	19	21	12	<0.1	7	20	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP19	0.1 - 0.2 m	Natural	7/09/2021	10	<0.4	19	19	20	<0.1	6	22	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP19	0.5 - 0.6 m	Natural	7/09/2021	9	<0.4	18	23	15	<0.1	5	21	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
BD5	0.5-0.6 m	Natural	7/09/2021	9	<0.4	15	17	11	<0.1	4	16	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP20	0.1 - 0.2 m	Natural	7/09/2021	9	<0.4	20	16	15	<0.1	8	15	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP20	0.5 - 0.6 m	Natural	7/09/2021	7	<0.4	19	24	14	<0.1	6	17	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS1	0-0.1 m	Fill	6/09/2021	<4	<0.4	14	8	12	<0.1	16	43	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS2	0-0.1 m	Fill	6/09/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS3	0-0.1 m	Fill	6/09/2021	<4	<0.4	14	8	11	<0.1	13	33	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS8	0-0.1 m	Fill	6/09/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS8	0-0.1 m	Fill	6/09/2021	<4	<0.4	10	9	120	0.1	2	46	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	0.2	<0.5	1.3	<5	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS9	0-0.1 m	Fill	6/09/2021	<4	<0.4	8	12	180	0.1	1	62	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<1	0.2	<0.5	1.2	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS10	0-0.1 m	Fill	7/09/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
SS11	0-0.1 m	Fill	7/09/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
Previous Investigation (DP, 2022) - 1030-1048 Mamre Road																																						
TP2	0 - 0.2 m	Natural	13/12/2021	8	<0.4	18	19	16	<0.1	7	24	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP2	0.4 - 0.5 m	Natural	13/12/2021	11	<0.4	23	22	17	<0.1	7	26	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							
TP3	0 - 0.2 m	Natural	13/12/2021	10	<0.4	21	21	12	<0.1	7	16	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -							

Douglas Partners
Geotechnics / Environment / Groundwater

Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH									Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
TP4	0 - 0.2 m	Natural	13/12/2021	**6**	<0.4	**21**	**30**	**15**	<0.1	**14**	**26**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP4	0.4 - 0.5 m	Natural	13/12/2021	**5**	<0.4	**14**	**35**	**14**	<0.1	**15**	**53**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP5	0 - 0.2 m	Natural	13/12/2021	**6**	<0.4	**16**	**11**	**18**	<0.1	**7**	**14**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP5	0.4 - 0.5 m	Natural	13/12/2021	**6**	<0.4	**20**	**27**	**16**	<0.1	**11**	**25**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP6	0 - 0.1 m	Natural	13/12/2021	**6**	<0.4	**14**	**21**	**12**	<0.1	**8**	**26**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
BD1/20211213	0 - 0.1 m	Natural	13/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	<10	<50	NT	<10	<50	<100	NT	<100	NT	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP7	0 - 0.1 m	Natural	14/12/2021	**10**	<0.4	**18**	**11**	**24**	<0.1	**7**	**15**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<PQL	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP7	0.4 - 0.5 m	Natural	14/12/2021	**6**	<0.4	**16**	**27**	**19**	<0.1	**14**	**36**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP8	0 - 0.2 m	Natural	14/12/2021	**6**	<0.4	**12**	**16**	**21**	<0.1	**10**	**33**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP8	0.4 - 0.5 m	Natural	14/12/2021	**5**	<0.4	**17**	**28**	**13**	<0.1	**9**	**34**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP9	0 - 0.1 m	Natural	14/12/2021	**7**	<0.4	**16**	**15**	**20**	<0.1	**12**	**26**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP10	0 - 0.2 m	Natural	14/12/2021	**6**	<0.4	**16**	**21**	**14**	<0.1	**8**	**22**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP10	0.4 - 0.5 m	Natural	14/12/2021	**13**	<0.4	**20**	**33**	**34**	<0.1	**18**	**47**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP11	0 - 0.1 m	Natural	14/12/2021	**5**	<0.4	**15**	**17**	**14**	<0.1	**7**	**18**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP12	0 - 0.1 m	Fill (SP1)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP12	0.4 - 0.5 m	Fill (SP1)	14/12/2021	**7**	<0.4	**15**	**15**	**18**	<0.1	**6**	**21**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<PQL	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP13	0 - 0.1 m	Fill (SP1)	14/12/2021	**8**	<0.4	**17**	**16**	**20**	<0.1	**7**	**34**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP13	0.4 - 0.5 m	Fill (SP1)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP13	1 - 1.2 m	Fill (SP1)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP14	0 - 0.1 m	Fill (SP1)	14/12/2021	**9**	<0.4	**17**	**14**	**18**	<0.1	**6**	**21**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP14	0.4 - 0.5 m	Fill (SP1)	14/12/2021	**8**	<0.4	**15**	**17**	**19**	<0.1	**8**	**29**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP15	0 - 0.1 m	Fill (SP4)	14/12/2021	**6**	<0.4	**36**	**28**	**40**	0.1	**7**	**170**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	0.2	<0.5	1.2	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP15	0.4 - 0.5 m	Fill (SP4)	14/12/2021	**7**	<0.4	**40**	**27**	**42**	<0.1	**7**	**170**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	0.2	<0.5	1.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
BD3/20211214	0.4 - 0.5 m	Fill (SP4)	14/12/2021	**6**	<0.4	**33**	**19**	**29**	<0.1	**6**	**91**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	0.2	<0.5	1.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP16	0 - 0.2 m	Fill	14/12/2021	**6**	<0.4	**4**	**18**	**7**	<0.1	**3**	**23**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP16	0.7 - 0.9 m	Natural	14/12/2021	**9**	<0.4	**16**	**24**	**22**	<0.1	**12**	**35**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP17	0 - 0.2 m	Fill (SP2)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP17	0.8 - 1 m	Fill (SP2)	14/12/2021	**9**	<0.4	**19**	**11**	**24**	<0.1	**7**	**20**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP17	1.6 - 1.8 m	Fill (SP2)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP17	2.2 - 2.4 m	Fill (SP2)	14/12/2021	**8**	<0.4	**16**	**14**	**23**	<0.1	**7**	**21**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	NL 215	NL -	- 2500	- 2500	- 6600	- 6600	9 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP18	0 - 0.2 m	Fill (SP2)	14/12/2021	**9**	<0.4	**19**	**13**	**21**	<0.1	**7**	**22**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
BD4/20211214	0 - 0.2 m	Fill (SP2)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	<10	<50	NT	<10	<50	<100	NT	<100	NT	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								
TP18	0.7 - 0.9 m	Fill (SP2)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	2500 -	2000 -	7 -								

Douglas Partners
Geotechnics / Environment / Groundwater

Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH								Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
TP18	1.5 - 1.7 m	Fill (SP2)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	480	215	NL	-	-	2500	-	2500	-	6600	-	6600	6	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP18	2 - 2.2 m	Fill (SP2)	14/12/2021	9	<0.4	17	12	20	<0.1	7	23	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	<PQL	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	NL	215	NL	-	-	2500	-	2500	-	6600	-	6600	9	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP19	0 - 0.2 m	Fill (SP2)	14/12/2021	8	<0.4	19	12	20	<0.1	8	20	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP19	0.7 - 0.9 m	Fill (SP2)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP19	1.7 - 1.9 m	Fill (SP2)	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	480	215	NL	-	-	2500	-	2500	-	6600	-	6600	6	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP19	2 - 2.2 m	Natural	14/12/2021	7	<0.4	18	18	18	<0.1	8	21	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	NL	215	NL	-	-	2500	-	2500	-	6600	-	6600	9	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP20	0 - 0.2 m	Fill (SP2)	14/12/2021	9	<0.4	19	14	25	<0.1	8	31	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP20	1 - 1.2 m	Natural	14/12/2021	9	<0.4	18	12	22	<0.1	7	23	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	480	215	NL	-	-	2500	-	2500	-	6600	-	6600	6	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
BD5/20211214	1 - 1.2 m	Natural	14/12/2021	10	<0.4	19	14	24	<0.1	7	26	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP21	0 - 0.2 m	Fill	14/12/2021	10	<0.4	19	18	21	<0.1	8	29	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
SS1	0 - 0.1 m	Fill (SP9)	14/12/2021	5	<0.4	16	15	16	<0.1	10	33	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
SS2	0 - 0.1 m	Fill (SP9)	14/12/2021	5	<0.4	17	20	15	<0.1	15	39	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	**AD**	NAD	**0.0412**	**0.0033**	
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
SS3	0 - 0.1 m	Fill (SP13)	14/12/2021	<4	<0.4	7	22	6	<0.1	6	29	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
Current Investigation																																								
TP101	0.1 - 0.2 m	Fill	18/07/2022	7	<0.4	17	15	23	<0.1	8	25	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	2500	-	2000	-	7	-								
TP102	0.1 - 0.2 m	Fill	18/07/2022	7	<0.4	17	17	22	<0.1	7	20	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP102	0.2 - 0.3 m	Natural	18/07/2022	7	<0.4	13	31	23	<0.1	20	56	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP103	0 - 0.1 m	Natural	18/07/2022	5	<0.4	12	21	12	<0.1	8	25	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP104	0.1 - 0.2 m	Fill	18/07/2022	7	<0.4	18	12	21	<0.1	6	18	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP105	0 - 0.1 m	Fill	18/07/2022	9	<0.4	20	13	27	<0.1	7	20	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP106	0 - 0.2 m	Fill	18/07/2022	8	<0.4	19	17	22	<0.1	8	26	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP106	0.2 - 0.3 m	Natural	18/07/2022	6	<0.4	17	22	15	<0.1	8	25	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP107	0 - 0.2 m	Fill (SP2)	18/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP107	0.5 - 0.7 m	Fill (SP2)	18/07/2022	5	<0.4	16	9	18	<0.1	6	13	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP107	1 - 1.2 m	Natural	18/07/2022	6	<0.4	11	24	17	<0.1	13	47	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	480	215	NL	-	-	2500	-	2500	-	6600	-	6600	6	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP108	0 - 0.2 m	Fill	18/07/2022	10	<0.4	21	12	26	<0.1	8	23	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP109	0 - 0.2 m	Fill	18/07/2022	8	<0.4	18	13	23	<0.1	6	20	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP109	0.7 - 0.9 m	Natural	18/07/2022	7	<0.4	18	24	19	<0.1	10	30	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP110	0.5 - 0.7 m	Fill (SP1)	18/07/2022	8	<0.4	16	16	22	<0.1	9	29	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP110	1 - 1.2 m	Fill (SP1)	18/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	480	215	NL	-	-	2500	-	2500	-	6600	-	6600	6	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP110	1.3 - 1.5 m	Natural	18/07/2022	7	<0.4	13	22	16	<0.1	9	32	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	480	215	NL	-	-	2500	-	2500	-	6600	-	6600	6	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP111	0 - 0.2 m	Fill (SP3)	18/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								
TP111	0.5 - 0.7 m	Fill (SP3)	18/07/2022	6	<0.4	36	22	40	<0.1	7	120	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.2**	<0.5	**1.8**	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								

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Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH									Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
TP111	0.9 - 1.1 m	Natural	18/07/2022	**6**	<0.4	**13**	**25**	**18**	<0.1	**12**	**34**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								

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Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH									Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
TP126	0.1 - 0.2 m	Fill (SP11)	19/07/2022	**4**	<0.4	**16**	**56**	**44**	<0.1	**13**	**430**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP126	0.9 - 1 m	Fill (SP11)	19/07/2022	**5**	**0.9**	**23**	**58**	**68**	<0.1	**15**	**250**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP126	1 - 1.1 m	Natural	19/07/2022	<4	<0.4	**15**	**21**	**10**	<0.1	**8**	**19**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
BD4/20220719	1 - 1.1 m	Natural	19/07/2022	**5**	<0.4	**15**	**20**	**11**	<0.1	**9**	**17**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP126A	0.5 - 0.6 m	Fill (SP11)	19/07/2022	**5**	<0.4	**15**	**42**	**49**	**0.1**	**10**	**85**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP126A	0.8 - 0.9 m	Fill (SP11)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP127	0.4 - 0.5 m	Fill (SP10)	19/07/2022	**6**	<0.4	**18**	**1900**	**77**	<0.1	**17**	**250**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP127	0.9 - 1 m	Fill (SP10)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP127	1 - 1.1 m	Natural	19/07/2022	<4	<0.4	**16**	**19**	**13**	<0.1	**10**	**17**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP128	0.1 - 0.2 m	Fill (SP10)	19/07/2022	**5**	<0.4	**19**	**57**	**42**	<0.1	**16**	**180**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP128	0.4 - 0.5 m	Fill (SP10)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP128	1 - 1.1 m	Fill (SP10)	19/07/2022	**5**	<0.4	**17**	**88**	**75**	<0.1	**18**	**280**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP129	0.1 - 0.2 m	Fill (SP8)	19/07/2022	**6**	**0.4**	**19**	**120**	**70**	<0.1	**16**	**1200**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP129	0.4 - 0.5 m	Fill (SP8)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP129	0.9 - 1 m	Fill (SP8)	19/07/2022	**6**	<0.4	**19**	**29**	**37**	<0.1	**11**	**61**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP129	1.4 - 1.5 m	Fill (SP8)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP129	1.5 - 1.6 m	Natural	19/07/2022	**5**	<0.4	**16**	**22**	**14**	<0.1	**11**	**22**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
BD5/20220719	1.5 - 1.6 m	Natural	19/07/2022	**7**	<1	**23**	**26**	**14**	<0.1	**13**	**28**	<10	<50	NT	<10	<50	<100	NT	<100	NT	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP130	0.1 - 0.2 m	Fill (SP7)	19/07/2022	<4	<0.4	**22**	**21**	**18**	<0.1	**10**	**32**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP130	0.9 - 1 m	Fill (SP7)	19/07/2022	<4	<0.4	**28**	**24**	**26**	<0.1	**11**	**35**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP130	1.2 - 1.3 m	Natural	19/07/2022	**6**	<0.4	**17**	**22**	**15**	<0.1	**10**	**26**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131	0.1 - 0.2 m	Fill (SP4)	19/07/2022	**5**	<0.4	**30**	**17**	**28**	<0.1	**6**	**89**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.2**	<0.5	**1.5**	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131	0.9 - 1 m	Fill (SP4)	19/07/2022	**5**	<0.4	**33**	**23**	**36**	**0.1**	**7**	**110**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.3**	<0.5	**2.1**	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131	1.9 - 2 m	Fill (SP4)	19/07/2022	**5**	<0.4	**30**	**18**	**30**	<0.1	**5**	**86**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.2**	<0.5	**2.4**	NT	NT	NT	NT	NT	NT	NAD	**1.4503**	**1.3233**	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131	2.4 - 2.5 m	Fill (SP4)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	NL 215	NL -	- 2500	- 2500	- 6600	- 6600	9 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131	2.5 - 2.6 m	Fill (SP4)	19/07/2022	**5**	<0.4	**29**	**17**	**27**	<0.1	**8**	**85**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	**0.2**	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	NL 215	NL -	- 2500	- 2500	- 6600	- 6600	9 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131	3 - 3.1 m	Natural	19/07/2022	**8**	<0.4	**16**	**29**	**23**	<0.1	**12**	**40**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	NL 215	NL -	- 2500	- 2500	- 6600	- 6600	9 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
BD6/20220719	3 - 3.1 m	Natural	19/07/2022	**8**	<1	**22**	**26**	**18**	<0.1	**14**	**31**	<10	<50	NT	<10	<50	<100	NT	<100	NT	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	NL 215	NL -	- 2500	- 2500	- 6600	- 6600	9 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131A	0.4 - 0.5 m	Fill (SP4)	19/07/2022	**5**	<0.4	**32**	**21**	**34**	<0.1	**8**	**130**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.2**	<0.5	**2.8**	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP131A	1.4 - 1.5 m	Fill (SP4)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP132	0.1 - 0.2 m	Fill (SP3)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP132	0.4 - 0.5 m	Fill (SP3)	19/07/2022	**9**	<0.4	**40**	**28**	**48**	**0.2**	**9**	**140**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.2**	<0.5	**2.3**	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP132	1.4 - 1.5 m	Fill (SP3)	19/07/2022	**9**	<0.4	**36**	**25**	**42**	**0.1**	**7**	**99**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.3**	<0.5	**4.4**	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								

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Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH								Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
TP132	1.7 - 1.8 m	Fill (SP3)	19/07/2022	**7**	<0.4	**17**	**14**	**21**	<0.1	**5**	**22**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	480	215	NL	-	-	2500	-	2500	-	6600	-	6600	6	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								

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Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH									Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
BD1/20220720	1.4 - 1.5 m	Natural	20/07/2022	**6**	<0.4	**12**	**23**	**12**	<0.1	**6**	**27**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								

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Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH									Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
TP161	0.1 - 0.2 m	Fill	20/07/2022	**4**	<0.4	**12**	**20**	**13**	<0.1	**8**	**24**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	<5	<0.1	<0.1	<0.1	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000	160	900	-	3600	1200	240000	320	1500	1800	730	-	6000	350	400000	900	-	-	-	170	-	170	310	215	NL	-	-	2500	-	2500	-	6600	-	6600	4	95	NL	135	NL	185	NL	95	NL	370	-	172	40	-	4000	-	660	-	45	640	2000	-	7	-								

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Table I1: Summary of Laboratory Results for Site Suitability

				Metals								TRH									BTEX				PAH									Asbestos					
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	TRH >C10-C16 (SGC)[f]	F1 (C6-C10 less BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F3 (>C16-C34) (SGC)	F4 (>C34-C40)	F4 (>C34-C40) (SGC)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs	Phenol	All OCP [c] [d]	OPP [e]	Total PCB	Herbicides	Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL	4	0.4	1	1	1	0.1	1	1	25	50	50	25	50	100	100	100	100	0.2	0.5	1	1	0.1	0.05	0.5	0.05	5	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Matrix	Sample Date	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	-	-	g/kg	g	g	%(w/w)
TP175	0.1 - 0.2 m	Fill (SP14)	27/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP175	0.6 - 0.7 m	Fill (SP14)	27/07/2022	**12**	<0.4	**25**	**19**	**26**	<0.1	**12**	**52**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP176	0.1 - 0.2 m	Fill (SP15)	27/07/2022	**5**	<0.4	**18**	**13**	**19**	<0.1	**6**	**52**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP176	0.6 - 0.7 m	Fill (SP15)	27/07/2022	**4**	<0.4	**19**	**9**	**15**	<0.1	**5**	**29**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	**0.07**	<0.5	**1.1**	<5	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
TP176	1.1 - 1.2 m	Natural	27/07/2022	**6**	<0.4	**16**	**27**	**15**	<0.1	**11**	**29**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	480 215	NL -	- 2500	- 2500	- 6600	- 6600	6 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
BD3/20220727	1.1 - 1.2 m	Natural	27/07/2022	**6**	<0.4	**14**	**25**	**14**	<0.1	**10**	**30**	<25	<50	NT	<25	<50	<100	NT	<100	NT	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM1	0.9 - 1.0 m	Material (TP125 / SP12)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM2	0.4 - 0.5 m	Material (TP127 / SP10)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM3	0.4 - 0.5 m	Material (TP128 / SP10)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM4	0.9 - 1.0 m	Material (TP125 / SP12)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM5	0.9 - 1.0 m	Material (TP126 / SP11)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM6	1.4 - 1.5 m	Material (TP131 / SP4)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM7	0.9 - 1.0 m	Material (TP132 / SP3)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM8	Surface	Material (TP160)	19/07/2022	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								
ACM9	Surface	Material	21-07-22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NT	NT	NT	NT
				3000 160	900 -	3600 1200	240000 320	1500 1800	730 -	6000 350	400000 900	- -	- 170	- 170	310 215	NL -	- 2500	- 2500	- 6600	- 6600	4 95	NL 135	NL 185	NL 95	NL 370	- 172	40 -	4000 -	660 -	45 640	2000 -	7 -								

Lab result

HIL/HSL value EIL/ESL value

HIL/HSL exceedance EIL/ESL exceedance HIL/HSL and EIL/ESL exceedance ML exceedance ML and HIL/HSL or EIL/ESL exceedance

Indicates that asbestos has been detected by the lab, refer to the lab report **Blue** = DC exceedance HSL 0-<1 Exceedance

Bold = Lab detections NT = Not tested - = No HIL/HSL/EIL/ESL (as applicable) or Not applicable NL = Non limiting AD = Asbestos detected NAD = No Asbestos detected

HIL = Health investigation level HSL = Health screening level (excluding DC) EIL = Ecological investigation level ESL = Ecological screening level ML = Management Limit DC = Direct Contact HSL

Notes:

a	QA/QC replicate of QA/QC replicate of sample listed directly below the primary sample
b	Reported naphthal Reported naphthalene laboratory result obtained from BTEXN suite
c	HIL criteria applies HIL criteria applies to aldrin & dieldrin only
d	EIL criteria applies EIL criteria applies to DDT only
e	HIL criteria applies HIL criteria applies to chlorpyriphos only
f	Silica Gel Cleanup Silica Gel Cleanup
ACM	ACM samples are material samples.
Triplicate	Where lab triplicate has been analysed and reported for QA purposes, the higher respective metal concentration is summarised in this table.
Fill	Fill matrix also including material logged as topsoil

Site Assessment Criteria (SAC):

Refer to the SAC section of report for information of SAC sources and rationale. Summary information as follows:

SAC based on generic land use thresholds for Commercial/ industrial D

HIL D	Commercial / Industrial (NEPC, 2013)
HSL D	Commercial / Industrial (vapour intrusion) (NEPC, 2013)
DC HSL D	Direct contact HSL D Commercial/Industrial (direct contact) (CRC CARE, 2011)
EIL/ESL C/Ind	Commercial and Industrial (NEPC, 2013)
ML C/Ind	Commercial and Industrial (NEPC, 2013)

Appendix I2

Table I2: Summary of Laboratory Results
for Preliminary Waste Classification

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Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
Previous Investigation (DP, 2021) - 1050-1064 Mamre Road																																			
TP2	0.1 - 0.2 m	7/09/2021	Natrual	**11**	<0.4	**22**	**14**	**25**	NT	<0.1	**9**	NT	**27**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NT	NT	NT	NT
TP4	0.1 - 0.2 m	7/09/2021	Natrual	**10**	<0.4	**19**	**12**	**21**	NT	<0.1	**8**	NT	**30**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NT	NT	NT	NT
TP6	0.1 - 0.2 m	7/09/2021	Fill	**7**	<0.4	**13**	**16**	**15**	NT	<0.1	**7**	NT	**28**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NT	NT	NT	NT
TP6	0.5 - 0.6 m	7/09/2021	Natrual	**5**	<0.4	**10**	**18**	**9**	NT	<0.1	**4**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP8	0.1 - 0.2 m	7/09/2021	Natrual	**6**	<0.4	**17**	**30**	**17**	NT	<0.1	**19**	NT	**52**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP8	0.5 - 0.6 m	7/09/2021	Natrual	**5**	<0.4	**19**	**26**	**16**	NT	<0.1	**19**	NT	**49**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NT	NT	NT	NT
TP9	0.5 - 0.6 m	7/09/2021	Fill	**11**	<0.4	**18**	**22**	**16**	NT	<0.1	**16**	NT	**40**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NT	NT	NT	NT
TP10	0.1 - 0.2 m	7/09/2021	Natrual	**5**	<0.4	**17**	**33**	**14**	NT	<0.1	**13**	NT	**32**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP10	0.5 - 0.6 m	7/09/2021	Natrual	**8**	<0.4	**19**	**33**	**18**	NT	<0.1	**20**	NT	**53**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP12	0.1 - 0.2 m	7/09/2021	Natrual	**7**	<0.4	**13**	**15**	**15**	NT	<0.1	**9**	NT	**27**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP12	0.5 - 0.6 m	7/09/2021	Natrual	**6**	<0.4	**14**	**38**	**16**	NT	<0.1	**17**	NT	**51**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD2	0.5 - 0.6 m	7/09/2021	Natrual	**6**	<0.4	**13**	**34**	**15**	NT	<0.1	**15**	NT	**45**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BH14	0.1 - 0.2 m	7/09/2021	Natrual	**10**	<0.4	**19**	**24**	**19**	NT	<0.1	**6**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
BH14	0.4 - 0.5 m	7/09/2021	Natrual	**10**	<0.4	**18**	**23**	**13**	NT	<0.1	**5**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP18	0.1 - 0.2 m	7/09/2021	Natrual	**9**	<0.4	**20**	**13**	**25**	NT	<0.1	**6**	NT	**23**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP18	0.5 - 0.6 m	7/09/2021	Natrual	**6**	<0.4	**19**	**21**	**12**	NT	<0.1	**7**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP19	0.1 - 0.2 m	7/09/2021	Natrual	**10**	<0.4	**19**	**19**	**20**	NT	<0.1	**6**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP19	0.5 - 0.6 m	7/09/2021	Natrual	**9**	<0.4	**18**	**23**	**15**	NT	<0.1	**5**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD5	0.5 - 0.6 m	7/09/2021	Natrual	**9**	<0.4	**15**	**17**	**11**	NT	<0.1	**4**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP20	0.1 - 0.2 m	7/09/2021	Natrual	**9**	<0.4	**20**	**16**	**15**	NT	<0.1	**8**	NT	**15**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP20	0.5 - 0.6 m	7/09/2021	Natrual	**7**	<0.4	**19**	**24**	**14**	NT	<0.1	**6**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SS1	0-0.1	6/09/2021	Fill	<4	<0.4	**14**	**8**	**12**	NT	<0.1	**16**	NT	**43**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	NAD	<0.001
SS2	0-0.1	6/09/2021	Fill	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
SS3	0-0.1	6/09/2021	Fill	<4	<0.4	**14**	**8**	**11**	NT	<0.1	**13**	NT	**33**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
SS8	0-0.1	6/09/2021	Fill	<4	<0.4	**10**	**9**	**120**	**0.2**	**0.1**	**2**	NT	**46**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	**0.2**	**1.3**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
SS9	0-0.1	6/09/2021	Fill	<4	<0.4	**8**	**12**	**180**	**0.2**	**0.1**	**1**	NT	**62**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	**0.2**	**1.2**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
SS10	0-0.1	7/09/2021	Fill	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
SS11	0-0.1	7/09/2021	Fill	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	NAD	<0.001
Previous Investigation (DP, 2022) - 1030-1048 Mamre Road																																			
TP2	0 - 0.2 m	13/12/2021	Natural	8	<0.4	18	19	16	NT	<0.1	7	NT	24	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP2	0.4 - 0.5 m	13/12/2021	Natural	11	<0.4	23	22	17	NT	<0.1	7	NT	26	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP3	0 - 0.2 m	13/12/2021	Natural	10	<0.4	21	21	12	NT	<0.1	7	NT	16	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP4	0 - 0.2 m	13/12/2021	Natural	6	<0.4	21	30	15	NT	<0.1	14	NT	26	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP4	0.4 - 0.5 m	13/12/2021	Natural	5	<0.4	14	35	14	NT	<0.1	15	NT	53	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP5	0 - 0.2 m	13/12/2021	Natural	6	<0.4	16	11	18	NT	<0.1	7	NT	14	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP5	0.4 - 0.5 m	13/12/2021	Natural	6	<0.4	20	27	16	NT	<0.1	11	NT	25	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP6	0 - 0.1 m	13/12/2021	Natural	6	<0.4	14	21	12	NT	<0.1	8	NT	26	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001

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Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
BD1/20211213	0 - 0.1 m	13/12/2021	Natural	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP7	0 - 0.1 m	14/12/2021	Natural	10	<0.4	18	11	24	NT	<0.1	7	NT	15	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<PQL	NT	NAD	NAD	NAD	NAD	<0.001
TP7	0.4 - 0.5 m	14/12/2021	Natural	6	<0.4	16	27	19	NT	<0.1	14	NT	36	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP8	0 - 0.2 m	14/12/2021	Natural	6	<0.4	12	16	21	NT	<0.1	10	NT	33	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP8	0.4 - 0.5 m	14/12/2021	Natural	5	<0.4	17	28	13	NT	<0.1	9	NT	34	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP9	0 - 0.1 m	14/12/2021	Natural	7	<0.4	16	15	20	NT	<0.1	12	NT	26	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP10	0 - 0.2 m	14/12/2021	Natural	6	<0.4	16	21	14	NT	<0.1	8	NT	22	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP10	0.4 - 0.5 m	14/12/2021	Natural	13	<0.4	20	33	34	NT	<0.1	18	NT	47	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP11	0 - 0.1 m	14/12/2021	Natural	5	<0.4	15	17	14	NT	<0.1	7	NT	18	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP12	0 - 0.1 m	14/12/2021	Fill (SP1)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP12	0.4 - 0.5 m	14/12/2021	Fill (SP1)	7	<0.4	15	15	18	NT	<0.1	6	NT	21	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<PQL	NT	NAD	NAD	NAD	NAD	<0.001
TP13	0 - 0.1 m	14/12/2021	Fill (SP1)	8	<0.4	17	16	20	NT	<0.1	7	NT	34	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP13	0.4 - 0.5 m	14/12/2021	Fill (SP1)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP13	1 - 1.2 m	14/12/2021	Fill (SP1)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP14	0 - 0.1 m	14/12/2021	Fill (SP1)	9	<0.4	17	14	18	NT	<0.1	6	NT	21	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP14	0.4 - 0.5 m	14/12/2021	Fill (SP1)	8	<0.4	15	17	19	NT	<0.1	8	NT	29	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP15	0 - 0.1 m	14/12/2021	Fill (SP4)	6	<0.4	36	28	40	NT	0.1	7	NT	170	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	0.2	1.2	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP15	0.4 - 0.5 m	14/12/2021	Fill (SP4)	7	<0.4	40	27	42	NT	<0.1	7	NT	170	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	0.2	1.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD3/20211214	0.4 - 0.5 m	14/12/2021	Fill (SP4)	6	<0.4	33	19	29	NT	<0.1	6	NT	91	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	0.2	1.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP16	0 - 0.2 m	14/12/2021	Fill	6	<0.4	4	18	7	NT	<0.1	3	NT	23	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP16	0.7 - 0.9 m	14/12/2021	Natural	9	<0.4	16	24	22	NT	<0.1	12	NT	35	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP17	0 - 0.2 m	14/12/2021	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP17	0.8 - 1 m	14/12/2021	Fill (SP2)	9	<0.4	19	11	24	NT	<0.1	7	NT	20	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP17	1.6 - 1.8 m	14/12/2021	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP17	2.2 - 2.4 m	14/12/2021	Fill (SP2)	8	<0.4	16	14	23	NT	<0.1	7	NT	21	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP18	0 - 0.2 m	14/12/2021	Fill (SP2)	9	<0.4	19	13	21	NT	<0.1	7	NT	22	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
BD4/20211214	0 - 0.2 m	14/12/2021	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP18	0.7 - 0.9 m	14/12/2021	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP18	1.5 - 1.7 m	14/12/2021	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP18	2 - 2.2 m	14/12/2021	Fill (SP2)	9	<0.4	17	12	20	NT	<0.1	7	NT	23	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	<PQL	NT	NAD	NAD	NAD	NAD	<0.001
TP19	0 - 0.2 m	14/12/2021	Fill (SP2)	8	<0.4	19	12	20	NT	<0.1	8	NT	20	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP19	0.7 - 0.9 m	14/12/2021	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP19	1.7 - 1.9 m	14/12/2021	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP19	2 - 2.2 m	14/12/2021	Natural	7	<0.4	18	18	18	NT	<0.1	8	NT	21	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP20	0 - 0.2 m	14/12/2021	Fill (SP2)	9	<0.4	19	14	25	NT	<0.1	8	NT	31	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP20	1 - 1.2 m	14/12/2021	Natural	9	<0.4	18	12	22	NT	<0.1	7	NT	23	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD5/20211214	1 - 1.2 m	14/12/2021	Natural	10	<0.4	19	14	24	NT	<0.1	7	NT	26	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP21	0 - 0.2 m	14/12/2021	Fill	10	<0.4	19	18	21	NT	<0.1	8	NT	29	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
SS1	0 m	14/12/2021	Fill (SP9)	5	<0.4	16	15	16	NT	<0.1	10	NT	33	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
SS2	0 m	14/12/2021	Fill (SP9)	5	<0.4	17	20	15	NT	<0.1	15	NT	39	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	AD	NAD	0.0412	0.0033
SS3	0 m	14/12/2021	Fill (SP13)	<4	<0.4	7	22	6	NT	<0.1	6	NT	29	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<3	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001

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Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
Current Investigation																																				
TP101	0.1 - 0.2 m	18/07/2022	Fill	**7**	<0.4	**17**	**15**	**23**	NT	<0.1	**8**	NT	**25**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP102	0.1 - 0.2 m	18/07/2022	Fill	**7**	<0.4	**17**	**17**	**22**	NT	<0.1	**7**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP102	0.2 - 0.3 m	18/07/2022	Natural	**7**	<0.4	**13**	**31**	**23**	NT	<0.1	**20**	NT	**56**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP103	0 - 0.1 m	18/07/2022	Natural	**5**	<0.4	**12**	**21**	**12**	NT	<0.1	**8**	NT	**25**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP104	0.1 - 0.2 m	18/07/2022	Fill	**7**	<0.4	**18**	**12**	**21**	NT	<0.1	**6**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP105	0 - 0.1 m	18/07/2022	Fill	**9**	<0.4	**20**	**13**	**27**	NT	<0.1	**7**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP106	0 - 0.2 m	18/07/2022	Fill	**8**	<0.4	**19**	**17**	**22**	NT	<0.1	**8**	NT	**26**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP106	0.2 - 0.3 m	18/07/2022	Natural	**6**	<0.4	**17**	**22**	**15**	NT	<0.1	**8**	NT	**25**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP107	0 - 0.2 m	18/07/2022	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP107	0.5 - 0.7 m	18/07/2022	Fill (SP2)	**5**	<0.4	**16**	**9**	**18**	NT	<0.1	**6**	NT	**13**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP107	1 - 1.2 m	18/07/2022	Natural	**6**	<0.4	**11**	**24**	**17**	NT	<0.1	**13**	NT	**47**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP108	0 - 0.2 m	18/07/2022	Fill	**10**	<0.4	**21**	**12**	**26**	NT	<0.1	**8**	NT	**23**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP109	0 - 0.2 m	18/07/2022	Fill	**8**	<0.4	**18**	**13**	**23**	NT	<0.1	**6**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP109	0.7 - 0.9 m	18/07/2022	Natural	**7**	<0.4	**18**	**24**	**19**	NT	<0.1	**10**	NT	**30**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP110	0.5 - 0.7 m	18/07/2022	Fill (SP1)	**8**	<0.4	**16**	**16**	**22**	NT	<0.1	**9**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP110	1 - 1.2 m	18/07/2022	Fill (SP1)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP110	1.3 - 1.5 m	18/07/2022	Natural	**7**	<0.4	**13**	**22**	**16**	NT	<0.1	**9**	NT	**32**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP111	0 - 0.2 m	18/07/2022	Fill (SP3)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP111	0.5 - 0.7 m	18/07/2022	Fill (SP3)	**6**	<0.4	**36**	**22**	**40**	NT	<0.1	**7**	NT	**120**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**1.8**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP111	0.9 - 1.1 m	18/07/2022	Natural	**6**	<0.4	**13**	**25**	**18**	NT	<0.1	**12**	NT	**34**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP112	0 - 0.2 m	18/07/2022	Fill	**7**	<0.4	**15**	**22**	**22**	NT	<0.1	**8**	NT	**49**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP113	0 - 0.2 m	18/07/2022	Fill	**10**	<0.4	**19**	**19**	**27**	NT	<0.1	**7**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP113	0.3 - 0.5 m	18/07/2022	Natural	**6**	<0.4	**14**	**24**	**21**	NT	<0.1	**11**	NT	**34**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP114	0 - 0.2 m	18/07/2022	Fill	**8**	<0.4	**18**	**11**	**30**	NT	<0.1	**7**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP114	0.8 - 1 m	18/07/2022	Natural	**7**	<0.4	**11**	**23**	**16**	NT	<0.1	**11**	NT	**44**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD1/20220718	0.8 - 1 m	18/07/2022	Natural	**10**	<1	**17**	**31**	**15**	NT	<0.1	**11**	NT	**43**	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP115	0 - 0.2 m	18/07/2022	Natural	**5**	<0.4	**14**	**25**	**16**	NT	<0.1	**10**	NT	**32**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP116	0 - 0.2 m	18/07/2022	Fill	**7**	<0.4	**15**	**12**	**22**	NT	<0.1	**7**	NT	**30**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP117	0 - 0.2 m	18/07/2022	Fill	**8**	<0.4	**18**	**12**	**26**	NT	<0.1	**8**	NT	**23**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP117	0.45 - 0.6 m	18/07/2022	Natural	**5**	<0.4	**14**	**27**	**15**	NT	<0.1	**10**	NT	**34**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP118	0.5 - 0.7 m	18/07/2022	Fill (SP2)	**7**	<0.4	**17**	**11**	**20**	NT	<0.1	**6**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP118	1 - 1.2 m	18/07/2022	Fill	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP118	1.5 - 1.7 m	18/07/2022	Natural	**5**	<0.4	**14**	**26**	**14**	NT	<0.1	**10**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP119	0 - 0.2 m	18/07/2022	Fill	**6**	<0.4	**15**	**24**	**29**	NT	<0.1	**7**	NT	**76**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
BD2/20220718	0 - 0.2 m	18/07/2022	Fill	**6**	<0.4	**18**	**17**	**14**	NT	<0.1	**8**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP119	0.2 - 0.4 m	18/07/2022	Natural	**5**	<0.4	**16**	**22**	**15**	NT	<0.1	**8**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP120	0.1 - 0.2 m	19/07/2022	Fill	**8**	<0.4	**22**	**17**	**24**	NT	<0.1	**7**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP120	0.3 - 0.4 m	19/07/2022	Natural	**5**	<0.4	**17**	**20**	**17**	NT	<0.1	**10**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD1/20220719	0.3 - 0.4 m	19/07/2022	Natural	**8**	<1	**23**	**26**	**19**	NT	<0.1	**13**	NT	**30**	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP121	0.1 - 0.2 m	19/07/2022	Fill	**5**	<0.4	**13**	**11**	**18**	NT	<0.1	**7**	NT	**23**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

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Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
TP122	0.1 - 0.2 m	19/07/2022	Fill	**6**	<0.4	**16**	**12**	**18**	NT	<0.1	**7**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP122	0.3 - 0.4 m	19/07/2022	Natural	**4**	<0.4	**16**	**21**	**11**	NT	<0.1	**7**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD2/20220719	0.3 - 0.4 m	19/07/2022	Natural	**5**	<0.4	**16**	**20**	**13**	NT	<0.1	**8**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP123	0.1 - 0.2 m	19/07/2022	Fill	**7**	<0.4	**16**	**12**	**21**	NT	<0.1	**8**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP124	0.1 - 0.2 m	19/07/2022	Fill (SP2)	**8**	<0.4	**17**	**12**	**25**	NT	<0.1	**9**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP124	0.9 - 1 m	19/07/2022	Fill (SP2)	**6**	<0.4	**17**	**12**	**20**	NT	<0.1	**9**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP124	1.8 - 1.9 m	19/07/2022	Natural	**4**	<0.4	**14**	**20**	**14**	NT	<0.1	**7**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD3/20220719	1.8 - 1.9 m	19/07/2022	Natural	**7**	<1	**23**	**26**	**12**	NT	<0.1	**11**	NT	**25**	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP125	0.1 - 0.2 m	19/07/2022	Fill (SP12)	**5**	**0.5**	**18**	**47**	**82**	NT	<0.1	**8**	NT	**210**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP125	0.9 - 1 m	19/07/2022	Fill (SP12)	**4**	<0.4	**14**	**43**	**62**	NT	<0.1	**8**	NT	**180**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP125	1 - 1.1 m	19/07/2022	Natural	**5**	<0.4	**16**	**18**	**13**	NT	<0.1	**8**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP125A	0.5 - 0.6 m	19/07/2022	Fill (SP12)	**8**	**0.4**	**18**	**73**	**370**	<0.03	<0.1	**11**	NT	**230**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP125A	0.8 - 0.9 m	19/07/2022	Fill (SP12)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	AD	NAD	**0.1512**	**0.0189**
TP126	0.1 - 0.2 m	19/07/2022	Fill (SP11)	**4**	<0.4	**15**	**40**	**44**	NT	<0.1	**12**	NT	**160**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP126 - [TRIPLICATE]	0.1 - 0.2 m	19/07/2022	Fill (SP11)	<4	<0.4	**16**	**56**	**42**	NT	<0.1	**13**	NT	**430**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP126	0.9 - 1 m	19/07/2022	Fill (SP11)	**5**	**0.9**	**23**	**58**	**68**	NT	<0.1	**15**	NT	**250**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP126	1 - 1.1 m	19/07/2022	Natural	<4	<0.4	**15**	**21**	**10**	NT	<0.1	**8**	NT	**19**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD4/20220719	1 - 1.1 m	19/07/2022	Natural	**5**	<0.4	**15**	**20**	**11**	NT	<0.1	**9**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP126A	0.5 - 0.6 m	19/07/2022	Fill (SP11)	**5**	<0.4	**15**	**42**	**49**	NT	**0.1**	**10**	NT	**85**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP126A	0.8 - 0.9 m	19/07/2022	Fill (SP11)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP127	0.4 - 0.5 m	19/07/2022	Fill (SP10)	**6**	<0.4	**18**	**1900**	**77**	NT	<0.1	**17**	NT	**250**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP127	0.9 - 1 m	19/07/2022	Fill (SP10)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP127	1 - 1.1 m	19/07/2022	Natural	<4	<0.4	**16**	**19**	**13**	NT	<0.1	**10**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP128	0.1 - 0.2 m	19/07/2022	Fill (SP10)	**5**	<0.4	**19**	**57**	**42**	NT	<0.1	**16**	NT	**180**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP128	0.4 - 0.5 m	19/07/2022	Fill (SP10)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP128	1 - 1.1 m	19/07/2022	Fill (SP10)	**5**	<0.4	**17**	**88**	**75**	NT	<0.1	**18**	NT	**280**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP129	0.1 - 0.2 m	19/07/2022	Fill (SP8)	**6**	**0.4**	**19**	**120**	**70**	NT	<0.1	**16**	NT	**1200**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP129	0.4 - 0.5 m	19/07/2022	Fill (SP8)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP129	0.9 - 1 m	19/07/2022	Fill (SP8)	**6**	<0.4	**19**	**29**	**37**	NT	<0.1	**11**	NT	**61**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP129	1.4 - 1.5 m	19/07/2022	Fill (SP8)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP129	1.5 - 1.6 m	19/07/2022	Natural	**5**	<0.4	**16**	**22**	**14**	NT	<0.1	**11**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD5/20220719	1.5 - 1.6 m	19/07/2022	Natural	**7**	<1	**23**	**26**	**14**	NT	<0.1	**13**	NT	**28**	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP130	0.1 - 0.2 m	19/07/2022	Fill (SP7)	<4	<0.4	**22**	**21**	**18**	NT	<0.1	**10**	NT	**32**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP130	0.9 - 1 m	19/07/2022	Fill (SP7)	<4	<0.4	**28**	**24**	**26**	NT	<0.1	**11**	NT	**35**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP130	1.2 - 1.3 m	19/07/2022	Natural	**6**	<0.4	**17**	**22**	**15**	NT	<0.1	**10**	NT	**26**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP131	0.1 - 0.2 m	19/07/2022	Fill (SP4)	**5**	<0.4	**30**	**17**	**28**	NT	<0.1	**6**	NT	**89**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**1.5**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP131	0.9 - 1 m	19/07/2022	Fill (SP4)	**5**	<0.4	**33**	**23**	**36**	NT	**0.1**	**7**	NT	**110**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.3**	**2.1**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP131	1.9 - 2 m	19/07/2022	Fill (SP4)	**5**	<0.4	**30**	**18**	**30**	NT	<0.1	**5**	NT	**86**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**2.4**	NT	NT	NT	NT	NT	NT	NT	NAD	**1.4503**	**1.3233**	NAD	<0.001
TP131	2.4 - 2.5 m	19/07/2022	Fill (SP4)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP131	2.5 - 2.6 m	19/07/2022	Fill (SP4)	**5**	<0.4	**29**	**17**	**27**	NT	<0.1	**8**	NT	**85**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	**0.2**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP131	3 - 3.1 m	19/07/2022	Natural	**8**	<0.4	**16**	**29**	**23**	NT	<0.1	**12**	NT	**40**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD6/20220719	3 - 3.1 m	19/07/2022	Natural	**8**	<1	**22**	**26**	**18**	NT	<0.1	**14**	NT	**31**	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

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Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
TP131A	0.4 - 0.5 m	19/07/2022	Fill (SP4)	**5**	<0.4	**32**	**21**	**34**	NT	<0.1	**8**	NT	**130**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**2.8**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP131A	1.4 - 1.5 m	19/07/2022	Fill (SP4)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP132	0.1 - 0.2 m	19/07/2022	Fill (SP3)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP132	0.4 - 0.5 m	19/07/2022	Fill (SP3)	**9**	<0.4	**40**	**28**	**48**	NT	**0.2**	**9**	NT	**140**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**2.3**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP132	1.4 - 1.5 m	19/07/2022	Fill (SP3)	**9**	<0.4	**36**	**25**	**42**	NT	**0.1**	**7**	NT	**99**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.3**	**4.4**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP132	1.7 - 1.8 m	19/07/2022	Fill (SP3)	**7**	<0.4	**17**	**14**	**21**	NT	<0.1	**5**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP132A	0.4 - 0.5 m	19/07/2022	Fill (SP3)	**8**	<0.4	**32**	**24**	**37**	NT	<0.1	**7**	NT	**96**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**1.8**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP132A	1.4 - 1.5 m	19/07/2022	Fill (SP3)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP133	0.6 - 0.7 m	19/07/2022	Fill (SP1)	**6**	<0.4	**13**	**12**	**19**	NT	<0.1	**6**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP133	1.2 - 1.3 m	19/07/2022	Fill (SP1)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP133	2.9 - 3 m	19/07/2022	Fill (SP1)	**5**	<0.4	**12**	**15**	**18**	NT	<0.1	**6**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP134	0.1 - 0.2 m	19/07/2022	Fill (SP1)	**6**	<0.4	**15**	**11**	**17**	NT	<0.1	**6**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP134	0.9 - 1 m	19/07/2022	Fill (SP1)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP134	1.9 - 2 m	19/07/2022	Fill (SP1)	**7**	<0.4	**16**	**13**	**19**	NT	<0.1	**6**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP134	3.4 - 3.5 m	19/07/2022	Fill (SP1)	**4**	<0.4	**10**	**17**	**19**	NT	<0.1	**8**	NT	**30**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP135	0.5 - 0.6 m	19/07/2022	Fill (SP1)	**7**	<0.4	**16**	**12**	**23**	NT	<0.1	**6**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP135	1.5 - 1.6 m	19/07/2022	Fill (SP1)	**6**	<0.4	**12**	**9**	**17**	NT	<0.1	**5**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
BD7/20220719	1.5 - 1.6 m	19/07/2022	Fill (SP1)	**8**	<1	**14**	**16**	**21**	NT	<0.1	**9**	NT	**34**	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP135	3.5 - 3.6 m	19/07/2022	Fill (SP1)	**5**	<0.4	**12**	**11**	**17**	NT	<0.1	**6**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP136	0.1 - 0.2 m	19/07/2022	Fill (SP2)	**8**	<0.4	**16**	**11**	**24**	NT	<0.1	**7**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP136	0.5 - 0.6 m	19/07/2022	Fill (SP2)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP136	1.5 - 1.6 m	19/07/2022	Fill (SP2)	**7**	<0.4	**17**	**11**	**22**	NT	<0.1	**6**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP136	2.5 - 2.6 m	19/07/2022	Fill (SP2)	**7**	<0.4	**16**	**11**	**19**	NT	<0.1	**6**	NT	**15**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP136	2.8 - 2.9 m	19/07/2022	Natural	**6**	<0.4	**14**	**17**	**16**	NT	<0.1	**8**	NT	**23**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP137	0.1 - 0.2 m	19/07/2022	Fill (SP2)	**5**	<0.4	**14**	**9**	**17**	NT	<0.1	**5**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP137	1 - 1.1 m	19/07/2022	Fill (SP2)	**5**	<0.4	**12**	**10**	**15**	NT	<0.1	**6**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP137	2.5 - 2.6 m	19/07/2022	Fill (SP2)	**6**	<0.4	**15**	**10**	**18**	NT	<0.1	**5**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP137	3.5 - 3.6 m	19/07/2022	Natural	**5**	<0.4	**14**	**19**	**13**	NT	<0.1	**9**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP138	0.1 - 0.2 m	19/07/2022	Fill (SP6)	**4**	<0.4	**11**	**15**	**28**	NT	<0.1	**5**	NT	**85**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	AD	NAD	0.0142	0.002
TP138	0.5 - 0.6 m	19/07/2022	Fill (SP6)	**4**	<0.4	**13**	**16**	**24**	NT	<0.1	**5**	NT	**74**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	AD	NAD	0.0026	<0.001
TP138	0.9 - 1 m	19/07/2022	Fill (SP6)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP138	1 - 1.1 m	19/07/2022	Natural	**4**	<0.4	**13**	**15**	**13**	NT	<0.1	**4**	NT	**15**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP138A	0.7 - 0.8 m	19/07/2022	Fill (SP6)	<4	<0.4	**11**	**16**	**23**	NT	<0.1	**6**	NT	**79**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.1**	**0.56**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP139	0.1 - 0.2 m	20/07/2022	Fill (SP17)	<4	<0.4	**6**	**9**	**76**	NT	<0.1	**1**	NT	**33**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP139	0.5 - 0.6 m	20/07/2022	Fill (SP17)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP139	1 - 1.1 m	20/07/2022	Fill (SP17)	<4	<0.4	**5**	**9**	**44**	NT	<0.1	<1	NT	**19**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP139 - [TRIPLICATE]	1 - 1.1 m	20/07/2022	Fill (SP17)	<4	<0.4	**6**	**8**	**55**	NT	<0.1	**1**	NT	**26**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP139	1.2 - 1.3 m	20/07/2022	Fill (SP17)	**6**	<0.4	**10**	**9**	**14**	NT	<0.1	**4**	NT	**19**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP139	1.4 - 1.5 m	20/07/2022	Natural	**7**	<0.4	**11**	**27**	**13**	NT	<0.1	**14**	NT	**67**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD1/20220720	1.4 - 1.5 m	20/07/2022	Natural	**6**	<0.4	**12**	**23**	**12**	NT	<0.1	**6**	NT	**27**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP140	0.1 - 0.2 m	20/07/2022	Fill	<4	<0.4	**8**	**57**	**14**	NT	<0.1	**41**	<0.02	**28**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP141	0.1 - 0.2 m	20/07/2022	Fill	<4	<0.4	**7**	**12**	**170**	**0.09**	**0.2**	**1**	NT	**66**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**1**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NT	NT	NT	NT	NT
TP141	0.4 - 0.5 m	20/07/2022	Natural	**4**	<0.4	**15**	**12**	**11**	NT	<0.1	**5**	NT	**9**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

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Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
TP142	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**9**	**8**	**13**	NT	<0.1	**5**	NT	**14**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP143	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**12**	**12**	**15**	NT	<0.1	**4**	NT	**10**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP144	0.1 - 0.2 m	20/07/2022	Fill	**6**	<0.4	**12**	**14**	**16**	NT	<0.1	**6**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NT	NT	NT
TP144	0.3 - 0.4 m	20/07/2022	Natural	**5**	<0.4	**14**	**17**	**12**	NT	<0.1	**6**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD2/20220720	0.3 - 0.4 m	19/07/2022	Natural	**9**	<1	**17**	**24**	**15**	NT	<0.1	**9**	NT	**34**	<10	<50	<100	<100	<50	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP145	0.1 - 0.2 m	20/07/2022	Fill	**8**	<0.4	**17**	**16**	**17**	NT	<0.1	**6**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP146	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**13**	**14**	**13**	NT	<0.1	**5**	NT	**15**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP147	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**12**	**18**	**12**	NT	<0.1	**6**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP148	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**13**	**14**	**13**	NT	<0.1	**6**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP148	0.3 - 0.4 m	20/07/2022	Natural	**5**	<0.4	**15**	**19**	**12**	NT	<0.1	**7**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP149	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**14**	**18**	**11**	NT	<0.1	**8**	NT	**19**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NT	NT	NT
TP149	0.4 - 0.5 m	20/07/2022	Fill	<4	<0.4	**5**	**3**	**5**	NT	<0.1	**4**	NT	**14**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP149	0.9 - 1 m	20/07/2022	Fill	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP149	1 - 1.1 m	20/07/2022	Natural	<4	<0.4	**4**	**5**	**5**	NT	<0.1	**2**	NT	**11**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP150	0.1 - 0.2 m	20/07/2022	Fill	**6**	<0.4	**15**	**18**	**13**	NT	<0.1	**7**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP151	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**12**	**16**	**15**	NT	<0.1	**7**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP152	0.1 - 0.2 m	20/07/2022	Fill	<4	<0.4	**11**	**19**	**27**	NT	<0.1	**11**	NT	**39**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.2**	**2**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP152	0.4 - 0.5 m	20/07/2022	Natural	**6**	<0.4	**15**	**20**	**10**	NT	<0.1	**5**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP153	0.1 - 0.2 m	20/07/2022	Fill	**5**	<0.4	**12**	**17**	**17**	NT	<0.1	**6**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	**0.3**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP154	0.1 - 0.2 m	20/07/2022	Fill	**4**	<0.4	**9**	**16**	**12**	NT	<0.1	**7**	NT	**21**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP155	0.1 - 0.2 m	20/07/2022	Fill	**11**	<0.4	**12**	**17**	**18**	NT	<0.1	**10**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP155	0.3 - 0.4 m	20/07/2022	Fill	**9**	<0.4	**13**	**27**	**11**	NT	<0.1	**8**	NT	**26**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP156	0.1 - 0.2 m	20/07/2022	Fill	**7**	<0.4	**12**	**18**	**15**	NT	<0.1	**7**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP157	0.1 - 0.2 m	20/07/2022	Fill	**4**	<0.4	**12**	**18**	**13**	NT	<0.1	**9**	NT	**22**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP157	0.3 - 0.4 m	20/07/2022	Fill	<4	<0.4	**13**	**23**	**10**	NT	<0.1	**8**	NT	**23**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP158	0.1 - 0.2 m	20/07/2022	Fill	**7**	<0.4	**12**	**15**	**14**	NT	<0.1	**7**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP159	0.1 - 0.2 m	20/07/2022	Fill	**7**	<0.4	**10**	**13**	**12**	NT	<0.1	**5**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP160	0.1 - 0.2 m	20/07/2022	Fill	**7**	<0.4	**11**	**23**	**16**	NT	<0.1	**7**	NT	**39**	<25	**1600**	**4300**	<100	**5800**	<0.2	<0.5	<1	<1	<0.05	**0.4**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP160	0.3 - 0.4 m	20/07/2022	Natural	**5**	<0.4	**10**	**19**	**10**	NT	<0.1	**3**	NT	**11**	<25	**74**	**170**	<100	**240**	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP161	0.1 - 0.2 m	20/07/2022	Fill	**4**	<0.4	**12**	**20**	**13**	NT	<0.1	**8**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP162	0.1 - 0.2 m	21/07/2022	Fill	<4	<0.4	**33**	**30**	**6**	NT	<0.1	**49**	NT	**28**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	**0.2**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP163	0.1 - 0.2 m	21/07/2022	Fill	**6**	<0.4	**13**	**15**	**15**	NT	<0.1	**8**	NT	**18**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP164	0.1 - 0.2 m	21/07/2022	Fill	**7**	<0.4	**20**	**11**	**16**	NT	<0.1	**8**	NT	**15**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP164	0.3 - 0.4 m	21/07/2022	Natural	**8**	<0.4	**20**	**20**	**17**	NT	<0.1	**8**	NT	**17**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP165	0.1 - 0.2 m	21/07/2022	Fill	**4**	<0.4	**12**	**20**	**12**	NT	<0.1	**9**	NT	**20**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP166	0 - 0.1 m	21/07/2022	Fill	<4	<0.4	**50**	**26**	**5**	NT	<0.1	**56**	NT	**31**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	**0.2**	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP166	0.2 - 0.3 m	21/07/2022	Fill	<4	<0.4	**5**	**2**	**12**	NT	<0.1	**7**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP166	0.3 - 0.4 m	21/07/2022	Fill	**6**	<0.4	**13**	**10**	**18**	NT	<0.1	**7**	NT	**16**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP166	0.5 - 0.6 m	21/07/2022	Natural	**5**	<0.4	**10**	**20**	**15**	NT	<0.1	**19**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BH167	0.2 - 0.3 m	21/07/2022	Fill	**5**	<0.4	**13**	**21**	**15**	NT	<0.1	**8**	NT	**27**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
BH167	0.9 - 1 m	21/07/2022	Natural	**6**	<0.4	**13**	**21**	**11**	NT	<0.1	**6**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BH168	0.2 - 0.3 m	21/07/2022	Fill	**5**	<0.4	**14**	**22**	**18**	NT	<0.1	**8**	NT	**27**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
BH168	0.7 - 0.8 m	21/07/2022	Fill	**7**	<0.4	**15**	**20**	**21**	NT	<0.1	**9**	NT	**30**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001

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Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
BH168	1.1 - 1.2 m	21/07/2022	Natural	**6**	<0.4	**13**	**27**	**20**	NT	<0.1	**9**	NT	**33**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BH169	0.2 - 0.3 m	21/07/2022	Fill	<4	<0.4	**11**	**27**	**13**	NT	<0.1	**13**	NT	**30**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP170	0.1 - 0.2 m	27/07/2022	Fill	<4	<0.4	**9**	**4**	**3**	NT	<0.1	**4**	NT	**15**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP170	0.7 - 0.9 m	27/07/2022	Fill	<4	<0.4	**11**	**6**	**5**	NT	<0.1	**6**	NT	**57**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP170	1.1 - 1.2 m	27/07/2022	Fill	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP170	1.3 - 1.4 m	27/07/2022	Natural	**5**	<0.4	**17**	**25**	**14**	NT	<0.1	**13**	NT	**28**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD1/20220727	1.3 - 1.4 m	27/07/2022	Natural	**6**	<0.4	**17**	**27**	**18**	NT	<0.1	**13**	NT	**34**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP171	0.1 - 0.2 m	27/07/2022	Fill (SP5)	**5**	<0.4	**13**	**13**	**13**	NT	<0.1	**7**	NT	**39**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP171	0.4 - 0.5 m	27/07/2022	Fill (SP5)	**5**	<0.4	**16**	**13**	**13**	NT	<0.1	**8**	NT	**38**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP172	0.1 - 0.2 m	27/07/2022	Fill (SP13)	**4**	<0.4	**10**	**15**	**10**	NT	<0.1	**9**	NT	**36**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP172	0.8 - 0.9 m	27/07/2022	Fill (SP13)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP172	1.6 - 1.7 m	27/07/2022	Fill (SP13)	**5**	<0.4	**18**	**14**	**13**	NT	<0.1	**12**	NT	**37**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP172	1.9 - 2 m	27/07/2022	Natural	**5**	<0.4	**16**	**24**	**18**	NT	<0.1	**11**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP173	0.1 - 0.2 m	27/07/2022	Fill (SP14)	**5**	<0.4	**28**	**33**	**30**	NT	<0.1	**16**	NT	**37**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP173	0.6 - 0.7 m	27/07/2022	Fill (SP14)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP174	0.1 - 0.2 m	27/07/2022	Fill (SP14)	**8**	<0.4	**19**	**18**	**20**	NT	<0.1	**9**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP174	0.6 - 0.7 m	27/07/2022	Fill (SP14)	**5**	<0.4	**22**	**34**	**16**	NT	<0.1	**15**	NT	**57**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
BD2/20220727	0.6 - 0.7 m	27/07/2022	Fill (SP14)	**10**	<0.4	**18**	**28**	**30**	NT	<0.1	**14**	NT	**36**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP174	1.1 - 1.2 m	27/07/2022	Natural	**5**	<0.4	**17**	**22**	**14**	NT	<0.1	**10**	NT	**24**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
TP175	0.1 - 0.2 m	27/07/2022	Fill (SP14)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP175	0.6 - 0.7 m	27/07/2022	Fill (SP14)	**12**	<0.4	**25**	**19**	**26**	NT	<0.1	**12**	NT	**52**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP176	0.1 - 0.2 m	27/07/2022	Fill (SP15)	**5**	<0.4	**18**	**13**	**19**	NT	<0.1	**6**	NT	**52**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP176	0.6 - 0.7 m	27/07/2022	Fill (SP15)	**4**	<0.4	**19**	**9**	**15**	NT	<0.1	**5**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	**0.07**	**1.1**	<5	<0.1	<0.1	<0.1	<0.1	NT	NT	NAD	NAD	NAD	NAD	<0.001
TP176	1.1 - 1.2 m	27/07/2022	Natural	**6**	<0.4	**16**	**27**	**15**	NT	<0.1	**11**	NT	**29**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
BD3/20220727	1.1 - 1.2 m	27/07/2022	Natural	**6**	<0.4	**14**	**25**	**14**	NT	<0.1	**10**	NT	**30**	<25	<50	<100	<100	<50	<0.2	<0.5	<1	<1	<0.05	<0.05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ACM1	0.9 - 1.0 m	19/07/2022	Material (TP125 / SP12)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
ACM2	0.4 - 0.5 m	19/07/2022	Material (TP127 / SP10)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
ACM3	0.4 - 0.5 m	19/07/2022	Material (TP128 / SP10)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NT	NT	NT	NT	NT
ACM4	0.9 - 1.0 m	19/07/2022	Material (TP125 / SP12)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
ACM5	0.9 - 1.0 m	19/07/2022	Material (TP126 / SP11)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
ACM6	1.4 - 1.5 m	19/07/2022	Material (TP131 / SP4)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
ACM7	0.9 - 1.0 m	19/07/2022	Material (TP132 / SP3)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
ACM8	surface	19/07/2022	Material (TP160)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**AD**	NT	NT	NT	NT	NT
ACM9	surface	21-07-22	Material	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NAD	NT	NT	NT	NT	NT

Table I2: Summary of Laboratory Results for Preliminary Waste Classification

				Metals										TRH					BTEX				PAH		Total Analysed Phenol	OCP		Total Analysed OPP [e]	Total Analysed PCB	Herbicides	Asbestos					
				Arsenic	Cadmium	Total Chromium [b]	Copper	Lead	TCLP Lead	Mercury (inorganic)	Nickel	TCLP Nickel	Zinc	TRH C6 - C9	TRH C10 - C14	TRH C15 - C28	TRH C29 - C36	C10-C36 recoverable hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Benzo(a)pyrene (BaP)	Total PAHs		Total Endosulfan	Total Analysed OCP [d]				Asbestos ID in Material	Trace Analysis	Asbestos ID in soil <0.1g/kg	ACM >7mm Estimation	FA and AF Estimation	FA and AF Estimation
			PQL [f]	4	0.4	1	1	1	0.03	0.1	1	0.02	1	25	50	100	100	50	0.2	0.5	1	1	0.05	0.05	5	0.1	0.1	0.1	0.1	-	-	-	0.1	0.0001	0.0001	<0.001
Sample ID [a]	Depth	Sample Date	Matrix	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/l	mg/kg	mg/kg	mg/l	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	-	-	g	g	g	%(w/w)
Waste Classification Criteria [f]																																			
CT1				100	20	100	NC	100	N/A	4	40	N/A	NC	650	NC	NC	NC	10000	10	288	600	1000	0.8	200	288	60	<50	4	<50	NC	NC	NC	NC	NC	NC	NC
SCC1				500	100	1900	NC	1500	N/A	50	1050	N/A	NC	650	NC	NC	NC	10000	18	518	1080	1800	10	200	518	108	<50	7.5	<50	NC	NC	NC	NC	NC	NC	NC
TCLP1				N/A	N/A	N/A	NC	N/A	5	N/A	N/A	2	NC	N/A	NC	NC	NC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NC	NC	NC	NC	NC	NC	NC
VENM Classification Criteria [f]																																			
ANZECC (1992)				0.2-30	0.04-2	0.5-110	1-190	<2-200	N/A	0.001-0.1	2-400	N/A	2-180	NC	NC	NC	NC	NC	0.05 - 1	0.1 - 1	NC	NC	NC	0.95-5	0.03 – 0.5	0.5	0.03 – 0.5	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PQL				NC	NC	NC	NC	NC	N/A	NC	NC	N/A	NC	25	50	100	100	50	NC	NC	1	3	0.05	NC	NC	NC	NC	0.1	0.1	NC	NAD	NAD	NAD	NAD	NAD	NAD	NAD

CT1 exceedance | TCLP1 and/or SCC1 exceedance | CT2 exceedance | TCLP2 and/or SCC2 exceedance | Asbestos detection | VENM exceedance

NT = Not tested NL = Non limiting NC = No criteria NA = Not applicable

Notes:

a	QA/QC replicate of sample listed directly below the primary sample
b	Total chromium used as initial screen for chromium(VI).
c	Total recoverable hydrocarbons (TRH) used as an initial screen for total petroleum hydrocarbons (TPH)
d	Criteria for scheduled chemicals used as an initial screen
e	Criteria for Chlorpyrifos used as initial screen
f	All criteria are in the same units as the reported results
ACM	ACM samples are material samples.
Triplicate	Where lab triplicate has been analysed and reported for QA purposes, the higher respective metal concentration is summarised in this table.
Fill	Fill matrix also including material logged as topsoil
PQL	Practical quantitation limit
CT1	NSW EPA, 2014, Waste Classification Guidelines Part 1; Classifying Waste, Maximum values of specific contaminant concentration (SCC) for classification without TCLP: General solid waste
SCC1	NSW EPA, 2014, Waste Classification Guidelines Part 1; Classifying Waste, Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: General solid waste
TCLP1	NSW EPA, 2014, Waste Classification Guidelines Part 1; Classifying Waste, Maximum values for leachable concentration (TCLP) and specific contaminant concentration (SCC) when used together: General solid waste
ANZECC (1992)	ANZECC/NHMRC (1992) Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, Environmental Soil Quality Guidelines Background A [ANZECC A];

Appendix J

Laboratory Certificates of Analysis, Chain of Custodies
and Sample Receipt Advices

Appendix J1

Current Investigation

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CERTIFICATE OF ANALYSIS 301228

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.02, Kemps Creek, NSW**
Number of Samples	306 Soil, 8 Material
Date samples received	26/07/2022
Date completed instructions received	26/07/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	04/08/2022
Date of Issue	04/08/2022

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Lucy Zhu, Asbestos Supervisor
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Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-1	301228-3	301228-5	301228-6	301228-7
Your Reference	UNITS	BH167	BH167	BH168	BH168	BH168
Depth		0.2-0.3	0.9-1	0.2-0.3	0.7-0.8	1.1-1.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	77	73	131	122	119

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-9	301228-12	301228-15	301228-16	301228-18
Your Reference	UNITS	BH169	TP101	TP102	TP102	TP103
Depth		0.2-0.3	0.1-0.2	0.1-0.2	0.2-0.3	0-0.1
Date Sampled		21/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	119	114	119	117	115

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-20	301228-23	301228-26	301228-27	301228-30
Your Reference	UNITS	TP104	TP105	TP106	TP106	TP107
Depth		0.1-0.2	0-0.1	0-0.2	0.2-0.3	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	113	120	105	109	110

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-31	301228-33	301228-36	301228-38	301228-41
Your Reference	UNITS	TP107	TP108	TP109	TP109	TP110
Depth		1-1.2	0-0.2	0-0.2	0.7-0.9	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	111	106	107	83	75

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-43	301228-46	301228-47	301228-49	301228-52
Your Reference	UNITS	TP110	TP111	TP111	TP112	TP113
Depth		1.3-1.5	0.5-0.7	0.9-1.1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	75	84	76	71	75

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-53	301228-55	301228-57	301228-58	301228-60
Your Reference	UNITS	TP113	TP114	TP114	TP115	TP116
Depth		0.3-0.5	0-0.2	0.8-1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	79	75	76	80	74

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-63	301228-64	301228-67	301228-69	301228-71
Your Reference	UNITS	TP117	TP117	TP118	TP118	TP119
Depth		0-0.2	0.45-0.6	0.5-0.7	1.5-1.7	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	72	81	76	74	71

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-72	301228-74	301228-75	301228-77	301228-80
Your Reference	UNITS	TP119	TP120	TP120	TP121	TP122
Depth		0.2-0.4	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		18/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	82	74	84	74	74

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-81	301228-83	301228-86	301228-88	301228-90
Your Reference	UNITS	TP122	TP123	TP124	TP124	TP124
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.9-1	1.8-1.9
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	84	80	83	82	81

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-92	301228-94	301228-95	301228-97	301228-99
Your Reference	UNITS	TP125	TP125	TP125	TP125A	TP126
Depth		0.1-0.2	0.9-1	1-1.1	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	77	82	76	85	91

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-101	301228-102	301228-104	301228-107	301228-109
Your Reference	UNITS	TP126	TP126	TP126A	TP127	TP127
Depth		0.9-1	1-1.1	0.5-0.6	0.4-0.5	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	76	88	90	77	72

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-111	301228-113	301228-116	301228-118	301228-120
Your Reference	UNITS	TP128	TP128	TP129	TP129	TP129
Depth		0.1-0.2	1-1.1	0.1-0.2	0.9-1	1.5-1.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	70	76	78	74	81

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-122	301228-124	301228-125	301228-127	301228-129
Your Reference	UNITS	TP130	TP130	TP130	TP131	TP131
Depth		0.1-0.2	0.9-1	1.2-1.3	0.1-0.2	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	62	74	77	80	80

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-131	301228-133	301228-134	301228-136	301228-139
Your Reference	UNITS	TP131	TP131	TP131	TP131A	TP132
Depth		1.9-2	2.5-2.6	3-3.1	0.4-0.5	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	77	96	96	88	89

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-141	301228-142	301228-146	301228-149	301228-150
Your Reference	UNITS	TP132	TP132	TP133	TP133	TP134
Depth		1.4-1.5	1.7-1.8	0.6-0.7	2.9-3	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	94	102	86	90	104

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-153	301228-155	301228-157	301228-159	301228-161
Your Reference	UNITS	TP134	TP134	TP135	TP135	TP135
Depth		1.9-2	3.4-3.5	0.5-0.6	1.5-1.6	3.5-3.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	99	108	98	106	95

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-162	301228-165	301228-167	301228-168	301228-170
Your Reference	UNITS	TP136	TP136	TP136	TP137	TP137
Depth		0.1-0.2	1.5-1.6	2.8-2.9	0.1-0.2	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	98	94	97	102	111

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-172	301228-173	301228-174	301228-176	301228-177
Your Reference	UNITS	TP137	TP137	TP138	TP138	TP138A
Depth		2.5-2.6	3.5-3.6	0.1-0.2	1-1.1	0.7-0.8
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	98	97	100	108	111

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-178	301228-180	301228-181	301228-182	301228-183
Your Reference	UNITS	TP139	TP139	TP139	TP139	TP140
Depth		0.1-0.2	1-1.1	1.2-1.3	1.4-1.5	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	104	108	101	86	105

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-186	301228-187	301228-189	301228-192	301228-195
Your Reference	UNITS	TP141	TP141	TP142	TP143	TP144
Depth		0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	29/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	104	109	104	106	98

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-196	301228-198	301228-201	301228-204	301228-207
Your Reference	UNITS	TP144	TP145	TP146	TP147	TP148
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	104	101	102	102	99

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-208	301228-210	301228-211	301228-212	301228-214
Your Reference	UNITS	TP148	TP149	TP149	TP149	TP150
Depth		0.3-0.4	0.1-0.2	0.4-0.5	1-1.1	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	106	108	105	74	70

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-217	301228-220	301228-221	301228-223	301228-226
Your Reference	UNITS	TP151	TP152	TP152	TP153	TP154
Depth		0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	71	70	72	72	88

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-229	301228-230	301228-233	301228-234	301228-236
Your Reference	UNITS	TP155	TP156	TP157	TP157	TP158
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	80	63	80	84	70

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-238	301228-241	301228-242	301228-244	301228-247
Your Reference	UNITS	TP159	TP160	TP160	TP161	TP162
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	100	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	100	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	78	82	76	71	78

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-250	301228-253	301228-254	301228-256	301228-259
Your Reference	UNITS	TP163	TP164	TP164	TP165	TP166
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0-0.1
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	80	76	88	76	93

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-260	301228-261	301228-262	301228-265	301228-267
Your Reference	UNITS	TP166	TP166	TP166	BD2/20220718	BD2/20220719
Depth		0.2-0.3	0.3-0.4	0.5-0.6	-	-
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	85	89	86	89	89

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301228-269	301228-273	301228-287	301228-290	301228-292
Your Reference	UNITS	BD4/20220719	BD1/20220720	TP155	BD1/20220720	Trip Blank
Depth		-	-	0.3-0.4	-	-
Date Sampled		19/07/2022	20/07/2022	20/07/2022	20/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	86	90	88	88	97

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		301228-293
Your Reference	UNITS	Trip Spike
Depth		-
Date Sampled		19/07/2022
Type of sample		Soil
Date extracted	-	28/07/2022
Date analysed	-	01/08/2022
Benzene	mg/kg	97%
Toluene	mg/kg	97%
Ethylbenzene	mg/kg	97%
m+p-xylene	mg/kg	97%
o-Xylene	mg/kg	96%
Surrogate aaa-Trifluorotoluene	%	96

svTRH (C10-C40) in Soil						
Our Reference		301228-1	301228-3	301228-5	301228-6	301228-7
Your Reference	UNITS	BH167	BH167	BH168	BH168	BH168
Depth		0.2-0.3	0.9-1	0.2-0.3	0.7-0.8	1.1-1.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	70	79	76	78	77

svTRH (C10-C40) in Soil						
Our Reference		301228-9	301228-12	301228-15	301228-16	301228-18
Your Reference	UNITS	BH169	TP101	TP102	TP102	TP103
Depth		0.2-0.3	0.1-0.2	0.1-0.2	0.2-0.3	0-0.1
Date Sampled		21/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	78	78	76	77	76

svTRH (C10-C40) in Soil						
Our Reference		301228-20	301228-23	301228-26	301228-27	301228-30
Your Reference	UNITS	TP104	TP105	TP106	TP106	TP107
Depth		0.1-0.2	0-0.1	0-0.2	0.2-0.3	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	77	76	79	78	77

svTRH (C10-C40) in Soil						
Our Reference		301228-31	301228-33	301228-36	301228-38	301228-41
Your Reference	UNITS	TP107	TP108	TP109	TP109	TP110
Depth		1-1.2	0-0.2	0-0.2	0.7-0.9	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	80	77	76	75	76

svTRH (C10-C40) in Soil						
Our Reference		301228-43	301228-46	301228-47	301228-49	301228-52
Your Reference	UNITS	TP110	TP111	TP111	TP112	TP113
Depth		1.3-1.5	0.5-0.7	0.9-1.1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	77	75	76	83	78

svTRH (C10-C40) in Soil						
Our Reference		301228-53	301228-55	301228-57	301228-58	301228-60
Your Reference	UNITS	TP113	TP114	TP114	TP115	TP116
Depth		0.3-0.5	0-0.2	0.8-1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	75	72	75	78	75

svTRH (C10-C40) in Soil						
Our Reference		301228-63	301228-64	301228-67	301228-69	301228-71
Your Reference	UNITS	TP117	TP117	TP118	TP118	TP119
Depth		0-0.2	0.45-0.6	0.5-0.7	1.5-1.7	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	75	86	74	77	77

svTRH (C10-C40) in Soil						
Our Reference		301228-72	301228-74	301228-75	301228-77	301228-80
Your Reference	UNITS	TP119	TP120	TP120	TP121	TP122
Depth		0.2-0.4	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		18/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	75	76	76	76	77

svTRH (C10-C40) in Soil						
Our Reference		301228-81	301228-83	301228-86	301228-88	301228-90
Your Reference	UNITS	TP122	TP123	TP124	TP124	TP124
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.9-1	1.8-1.9
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	74	80	79	88	81

svTRH (C10-C40) in Soil						
Our Reference		301228-92	301228-94	301228-95	301228-97	301228-99
Your Reference	UNITS	TP125	TP125	TP125	TP125A	TP126
Depth		0.1-0.2	0.9-1	1-1.1	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	78	79	79	79	79

svTRH (C10-C40) in Soil						
Our Reference		301228-101	301228-102	301228-104	301228-107	301228-109
Your Reference	UNITS	TP126	TP126	TP126A	TP127	TP127
Depth		0.9-1	1-1.1	0.5-0.6	0.4-0.5	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	79	80	79	80	80

svTRH (C10-C40) in Soil						
Our Reference		301228-111	301228-113	301228-116	301228-118	301228-120
Your Reference	UNITS	TP128	TP128	TP129	TP129	TP129
Depth		0.1-0.2	1-1.1	0.1-0.2	0.9-1	1.5-1.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	78	82	79	78	79

svTRH (C10-C40) in Soil						
Our Reference		301228-122	301228-124	301228-125	301228-127	301228-129
Your Reference	UNITS	TP130	TP130	TP130	TP131	TP131
Depth		0.1-0.2	0.9-1	1.2-1.3	0.1-0.2	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	79	81	80	81	81

svTRH (C10-C40) in Soil						
Our Reference		301228-131	301228-133	301228-134	301228-136	301228-139
Your Reference	UNITS	TP131	TP131	TP131	TP131A	TP132
Depth		1.9-2	2.5-2.6	3-3.1	0.4-0.5	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	81	79	79	79	80

svTRH (C10-C40) in Soil						
Our Reference		301228-141	301228-142	301228-146	301228-149	301228-150
Your Reference	UNITS	TP132	TP132	TP133	TP133	TP134
Depth		1.4-1.5	1.7-1.8	0.6-0.7	2.9-3	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	71	92	90	89	88

svTRH (C10-C40) in Soil						
Our Reference		301228-153	301228-155	301228-157	301228-159	301228-161
Your Reference	UNITS	TP134	TP134	TP135	TP135	TP135
Depth		1.9-2	3.4-3.5	0.5-0.6	1.5-1.6	3.5-3.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	85	85	85	85	87

svTRH (C10-C40) in Soil						
Our Reference		301228-162	301228-165	301228-167	301228-168	301228-170
Your Reference	UNITS	TP136	TP136	TP136	TP137	TP137
Depth		0.1-0.2	1.5-1.6	2.8-2.9	0.1-0.2	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	86	87	86	85	83

svTRH (C10-C40) in Soil						
Our Reference		301228-172	301228-173	301228-174	301228-176	301228-177
Your Reference	UNITS	TP137	TP137	TP138	TP138	TP138A
Depth		2.5-2.6	3.5-3.6	0.1-0.2	1-1.1	0.7-0.8
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	86	85	81	84	81

svTRH (C10-C40) in Soil						
Our Reference		301228-178	301228-180	301228-181	301228-182	301228-183
Your Reference	UNITS	TP139	TP139	TP139	TP139	TP140
Depth		0.1-0.2	1-1.1	1.2-1.3	1.4-1.5	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	83	83	83	86	83

svTRH (C10-C40) in Soil						
Our Reference		301228-186	301228-187	301228-189	301228-192	301228-195
Your Reference	UNITS	TP141	TP141	TP142	TP143	TP144
Depth		0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	86	86	85	85	87

svTRH (C10-C40) in Soil						
Our Reference		301228-196	301228-198	301228-201	301228-204	301228-207
Your Reference	UNITS	TP144	TP145	TP146	TP147	TP148
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	79	77	81	79	83

svTRH (C10-C40) in Soil						
Our Reference		301228-208	301228-210	301228-211	301228-212	301228-214
Your Reference	UNITS	TP148	TP149	TP149	TP149	TP150
Depth		0.3-0.4	0.1-0.2	0.4-0.5	1-1.1	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	78	79	79	77	80

svTRH (C10-C40) in Soil						
Our Reference		301228-217	301228-220	301228-221	301228-223	301228-226
Your Reference	UNITS	TP151	TP152	TP152	TP153	TP154
Depth		0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	81	83	76	80	80

svTRH (C10-C40) in Soil						
Our Reference		301228-229	301228-230	301228-233	301228-234	301228-236
Your Reference	UNITS	TP155	TP156	TP157	TP157	TP158
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	83	86	81	88	81

svTRH (C10-C40) in Soil						
Our Reference		301228-238	301228-241	301228-242	301228-244	301228-247
Your Reference	UNITS	TP159	TP160	TP160	TP161	TP162
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	1,600	74	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	4,300	170	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	5,800	240	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	2,700	120	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	2,700	120	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	2,900	110	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	5,700	240	<50	<50
Surrogate o-Terphenyl	%	78	#	82	83	76

svTRH (C10-C40) in Soil						
Our Reference		301228-250	301228-253	301228-254	301228-256	301228-259
Your Reference	UNITS	TP163	TP164	TP164	TP165	TP166
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0-0.1
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	80	81	79	79	81

svTRH (C10-C40) in Soil						
Our Reference		301228-260	301228-261	301228-262	301228-265	301228-267
Your Reference	UNITS	TP166	TP166	TP166	BD2/20220718	BD2/20220719
Depth		0.2-0.3	0.3-0.4	0.5-0.6	-	-
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	75	77	77	79	76

svTRH (C10-C40) in Soil					
Our Reference		301228-269	301228-273	301228-287	301228-290
Your Reference	UNITS	BD4/20220719	BD1/20220720	TP155	BD1/20220720
Depth		-	-	0.3-0.4	-
Date Sampled		19/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50
Surrogate o-Terphenyl	%	77	77	79	83

PAHs in Soil						
Our Reference		301228-1	301228-3	301228-5	301228-6	301228-7
Your Reference	UNITS	BH167	BH167	BH168	BH168	BH168
Depth		0.2-0.3	0.9-1	0.2-0.3	0.7-0.8	1.1-1.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	83	85	87	85	88

PAHs in Soil						
Our Reference		301228-9	301228-12	301228-15	301228-16	301228-18
Your Reference	UNITS	BH169	TP101	TP102	TP102	TP103
Depth		0.2-0.3	0.1-0.2	0.1-0.2	0.2-0.3	0-0.1
Date Sampled		21/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	83	87	83	85	89

PAHs in Soil						
Our Reference		301228-20	301228-23	301228-26	301228-27	301228-30
Your Reference	UNITS	TP104	TP105	TP106	TP106	TP107
Depth		0.1-0.2	0-0.1	0-0.2	0.2-0.3	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	90	80	81	86	87

PAHs in Soil						
Our Reference		301228-31	301228-33	301228-36	301228-38	301228-41
Your Reference	UNITS	TP107	TP108	TP109	TP109	TP110
Depth		1-1.2	0-0.2	0-0.2	0.7-0.9	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	85	87	86	86	85

PAHs in Soil						
Our Reference		301228-43	301228-46	301228-47	301228-49	301228-52
Your Reference	UNITS	TP110	TP111	TP111	TP112	TP113
Depth		1.3-1.5	0.5-0.7	0.9-1.1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.3	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	0.3	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	0.3	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.2	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	1.8	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	88	87	83	85	82

PAHs in Soil						
Our Reference		301228-53	301228-55	301228-57	301228-58	301228-60
Your Reference	UNITS	TP113	TP114	TP114	TP115	TP116
Depth		0.3-0.5	0-0.2	0.8-1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	81	81	82	89	77

PAHs in Soil						
Our Reference		301228-63	301228-64	301228-67	301228-69	301228-71
Your Reference	UNITS	TP117	TP117	TP118	TP118	TP119
Depth		0-0.2	0.45-0.6	0.5-0.7	1.5-1.7	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	29/07/2022	29/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	76	87	81	97	108

PAHs in Soil						
Our Reference		301228-72	301228-74	301228-75	301228-77	301228-80
Your Reference	UNITS	TP119	TP120	TP120	TP121	TP122
Depth		0.2-0.4	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		18/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	107	98	119	108	103

PAHs in Soil						
Our Reference		301228-81	301228-83	301228-86	301228-88	301228-90
Your Reference	UNITS	TP122	TP123	TP124	TP124	TP124
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.9-1	1.8-1.9
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	98	111	110	100	113

PAHs in Soil						
Our Reference		301228-92	301228-94	301228-95	301228-97	301228-99
Your Reference	UNITS	TP125	TP125	TP125	TP125A	TP126
Depth		0.1-0.2	0.9-1	1-1.1	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	110	112	96	111	94

PAHs in Soil						
Our Reference		301228-101	301228-102	301228-104	301228-107	301228-109
Your Reference	UNITS	TP126	TP126	TP126A	TP127	TP127
Depth		0.9-1	1-1.1	0.5-0.6	0.4-0.5	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	95	96	89	96	93

PAHs in Soil						
Our Reference		301228-111	301228-113	301228-116	301228-118	301228-120
Your Reference	UNITS	TP128	TP128	TP129	TP129	TP129
Depth		0.1-0.2	1-1.1	0.1-0.2	0.9-1	1.5-1.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	97	104	111	106	108

PAHs in Soil						
Our Reference		301228-122	301228-124	301228-125	301228-127	301228-129
Your Reference	UNITS	TP130	TP130	TP130	TP131	TP131
Depth		0.1-0.2	0.9-1	1.2-1.3	0.1-0.2	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	0.2	0.3
Pyrene	mg/kg	<0.1	<0.1	<0.1	0.3	0.4
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	0.2
Chrysene	mg/kg	<0.1	<0.1	<0.1	0.1	0.2
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	0.3	0.3
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	0.2	0.3
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	0.1	0.2
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	0.1	0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	1.5	2.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	108	111	109	108	101

PAHs in Soil						
Our Reference		301228-131	301228-133	301228-134	301228-136	301228-139
Your Reference	UNITS	TP131	TP131	TP131	TP131A	TP132
Depth		1.9-2	2.5-2.6	3-3.1	0.4-0.5	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.2	<0.1	<0.1	0.2	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.4	0.1	<0.1	0.5	0.4
Pyrene	mg/kg	0.4	0.1	<0.1	0.5	0.4
Benzo(a)anthracene	mg/kg	0.2	<0.1	<0.1	0.3	0.3
Chrysene	mg/kg	0.2	<0.1	<0.1	0.3	0.2
Benzo(b,j+k)fluoranthene	mg/kg	0.4	<0.2	<0.2	0.4	0.4
Benzo(a)pyrene	mg/kg	0.2	<0.05	<0.05	0.2	0.2
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	<0.1	<0.1	0.1	0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.1	<0.1	<0.1	0.2	0.2
Total +ve PAH's	mg/kg	2.4	0.2	<0.05	2.8	2.3
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	94	78	78	76	82

PAHs in Soil						
Our Reference		301228-141	301228-142	301228-146	301228-149	301228-150
Your Reference	UNITS	TP132	TP132	TP133	TP133	TP134
Depth		1.4-1.5	1.7-1.8	0.6-0.7	2.9-3	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.4	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.8	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.8	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.5	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.4	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	0.6	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.3	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	4.4	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	84	84	78	77	85

PAHs in Soil						
Our Reference		301228-153	301228-155	301228-157	301228-159	301228-161
Your Reference	UNITS	TP134	TP134	TP135	TP135	TP135
Depth		1.9-2	3.4-3.5	0.5-0.6	1.5-1.6	3.5-3.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	78	78	88	86	81

PAHs in Soil						
Our Reference		301228-162	301228-165	301228-167	301228-168	301228-170
Your Reference	UNITS	TP136	TP136	TP136	TP137	TP137
Depth		0.1-0.2	1.5-1.6	2.8-2.9	0.1-0.2	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	91	93	88	83	94

PAHs in Soil						
Our Reference		301228-172	301228-173	301228-174	301228-176	301228-177
Your Reference	UNITS	TP137	TP137	TP138	TP138	TP138A
Depth		2.5-2.6	3.5-3.6	0.1-0.2	1-1.1	0.7-0.8
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	0.56
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	82	95	85	94	95

PAHs in Soil						
Our Reference		301228-178	301228-180	301228-181	301228-182	301228-183
Your Reference	UNITS	TP139	TP139	TP139	TP139	TP140
Depth		0.1-0.2	1-1.1	1.2-1.3	1.4-1.5	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	81	91	91	98	78

PAHs in Soil						
Our Reference		301228-186	301228-187	301228-189	301228-192	301228-195
Your Reference	UNITS	TP141	TP141	TP142	TP143	TP144
Depth		0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	0.3	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.2	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	1.0	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	87	96	90	81	98

PAHs in Soil						
Our Reference		301228-196	301228-198	301228-201	301228-204	301228-207
Your Reference	UNITS	TP144	TP145	TP146	TP147	TP148
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	118	102	113	125	105

PAHs in Soil						
Our Reference		301228-208	301228-210	301228-211	301228-212	301228-214
Your Reference	UNITS	TP148	TP149	TP149	TP149	TP150
Depth		0.3-0.4	0.1-0.2	0.4-0.5	1-1.1	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	111	93	118	112	113

PAHs in Soil						
Our Reference		301228-217	301228-220	301228-221	301228-223	301228-226
Your Reference	UNITS	TP151	TP152	TP152	TP153	TP154
Depth		0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.3	<0.1	0.2	<0.1
Pyrene	mg/kg	<0.1	0.3	<0.1	0.2	<0.1
Benzo(a)anthracene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	0.3	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.2	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	2.0	<0.05	0.3	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	115	98	120	129	94

PAHs in Soil						
Our Reference		301228-229	301228-230	301228-233	301228-234	301228-236
Your Reference	UNITS	TP155	TP156	TP157	TP157	TP158
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	118	115	96	116	119

PAHs in Soil						
Our Reference		301228-238	301228-241	301228-242	301228-244	301228-247
Your Reference	UNITS	TP159	TP160	TP160	TP161	TP162
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	0.4	<0.05	<0.05	0.2
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	118	92	112	108	125

PAHs in Soil						
Our Reference		301228-250	301228-253	301228-254	301228-256	301228-259
Your Reference	UNITS	TP163	TP164	TP164	TP165	TP166
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0-0.1
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	0.2
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	108	106	120	108	124

PAHs in Soil						
Our Reference		301228-260	301228-261	301228-262	301228-265	301228-267
Your Reference	UNITS	TP166	TP166	TP166	BD2/20220718	BD2/20220719
Depth		0.2-0.3	0.3-0.4	0.5-0.6	-	-
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	99	110	105	125	123

PAHs in Soil					
Our Reference		301228-269	301228-273	301228-287	301228-290
Your Reference	UNITS	BD4/20220719	BD1/20220720	TP155	BD1/20220720
Depth		-	-	0.3-0.4	-
Date Sampled		19/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	107	110	113	109

Organochlorine Pesticides in soil						
Our Reference		301228-1	301228-5	301228-9	301228-15	301228-26
Your Reference	UNITS	BH167	BH168	BH169	TP102	TP106
Depth		0.2-0.3	0.2-0.3	0.2-0.3	0.1-0.2	0-0.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	80	85	79	80	80

Organochlorine Pesticides in soil						
Our Reference		301228-30	301228-46	301228-52	301228-63	301228-74
Your Reference	UNITS	TP107	TP111	TP113	TP117	TP120
Depth		0.5-0.7	0.5-0.7	0-0.2	0-0.2	0.1-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	29/07/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	85	86	80	84	97

Organochlorine Pesticides in soil						
Our Reference		301228-86	301228-92	301228-99	301228-104	301228-111
Your Reference	UNITS	TP124	TP125	TP126	TP126A	TP128
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	108	93	92	94

Organochlorine Pesticides in soil						
Our Reference		301228-116	301228-122	301228-129	301228-139	301228-146
Your Reference	UNITS	TP129	TP130	TP131	TP132	TP133
Depth		0.1-0.2	0.1-0.2	0.9-1	0.4-0.5	0.6-0.7
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	31/07/2022	31/07/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	106	110	104	83	86

Organochlorine Pesticides in soil						
Our Reference		301228-150	301228-162	301228-170	301228-174	301228-178
Your Reference	UNITS	TP134	TP136	TP137	TP138	TP139
Depth		0.1-0.2	0.1-0.2	1-1.1	0.1-0.2	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	85	92	92	92	90

Organochlorine Pesticides in soil						
Our Reference		301228-186	301228-195	301228-198	301228-207	301228-210
Your Reference	UNITS	TP141	TP144	TP145	TP148	TP149
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	90	93	92	97	87

Organochlorine Pesticides in soil						
Our Reference		301228-220	301228-226	301228-233	301228-241	301228-244
Your Reference	UNITS	TP152	TP154	TP157	TP160	TP161
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	90	92	89	92

Organochlorine Pesticides in soil			
Our Reference		301228-253	301228-260
Your Reference	UNITS	TP164	TP166
Depth		0.1-0.2	0.2-0.3
Date Sampled		21/07/2022	21/07/2022
Type of sample		Soil	Soil
Date extracted	-	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022
alpha-BHC	mg/kg	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1
Surrogate TCMX	%	93	86

Organophosphorus Pesticides in Soil						
Our Reference		301228-1	301228-5	301228-9	301228-15	301228-26
Your Reference	UNITS	BH167	BH168	BH169	TP102	TP106
Depth		0.2-0.3	0.2-0.3	0.2-0.3	0.1-0.2	0-0.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	80	85	79	80	80

Organophosphorus Pesticides in Soil						
Our Reference		301228-30	301228-46	301228-52	301228-63	301228-74
Your Reference	UNITS	TP107	TP111	TP113	TP117	TP120
Depth		0.5-0.7	0.5-0.7	0-0.2	0-0.2	0.1-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	29/07/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	85	86	80	84	97

Organophosphorus Pesticides in Soil						
Our Reference		301228-86	301228-92	301228-99	301228-104	301228-111
Your Reference	UNITS	TP124	TP125	TP126	TP126A	TP128
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	108	93	92	94

Organophosphorus Pesticides in Soil						
Our Reference		301228-116	301228-122	301228-129	301228-139	301228-146
Your Reference	UNITS	TP129	TP130	TP131	TP132	TP133
Depth		0.1-0.2	0.1-0.2	0.9-1	0.4-0.5	0.6-0.7
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	31/07/2022	31/07/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	106	110	104	83	86

Organophosphorus Pesticides in Soil						
Our Reference		301228-150	301228-162	301228-170	301228-174	301228-178
Your Reference	UNITS	TP134	TP136	TP137	TP138	TP139
Depth		0.1-0.2	0.1-0.2	1-1.1	0.1-0.2	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	85	92	92	92	90

Organophosphorus Pesticides in Soil						
Our Reference		301228-186	301228-195	301228-198	301228-207	301228-210
Your Reference	UNITS	TP141	TP144	TP145	TP148	TP149
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	90	93	92	97	87

Organophosphorus Pesticides in Soil						
Our Reference		301228-220	301228-226	301228-233	301228-241	301228-244
Your Reference	UNITS	TP152	TP154	TP157	TP160	TP161
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	90	92	89	92

Organophosphorus Pesticides in Soil			
Our Reference		301228-253	301228-260
Your Reference	UNITS	TP164	TP166
Depth		0.1-0.2	0.2-0.3
Date Sampled		21/07/2022	21/07/2022
Type of sample		Soil	Soil
Date extracted	-	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022
Dichlorvos	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	93	86

PCBs in Soil						
Our Reference		301228-1	301228-5	301228-9	301228-15	301228-26
Your Reference	UNITS	BH167	BH168	BH169	TP102	TP106
Depth		0.2-0.3	0.2-0.3	0.2-0.3	0.1-0.2	0-0.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	30/07/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	80	85	79	80	80

PCBs in Soil						
Our Reference		301228-30	301228-46	301228-52	301228-63	301228-74
Your Reference	UNITS	TP107	TP111	TP113	TP117	TP120
Depth		0.5-0.7	0.5-0.7	0-0.2	0-0.2	0.1-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	30/07/2022	30/07/2022	30/07/2022	30/07/2022	29/07/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	85	86	80	84	97

PCBs in Soil						
Our Reference		301228-86	301228-92	301228-99	301228-104	301228-111
Your Reference	UNITS	TP124	TP125	TP126	TP126A	TP128
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	108	93	92	94

PCBs in Soil						
Our Reference		301228-116	301228-122	301228-129	301228-139	301228-146
Your Reference	UNITS	TP129	TP130	TP131	TP132	TP133
Depth		0.1-0.2	0.1-0.2	0.9-1	0.4-0.5	0.6-0.7
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	31/07/2022	31/07/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	106	110	104	83	86

PCBs in Soil						
Our Reference		301228-150	301228-162	301228-170	301228-174	301228-178
Your Reference	UNITS	TP134	TP136	TP137	TP138	TP139
Depth		0.1-0.2	0.1-0.2	1-1.1	0.1-0.2	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	31/07/2022	31/07/2022	31/07/2022	31/07/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	85	92	92	92	90

PCBs in Soil						
Our Reference		301228-186	301228-195	301228-198	301228-207	301228-210
Your Reference	UNITS	TP141	TP144	TP145	TP148	TP149
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	31/07/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	90	93	92	97	87

PCBs in Soil						
Our Reference		301228-220	301228-226	301228-233	301228-241	301228-244
Your Reference	UNITS	TP152	TP154	TP157	TP160	TP161
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	90	92	89	92

PCBs in Soil			
Our Reference		301228-253	301228-260
Your Reference	UNITS	TP164	TP166
Depth		0.1-0.2	0.2-0.3
Date Sampled		21/07/2022	21/07/2022
Type of sample		Soil	Soil
Date extracted	-	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	93	86

Acid Extractable metals in soil						
Our Reference		301228-1	301228-3	301228-5	301228-6	301228-7
Your Reference	UNITS	BH167	BH167	BH168	BH168	BH168
Depth		0.2-0.3	0.9-1	0.2-0.3	0.7-0.8	1.1-1.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	6	5	7	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	13	13	14	15	13
Copper	mg/kg	21	21	22	20	27
Lead	mg/kg	15	11	18	21	20
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	8	6	8	9	9
Zinc	mg/kg	27	29	27	30	33

Acid Extractable metals in soil						
Our Reference		301228-9	301228-12	301228-15	301228-16	301228-18
Your Reference	UNITS	BH169	TP101	TP102	TP102	TP103
Depth		0.2-0.3	0.1-0.2	0.1-0.2	0.2-0.3	0-0.1
Date Sampled		21/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	<4	7	7	7	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	11	17	17	13	12
Copper	mg/kg	27	15	17	31	21
Lead	mg/kg	13	23	22	23	12
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	13	8	7	20	8
Zinc	mg/kg	30	25	20	56	25

Acid Extractable metals in soil						
Our Reference		301228-20	301228-23	301228-26	301228-27	301228-30
Your Reference	UNITS	TP104	TP105	TP106	TP106	TP107
Depth		0.1-0.2	0-0.1	0-0.2	0.2-0.3	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	7	9	8	6	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	18	20	19	17	16
Copper	mg/kg	12	13	17	22	9
Lead	mg/kg	21	27	22	15	18
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	6	7	8	8	6
Zinc	mg/kg	18	20	26	25	13

Acid Extractable metals in soil						
Our Reference		301228-31	301228-33	301228-36	301228-38	301228-41
Your Reference	UNITS	TP107	TP108	TP109	TP109	TP110
Depth		1-1.2	0-0.2	0-0.2	0.7-0.9	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	6	10	8	7	8
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	11	21	18	18	16
Copper	mg/kg	24	12	13	24	16
Lead	mg/kg	17	26	23	19	22
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	13	8	6	10	9
Zinc	mg/kg	47	23	20	30	29

Acid Extractable metals in soil						
Our Reference		301228-43	301228-46	301228-47	301228-49	301228-52
Your Reference	UNITS	TP110	TP111	TP111	TP112	TP113
Depth		1.3-1.5	0.5-0.7	0.9-1.1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	7	6	6	7	10
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	13	36	13	15	19
Copper	mg/kg	22	22	25	22	19
Lead	mg/kg	16	40	18	22	27
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	7	12	8	7
Zinc	mg/kg	32	120	34	49	24

Acid Extractable metals in soil						
Our Reference		301228-53	301228-55	301228-57	301228-58	301228-60
Your Reference	UNITS	TP113	TP114	TP114	TP115	TP116
Depth		0.3-0.5	0-0.2	0.8-1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	6	8	7	5	7
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	14	18	11	14	15
Copper	mg/kg	24	11	23	25	12
Lead	mg/kg	21	30	16	16	22
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	11	7	11	10	7
Zinc	mg/kg	34	18	44	32	30

Acid Extractable metals in soil						
Our Reference		301228-63	301228-64	301228-67	301228-69	301228-71
Your Reference	UNITS	TP117	TP117	TP118	TP118	TP119
Depth		0-0.2	0.45-0.6	0.5-0.7	1.5-1.7	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	8	5	7	5	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	18	14	17	14	15
Copper	mg/kg	12	27	11	26	24
Lead	mg/kg	26	15	20	14	29
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	8	10	6	10	7
Zinc	mg/kg	23	34	18	29	76

Acid Extractable metals in soil						
Our Reference		301228-72	301228-74	301228-75	301228-77	301228-80
Your Reference	UNITS	TP119	TP120	TP120	TP121	TP122
Depth		0.2-0.4	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		18/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	8	5	5	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	22	17	13	16
Copper	mg/kg	22	12	20	11	12
Lead	mg/kg	15	24	17	18	18
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	8	7	10	7	7
Zinc	mg/kg	24	14	20	23	16

Acid Extractable metals in soil						
Our Reference		301228-81	301228-83	301228-86	301228-88	301228-90
Your Reference	UNITS	TP122	TP123	TP124	TP124	TP124
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.9-1	1.8-1.9
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	4	7	8	6	4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	16	17	17	14
Copper	mg/kg	21	12	12	12	20
Lead	mg/kg	11	21	25	20	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	8	9	9	7
Zinc	mg/kg	21	21	18	22	22

Acid Extractable metals in soil						
Our Reference		301228-92	301228-94	301228-95	301228-97	301228-99
Your Reference	UNITS	TP125	TP125	TP125	TP125A	TP126
Depth		0.1-0.2	0.9-1	1-1.1	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	4	5	8	4
Cadmium	mg/kg	0.5	<0.4	<0.4	0.4	<0.4
Chromium	mg/kg	18	14	16	18	15
Copper	mg/kg	47	43	18	73	40
Lead	mg/kg	82	62	13	370	44
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	8	8	8	11	12
Zinc	mg/kg	210	180	21	230	160

Acid Extractable metals in soil						
Our Reference		301228-101	301228-102	301228-104	301228-107	301228-109
Your Reference	UNITS	TP126	TP126	TP126A	TP127	TP127
Depth		0.9-1	1-1.1	0.5-0.6	0.4-0.5	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	<4	5	6	<4
Cadmium	mg/kg	0.9	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	23	15	15	18	16
Copper	mg/kg	58	21	42	1,900	19
Lead	mg/kg	68	10	49	77	13
Mercury	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Nickel	mg/kg	15	8	10	17	10
Zinc	mg/kg	250	19	85	250	17

Acid Extractable metals in soil						
Our Reference		301228-111	301228-113	301228-116	301228-118	301228-120
Your Reference	UNITS	TP128	TP128	TP129	TP129	TP129
Depth		0.1-0.2	1-1.1	0.1-0.2	0.9-1	1.5-1.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	5	6	6	5
Cadmium	mg/kg	<0.4	<0.4	0.4	<0.4	<0.4
Chromium	mg/kg	19	17	19	19	16
Copper	mg/kg	57	88	120	29	22
Lead	mg/kg	42	75	70	37	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	16	18	16	11	11
Zinc	mg/kg	180	280	1,200	61	22

Acid Extractable metals in soil						
Our Reference		301228-122	301228-124	301228-125	301228-127	301228-129
Your Reference	UNITS	TP130	TP130	TP130	TP131	TP131
Depth		0.1-0.2	0.9-1	1.2-1.3	0.1-0.2	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	<4	<4	6	5	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	22	28	17	30	33
Copper	mg/kg	21	24	22	17	23
Lead	mg/kg	18	26	15	28	36
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Nickel	mg/kg	10	11	10	6	7
Zinc	mg/kg	32	35	26	89	110

Acid Extractable metals in soil						
Our Reference		301228-131	301228-133	301228-134	301228-136	301228-139
Your Reference	UNITS	TP131	TP131	TP131	TP131A	TP132
Depth		1.9-2	2.5-2.6	3-3.1	0.4-0.5	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	5	8	5	9
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	30	29	16	32	40
Copper	mg/kg	18	17	29	21	28
Lead	mg/kg	30	27	23	34	48
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Nickel	mg/kg	5	8	12	8	9
Zinc	mg/kg	86	85	40	130	140

Acid Extractable metals in soil						
Our Reference		301228-141	301228-142	301228-146	301228-149	301228-150
Your Reference	UNITS	TP132	TP132	TP133	TP133	TP134
Depth		1.4-1.5	1.7-1.8	0.6-0.7	2.9-3	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	9	7	6	5	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	36	17	13	12	15
Copper	mg/kg	25	14	12	15	11
Lead	mg/kg	42	21	19	18	17
Mercury	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	5	6	6	6
Zinc	mg/kg	99	22	17	22	16

Acid Extractable metals in soil						
Our Reference		301228-153	301228-155	301228-157	301228-159	301228-161
Your Reference	UNITS	TP134	TP134	TP135	TP135	TP135
Depth		1.9-2	3.4-3.5	0.5-0.6	1.5-1.6	3.5-3.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	7	4	7	6	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	10	16	12	12
Copper	mg/kg	13	17	12	9	11
Lead	mg/kg	19	19	23	17	17
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	6	8	6	5	6
Zinc	mg/kg	20	30	18	16	21

Acid Extractable metals in soil						
Our Reference		301228-162	301228-165	301228-167	301228-168	301228-170
Your Reference	UNITS	TP136	TP136	TP136	TP137	TP137
Depth		0.1-0.2	1.5-1.6	2.8-2.9	0.1-0.2	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	8	7	6	5	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	17	14	14	12
Copper	mg/kg	11	11	17	9	10
Lead	mg/kg	24	22	16	17	15
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	6	8	5	6
Zinc	mg/kg	20	18	23	16	18

Acid Extractable metals in soil						
Our Reference		301228-172	301228-173	301228-174	301228-176	301228-177
Your Reference	UNITS	TP137	TP137	TP138	TP138	TP138A
Depth		2.5-2.6	3.5-3.6	0.1-0.2	1-1.1	0.7-0.8
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	6	5	4	4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	15	14	11	13	11
Copper	mg/kg	10	19	15	15	16
Lead	mg/kg	18	13	28	13	23
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	5	9	5	4	6
Zinc	mg/kg	17	22	85	15	79

Acid Extractable metals in soil						
Our Reference		301228-178	301228-180	301228-181	301228-182	301228-183
Your Reference	UNITS	TP139	TP139	TP139	TP139	TP140
Depth		0.1-0.2	1-1.1	1.2-1.3	1.4-1.5	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	<4	<4	6	7	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	6	5	10	11	8
Copper	mg/kg	9	9	9	27	57
Lead	mg/kg	76	44	14	13	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	1	<1	4	14	41
Zinc	mg/kg	33	19	19	67	28

Acid Extractable metals in soil						
Our Reference		301228-186	301228-187	301228-189	301228-192	301228-195
Your Reference	UNITS	TP141	TP141	TP142	TP143	TP144
Depth		0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	<4	4	5	5	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	7	15	9	12	12
Copper	mg/kg	12	12	8	12	14
Lead	mg/kg	170	11	13	15	16
Mercury	mg/kg	0.2	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	1	5	5	4	6
Zinc	mg/kg	66	9	14	10	16

Acid Extractable metals in soil						
Our Reference		301228-196	301228-198	301228-201	301228-204	301228-207
Your Reference	UNITS	TP144	TP145	TP146	TP147	TP148
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	8	5	5	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	14	17	13	12	13
Copper	mg/kg	17	16	14	18	14
Lead	mg/kg	12	17	13	12	13
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	6	6	5	6	6
Zinc	mg/kg	21	18	15	21	18

Acid Extractable metals in soil						
Our Reference		301228-208	301228-210	301228-211	301228-212	301228-214
Your Reference	UNITS	TP148	TP149	TP149	TP149	TP150
Depth		0.3-0.4	0.1-0.2	0.4-0.5	1-1.1	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	5	<4	<4	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	15	14	5	4	15
Copper	mg/kg	19	18	3	5	18
Lead	mg/kg	12	11	5	5	13
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	8	4	2	7
Zinc	mg/kg	22	19	14	11	18

Acid Extractable metals in soil						
Our Reference		301228-217	301228-220	301228-221	301228-223	301228-226
Your Reference	UNITS	TP151	TP152	TP152	TP153	TP154
Depth		0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	<4	6	5	4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	12	11	15	12	9
Copper	mg/kg	16	19	20	17	16
Lead	mg/kg	15	27	10	17	12
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	11	5	6	7
Zinc	mg/kg	29	39	17	24	21

Acid Extractable metals in soil						
Our Reference		301228-229	301228-230	301228-233	301228-234	301228-236
Your Reference	UNITS	TP155	TP156	TP157	TP157	TP158
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	11	7	4	<4	7
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	12	12	12	13	12
Copper	mg/kg	17	18	18	23	15
Lead	mg/kg	18	15	13	10	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	10	7	9	8	7
Zinc	mg/kg	24	20	22	23	18

Acid Extractable metals in soil						
Our Reference		301228-238	301228-241	301228-242	301228-244	301228-247
Your Reference	UNITS	TP159	TP160	TP160	TP161	TP162
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	7	7	5	4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	10	11	10	12	33
Copper	mg/kg	13	23	19	20	30
Lead	mg/kg	12	16	10	13	6
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	5	7	3	8	49
Zinc	mg/kg	18	39	11	24	28

Acid Extractable metals in soil						
Our Reference		301228-250	301228-253	301228-254	301228-256	301228-259
Your Reference	UNITS	TP163	TP164	TP164	TP165	TP166
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0-0.1
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	6	7	8	4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	13	20	20	12	50
Copper	mg/kg	15	11	20	20	26
Lead	mg/kg	15	16	17	12	5
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	8	8	8	9	56
Zinc	mg/kg	18	15	17	20	31

Acid Extractable metals in soil						
Our Reference		301228-260	301228-261	301228-262	301228-265	301228-267
Your Reference	UNITS	TP166	TP166	TP166	BD2/20220718	BD2/20220719
Depth		0.2-0.3	0.3-0.4	0.5-0.6	-	-
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	<4	6	5	6	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	5	13	10	18	16
Copper	mg/kg	2	10	20	17	20
Lead	mg/kg	12	18	15	14	13
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	7	19	8	8
Zinc	mg/kg	29	16	29	17	16

Acid Extractable metals in soil						
Our Reference		301228-269	301228-273	301228-287	301228-290	301228-315
Your Reference	UNITS	BD4/20220719	BD1/20220720	TP155	BD1/20220720	TP106 - [TRIPLICATE]
Depth		-	-	0.3-0.4	-	0-0.2
Date Sampled		19/07/2022	20/07/2022	20/07/2022	20/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	5	8	9	6	7
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	15	11	13	12	16
Copper	mg/kg	20	27	27	23	12
Lead	mg/kg	11	14	11	12	20
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	12	8	6	5
Zinc	mg/kg	17	51	26	27	21

Acid Extractable metals in soil				
Our Reference		301228-316	301228-317	301228-318
Your Reference	UNITS	TP120 - [TRIPLICATE]	TP126 - [TRIPLICATE]	TP139 - [TRIPLICATE]
Depth		0.1-0.2	0.1-0.2	1-1.1
Date Sampled		19/07/2022	19/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil
Date prepared	-	29/07/2022	29/07/2022	29/07/2022
Date analysed	-	29/07/2022	29/07/2022	29/07/2022
Arsenic	mg/kg	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	17	16	6
Copper	mg/kg	17	56	8
Lead	mg/kg	13	42	55
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	8	13	1
Zinc	mg/kg	16	430	26

Misc Soil - Inorg						
Our Reference		301228-1	301228-5	301228-9	301228-15	301228-26
Your Reference	UNITS	BH167	BH168	BH169	TP102	TP106
Depth		0.2-0.3	0.2-0.3	0.2-0.3	0.1-0.2	0-0.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		301228-30	301228-46	301228-52	301228-63	301228-74
Your Reference	UNITS	TP107	TP111	TP113	TP117	TP120
Depth		0.5-0.7	0.5-0.7	0-0.2	0-0.2	0.1-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		301228-86	301228-92	301228-99	301228-104	301228-111
Your Reference	UNITS	TP124	TP125	TP126	TP126A	TP128
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		301228-116	301228-122	301228-129	301228-139	301228-146
Your Reference	UNITS	TP129	TP130	TP131	TP132	TP133
Depth		0.1-0.2	0.1-0.2	0.9-1	0.4-0.5	0.6-0.7
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		301228-150	301228-162	301228-170	301228-174	301228-178
Your Reference	UNITS	TP134	TP136	TP137	TP138	TP139
Depth		0.1-0.2	0.1-0.2	1-1.1	0.1-0.2	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		301228-186	301228-195	301228-198	301228-207	301228-210
Your Reference	UNITS	TP141	TP144	TP145	TP148	TP149
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		301228-220	301228-226	301228-233	301228-241	301228-244
Your Reference	UNITS	TP152	TP154	TP157	TP160	TP161
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg			
Our Reference		301228-253	301228-260
Your Reference	UNITS	TP164	TP166
Depth		0.1-0.2	0.2-0.3
Date Sampled		21/07/2022	21/07/2022
Type of sample		Soil	Soil
Date prepared	-	28/07/2022	28/07/2022
Date analysed	-	28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5

Moisture						
Our Reference		301228-1	301228-3	301228-5	301228-6	301228-7
Your Reference	UNITS	BH167	BH167	BH168	BH168	BH168
Depth		0.2-0.3	0.9-1	0.2-0.3	0.7-0.8	1.1-1.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	20	20	26	20	21

Moisture						
Our Reference		301228-9	301228-12	301228-15	301228-16	301228-18
Your Reference	UNITS	BH169	TP101	TP102	TP102	TP103
Depth		0.2-0.3	0.1-0.2	0.1-0.2	0.2-0.3	0-0.1
Date Sampled		21/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	24	20	18	14	20

Moisture						
Our Reference		301228-20	301228-23	301228-26	301228-27	301228-30
Your Reference	UNITS	TP104	TP105	TP106	TP106	TP107
Depth		0.1-0.2	0-0.1	0-0.2	0.2-0.3	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	20	21	24	17	20

Moisture						
Our Reference		301228-31	301228-33	301228-36	301228-38	301228-41
Your Reference	UNITS	TP107	TP108	TP109	TP109	TP110
Depth		1-1.2	0-0.2	0-0.2	0.7-0.9	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	14	24	22	20	21

Moisture						
Our Reference		301228-43	301228-46	301228-47	301228-49	301228-52
Your Reference	UNITS	TP110	TP111	TP111	TP112	TP113
Depth		1.3-1.5	0.5-0.7	0.9-1.1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	17	15	14	33	25

Moisture						
Our Reference		301228-53	301228-55	301228-57	301228-58	301228-60
Your Reference	UNITS	TP113	TP114	TP114	TP115	TP116
Depth		0.3-0.5	0-0.2	0.8-1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	19	23	15	17	23

Moisture						
Our Reference		301228-63	301228-64	301228-67	301228-69	301228-71
Your Reference	UNITS	TP117	TP117	TP118	TP118	TP119
Depth		0-0.2	0.45-0.6	0.5-0.7	1.5-1.7	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	21	17	20	15	17

Moisture						
Our Reference		301228-72	301228-74	301228-75	301228-77	301228-80
Your Reference	UNITS	TP119	TP120	TP120	TP121	TP122
Depth		0.2-0.4	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		18/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	11	14	13	12	14

Moisture						
Our Reference		301228-81	301228-83	301228-86	301228-88	301228-90
Your Reference	UNITS	TP122	TP123	TP124	TP124	TP124
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.9-1	1.8-1.9
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	12	16	18	14	12

Moisture						
Our Reference		301228-92	301228-94	301228-95	301228-97	301228-99
Your Reference	UNITS	TP125	TP125	TP125	TP125A	TP126
Depth		0.1-0.2	0.9-1	1-1.1	0.5-0.6	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	12	7.0	9.1	22	11

Moisture						
Our Reference		301228-101	301228-102	301228-104	301228-107	301228-109
Your Reference	UNITS	TP126	TP126	TP126A	TP127	TP127
Depth		0.9-1	1-1.1	0.5-0.6	0.4-0.5	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	14	11	10	13	15

Moisture						
Our Reference		301228-111	301228-113	301228-116	301228-118	301228-120
Your Reference	UNITS	TP128	TP128	TP129	TP129	TP129
Depth		0.1-0.2	1-1.1	0.1-0.2	0.9-1	1.5-1.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	13	17	13	16	11

Moisture						
Our Reference		301228-122	301228-124	301228-125	301228-127	301228-129
Your Reference	UNITS	TP130	TP130	TP130	TP131	TP131
Depth		0.1-0.2	0.9-1	1.2-1.3	0.1-0.2	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	9.4	12	12	11	12

Moisture						
Our Reference		301228-131	301228-133	301228-134	301228-136	301228-139
Your Reference	UNITS	TP131	TP131	TP131	TP131A	TP132
Depth		1.9-2	2.5-2.6	3-3.1	0.4-0.5	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	8.3	16	17	11	14

Moisture						
Our Reference		301228-141	301228-142	301228-146	301228-149	301228-150
Your Reference	UNITS	TP132	TP132	TP133	TP133	TP134
Depth		1.4-1.5	1.7-1.8	0.6-0.7	2.9-3	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	18	10	9.8	8.0	6.6

Moisture						
Our Reference		301228-153	301228-155	301228-157	301228-159	301228-161
Your Reference	UNITS	TP134	TP134	TP135	TP135	TP135
Depth		1.9-2	3.4-3.5	0.5-0.6	1.5-1.6	3.5-3.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	7.5	7.8	6.9	9.5	6.8

Moisture						
Our Reference		301228-162	301228-165	301228-167	301228-168	301228-170
Your Reference	UNITS	TP136	TP136	TP136	TP137	TP137
Depth		0.1-0.2	1.5-1.6	2.8-2.9	0.1-0.2	1-1.1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	9.7	8.4	6.6	4.3	3.6

Moisture						
Our Reference		301228-172	301228-173	301228-174	301228-176	301228-177
Your Reference	UNITS	TP137	TP137	TP138	TP138	TP138A
Depth		2.5-2.6	3.5-3.6	0.1-0.2	1-1.1	0.7-0.8
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	4.1	8.1	4.8	5.5	6.2

Moisture						
Our Reference		301228-178	301228-180	301228-181	301228-182	301228-183
Your Reference	UNITS	TP139	TP139	TP139	TP139	TP140
Depth		0.1-0.2	1-1.1	1.2-1.3	1.4-1.5	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	5.7	6.8	8.9	4.8	5.3

Moisture						
Our Reference		301228-186	301228-187	301228-189	301228-192	301228-195
Your Reference	UNITS	TP141	TP141	TP142	TP143	TP144
Depth		0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	8.0	7.2	4.3	9.5	9.9

Moisture						
Our Reference		301228-196	301228-198	301228-201	301228-204	301228-207
Your Reference	UNITS	TP144	TP145	TP146	TP147	TP148
Depth		0.3-0.4	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	11	15	7.8	7.5	5.5

Moisture						
Our Reference		301228-208	301228-210	301228-211	301228-212	301228-214
Your Reference	UNITS	TP148	TP149	TP149	TP149	TP150
Depth		0.3-0.4	0.1-0.2	0.4-0.5	1-1.1	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	11	8.4	7.4	3.7	14

Moisture						
Our Reference		301228-217	301228-220	301228-221	301228-223	301228-226
Your Reference	UNITS	TP151	TP152	TP152	TP153	TP154
Depth		0.1-0.2	0.1-0.2	0.4-0.5	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	14	11	12	13	7.4

Moisture						
Our Reference		301228-229	301228-230	301228-233	301228-234	301228-236
Your Reference	UNITS	TP155	TP156	TP157	TP157	TP158
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	5.5	8.0	9.0	6.1	10

Moisture						
Our Reference		301228-238	301228-241	301228-242	301228-244	301228-247
Your Reference	UNITS	TP159	TP160	TP160	TP161	TP162
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	9.3	18	12	12	6.0

Moisture						
Our Reference		301228-250	301228-253	301228-254	301228-256	301228-259
Your Reference	UNITS	TP163	TP164	TP164	TP165	TP166
Depth		0.1-0.2	0.1-0.2	0.3-0.4	0.1-0.2	0-0.1
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	10	7.3	13	9.4	7.2

Moisture						
Our Reference		301228-260	301228-261	301228-262	301228-265	301228-267
Your Reference	UNITS	TP166	TP166	TP166	BD2/20220718	BD2/20220719
Depth		0.2-0.3	0.3-0.4	0.5-0.6	-	-
Date Sampled		21/07/2022	21/07/2022	21/07/2022	18/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	12	18	13	10	10

Moisture					
Our Reference		301228-269	301228-273	301228-287	301228-290
Your Reference	UNITS	BD4/20220719	BD1/20220720	TP155	BD1/20220720
Depth		-	-	0.3-0.4	-
Date Sampled		19/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Moisture	%	12	13	16	16

Asbestos ID - soils NEPM						
Our Reference		301228-1	301228-5	301228-6	301228-9	301228-74
Your Reference	UNITS	BH167	BH168	BH168	BH169	TP120
Depth		0.2-0.3	0.2-0.3	0.7-0.8	0.2-0.3	0.1-0.2
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	666.99	641.25	629.84	1,049.03	669.9
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-80	301228-83	301228-86	301228-88	301228-92
Your Reference	UNITS	TP122	TP123	TP124	TP124	TP125
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.9-1	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	697.63	618.3	534.66	734.24	662.41
Sample Description	-	Brown clayey soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-94	301228-97	301228-98	301228-99	301228-101
Your Reference	UNITS	TP125	TP125A	TP125A	TP126	TP126
Depth		0.9-1	0.5-0.6	0.8-0.9	0.1-0.2	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	668.55	760.47	800.52	843.21	882
Sample Description	-	Brown coarse-grained soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	Chrysotile asbestos detected Organic fibre detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	0.1889	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	See Above	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	0.1512	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	0.0189	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-104	301228-105	301228-107	301228-108	301228-111
Your Reference	UNITS	TP126A	TP126A	TP127	TP127	TP128
Depth		0.5-0.6	0.8-0.9	0.4-0.5	0.9-1	0.1-0.2
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	743.77	849.69	771.13	771.76	911.77
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic mineral fibre detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-112	301228-113	301228-116	301228-117	301228-118
Your Reference	UNITS	TP128	TP128	TP129	TP129	TP129
Depth		0.4-0.5	1-1.1	0.1-0.2	0.4-0.5	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	804.3	790.04	731.34	743.78	809.35
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-119	301228-122	301228-124	301228-127	301228-129
Your Reference	UNITS	TP129	TP130	TP130	TP131	TP131
Depth		1.4-1.5	0.1-0.2	0.9-1	0.1-0.2	0.9-1
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	764.69	707.75	957.71	790.41	850.57
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-131	301228-132	301228-133	301228-136	301228-137
Your Reference	UNITS	TP131	TP131	TP131	TP131A	TP131A
Depth		1.9-2	2.4-2.5	2.5-2.6	0.4-0.5	1.4-1.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	912.47	728.5	865.74	812.45	803.65
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	Chrysotile asbestos detected Organic fibre detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	1.4503	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	See Above	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	1.3233	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-138	301228-139	301228-141	301228-146	301228-147
Your Reference	UNITS	TP132	TP132	TP132	TP133	TP133
Depth		0.1-0.2	0.4-0.5	1.4-1.5	0.6-0.7	1.2-1.3
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	769	948.43	835.76	736	781.4
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-149	301228-150	301228-152	301228-153	301228-155
Your Reference	UNITS	TP133	TP134	TP134	TP134	TP134
Depth		2.9-3	0.1-0.2	0.9-1	1.9-2	3.4-3.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	746.1	692.05	754.34	801.54	679.93
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-157	301228-159	301228-162	301228-163	301228-165
Your Reference	UNITS	TP135	TP135	TP136	TP136	TP136
Depth		0.5-0.6	1.5-1.6	0.1-0.2	0.5-0.6	1.5-1.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	723.74	858.85	767.72	826.22	816.55
Sample Description	-	Brown coarse-grained soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-168	301228-170	301228-172	301228-174	301228-175
Your Reference	UNITS	TP137	TP137	TP137	TP138	TP138
Depth		0.1-0.2	1-1.1	2.5-2.6	0.1-0.2	0.5-0.6
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	774.43	737.19	840.58	704.08	930.72
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	Chrysotile Amosite Crocidolite	Chrysotile
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	0.0142	0.0026
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	0.0020	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-177	301228-178	301228-179	301228-180	301228-181
Your Reference	UNITS	TP138A	TP139	TP139	TP139	TP139
Depth		0.7-0.8	0.1-0.2	0.5-0.6	1-1.1	1.2-1.3
Date Sampled		19/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	722.77	883.36	760.2	938.66	771
Sample Description	-	Brown clayey soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-183	301228-189	301228-192	301228-198	301228-201
Your Reference	UNITS	TP140	TP142	TP143	TP145	TP146
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	649.92	738.25	612.61	777.91	628.51
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown coarse-grained soil and rocks	Brown fine-grained soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-204	301228-207	301228-214	301228-217	301228-220
Your Reference	UNITS	TP147	TP148	TP150	TP151	TP152
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	525.82	653.19	570.61	681.82	589.65
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-226	301228-229	301228-230	301228-233	301228-236
Your Reference	UNITS	TP154	TP155	TP156	TP157	TP158
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	599.31	764.93	454.07	330.21	522.11
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-238	301228-241	301228-244	301228-247	301228-250
Your Reference	UNITS	TP159	TP160	TP161	TP162	TP163
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022	20/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	589.03	635.03	605.09	909.31	726.3
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-253	301228-256	301228-259	301228-260	301228-261
Your Reference	UNITS	TP164	TP165	TP166	TP166	TP166
Depth		0.1-0.2	0.1-0.2	0-0.1	0.2-0.3	0.3-0.4
Date Sampled		21/07/2022	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	858.64	904.1	1,062.07	813.19	820
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Beige coarse-grained soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM		
Our Reference		301228-314
Your Reference	UNITS	TP149
Depth		0.9-1
Date Sampled		20/07/2022
Type of sample		Soil
Date analysed	-	04/08/2022
Sample mass tested	g	883.4
Sample Description	-	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected
Total Asbestos#1	g/kg	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected
ACM >7mm Estimation*	g	–
FA and AF Estimation*	g	–
FA and AF Estimation*#2	%(w/w)	<0.001

Misc Inorg - Soil						
Our Reference		301228-15	301228-16	301228-63	301228-64	301228-67
Your Reference	UNITS	TP102	TP102	TP117	TP117	TP118
Depth		0.1-0.2	0.2-0.3	0-0.2	0.45-0.6	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
pH 1:5 soil:water	pH Units	6.6	7.1	5.8	7.8	5.9

Misc Inorg - Soil						
Our Reference		301228-80	301228-81	301228-113	301228-129	301228-139
Your Reference	UNITS	TP122	TP122	TP128	TP131	TP132
Depth		0.1-0.2	0.3-0.4	1-1.1	0.9-1	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022	01/08/2022	01/08/2022
pH 1:5 soil:water	pH Units	6.9	7.4	7.8	7.7	7.6

Misc Inorg - Soil				
Our Reference		301228-153	301228-172	301228-179
Your Reference	UNITS	TP134	TP137	TP139
Depth		1.9-2	2.5-2.6	0.5-0.6
Date Sampled		19/07/2022	19/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil
Date prepared	-	01/08/2022	01/08/2022	01/08/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022
pH 1:5 soil:water	pH Units	4.8	6.1	5.8

CEC						
Our Reference		301228-15	301228-16	301228-63	301228-64	301228-67
Your Reference	UNITS	TP102	TP102	TP117	TP117	TP118
Depth		0.1-0.2	0.2-0.3	0-0.2	0.45-0.6	0.5-0.7
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Exchangeable Ca	meq/100g	2.8	1.6	4.4	2.6	4.0
Exchangeable K	meq/100g	0.2	0.1	0.1	0.1	0.3
Exchangeable Mg	meq/100g	5.6	7.7	2.5	11	3.4
Exchangeable Na	meq/100g	0.6	3.3	<0.1	3.5	<0.1
Cation Exchange Capacity	meq/100g	9.2	13	7.2	17	7.7

CEC						
Our Reference		301228-80	301228-81	301228-113	301228-129	301228-139
Your Reference	UNITS	TP122	TP122	TP128	TP131	TP132
Depth		0.1-0.2	0.3-0.4	1-1.1	0.9-1	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Exchangeable Ca	meq/100g	5.2	3.3	9.9	13	18
Exchangeable K	meq/100g	0.1	0.1	0.2	0.2	0.4
Exchangeable Mg	meq/100g	8.6	11	4.7	0.6	0.4
Exchangeable Na	meq/100g	1.2	2.5	<0.1	<0.1	<0.1
Cation Exchange Capacity	meq/100g	15	17	15	14	19

CEC				
Our Reference		301228-153	301228-172	301228-179
Your Reference	UNITS	TP134	TP137	TP139
Depth		1.9-2	2.5-2.6	0.5-0.6
Date Sampled		19/07/2022	19/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil
Date prepared	-	02/08/2022	02/08/2022	02/08/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022
Exchangeable Ca	meq/100g	3.5	6.2	3.4
Exchangeable K	meq/100g	0.2	0.2	0.3
Exchangeable Mg	meq/100g	1.9	4.4	1.3
Exchangeable Na	meq/100g	<0.1	0.2	<0.1
Cation Exchange Capacity	meq/100g	5.7	11	5.1

Asbestos ID - materials						
Our Reference		301228-275	301228-276	301228-277	301228-278	301228-279
Your Reference	UNITS	ACM1	ACM2	ACM3	ACM4	ACM5
Depth		-	-	-	-	-
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	28/07/2022	28/07/2022	28/07/2022	28/07/2022	28/07/2022
Mass / Dimension of Sample	-	120x70x5mm	30x30x4mm	80x60x4mm	130x100x5mm	100x80x5mm
Sample Description	-	Beige fibre cement material	Beige fibre cement material	Grey vitreous fibrous insulation	Beige fibre cement material	Beige fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected Amosite asbestos detected Crocidolite asbestos detected	No asbestos detected Synthetic mineral fibres detected	Chrysotile asbestos detected Amosite asbestos detected Crocidolite asbestos detected	Chrysotile asbestos detected Amosite asbestos detected Crocidolite asbestos detected
Trace Analysis	-	[NT]	[NT]	No asbestos detected	[NT]	[NT]

Asbestos ID - materials				
Our Reference		301228-280	301228-281	301228-282
Your Reference	UNITS	ACM6	ACM7	ACM8
Depth		-	-	-
Date Sampled		19/07/2022	19/07/2022	19/07/2022
Type of sample		Material	Material	Material
Date analysed	-	28/07/2022	28/07/2022	28/07/2022
Mass / Dimension of Sample	-	160x100x6mm	250x250x5mm	50x30x4mm
Sample Description	-	Beige fibre cement material	Beige fibre cement material	Beige fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected Amosite asbestos detected Crocidolite asbestos detected
Trace Analysis	-	[NT]	[NT]	[NT]

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-OES analytical finish.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date extracted	-			03/08/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			04/08/2022	1	02/08/2022	02/08/2022		01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	<25	1	<25	<25	0	108	86
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	1	<25	<25	0	108	86
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	111	102
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	113	103
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	102	93
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	107	98
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	110	99
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	97	1	77	74	4	88	104

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-52
Date extracted	-			[NT]	26	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	26	01/08/2022	01/08/2022		01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	26	<25	<25	0	86	74
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	26	<25	<25	0	86	74
Benzene	mg/kg	0.2	Org-023	[NT]	26	<0.2	<0.2	0	83	73
Toluene	mg/kg	0.5	Org-023	[NT]	26	<0.5	<0.5	0	88	74
Ethylbenzene	mg/kg	1	Org-023	[NT]	26	<1	<1	0	80	70
m+p-xylene	mg/kg	2	Org-023	[NT]	26	<2	<2	0	89	77
o-Xylene	mg/kg	1	Org-023	[NT]	26	<1	<1	0	90	79
Naphthalene	mg/kg	1	Org-023	[NT]	26	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	26	105	107	2	80	73

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	301228-86
Date extracted	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	46	01/08/2022	01/08/2022		01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	46	<25	<25	0	92	78
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	46	<25	<25	0	92	78
Benzene	mg/kg	0.2	Org-023	[NT]	46	<0.2	<0.2	0	89	76
Toluene	mg/kg	0.5	Org-023	[NT]	46	<0.5	<0.5	0	88	78
Ethylbenzene	mg/kg	1	Org-023	[NT]	46	<1	<1	0	87	74
m+p-xylene	mg/kg	2	Org-023	[NT]	46	<2	<2	0	98	82
o-Xylene	mg/kg	1	Org-023	[NT]	46	<1	<1	0	99	84
Naphthalene	mg/kg	1	Org-023	[NT]	46	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	46	84	86	2	113	76

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301228-118
Date extracted	-			[NT]	63	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	63	01/08/2022	01/08/2022		01/08/2022	02/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	63	<25	<25	0	101	79
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	63	<25	<25	0	101	79
Benzene	mg/kg	0.2	Org-023	[NT]	63	<0.2	<0.2	0	107	78
Toluene	mg/kg	0.5	Org-023	[NT]	63	<0.5	<0.5	0	107	80
Ethylbenzene	mg/kg	1	Org-023	[NT]	63	<1	<1	0	94	73
m+p-xylene	mg/kg	2	Org-023	[NT]	63	<2	<2	0	98	82
o-Xylene	mg/kg	1	Org-023	[NT]	63	<1	<1	0	100	84
Naphthalene	mg/kg	1	Org-023	[NT]	63	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	63	72	80	11	107	77

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301228-142
Date extracted	-			[NT]	74	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	74	01/08/2022	01/08/2022		01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	74	<25	<25	0	90	101
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	74	<25	<25	0	90	101
Benzene	mg/kg	0.2	Org-023	[NT]	74	<0.2	<0.2	0	88	104
Toluene	mg/kg	0.5	Org-023	[NT]	74	<0.5	<0.5	0	92	105
Ethylbenzene	mg/kg	1	Org-023	[NT]	74	<1	<1	0	84	94
m+p-xylene	mg/kg	2	Org-023	[NT]	74	<2	<2	0	94	100
o-Xylene	mg/kg	1	Org-023	[NT]	74	<1	<1	0	95	102
Naphthalene	mg/kg	1	Org-023	[NT]	74	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	74	74	81	9	89	107

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	301228-173
Date extracted	-			[NT]	99	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	99	01/08/2022	01/08/2022		01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	99	<25	<25	0	91	99
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	99	<25	<25	0	91	99
Benzene	mg/kg	0.2	Org-023	[NT]	99	<0.2	<0.2	0	94	103
Toluene	mg/kg	0.5	Org-023	[NT]	99	<0.5	<0.5	0	81	104
Ethylbenzene	mg/kg	1	Org-023	[NT]	99	<1	<1	0	91	93
m+p-xylene	mg/kg	2	Org-023	[NT]	99	<2	<2	0	94	98
o-Xylene	mg/kg	1	Org-023	[NT]	99	<1	<1	0	96	101
Naphthalene	mg/kg	1	Org-023	[NT]	99	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	99	91	91	0	78	105

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	301228-204
Date extracted	-			[NT]	113	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	113	01/08/2022	01/08/2022		01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	113	<25	<25	0	92	101
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	113	<25	<25	0	92	101
Benzene	mg/kg	0.2	Org-023	[NT]	113	<0.2	<0.2	0	89	104
Toluene	mg/kg	0.5	Org-023	[NT]	113	<0.5	<0.5	0	88	105
Ethylbenzene	mg/kg	1	Org-023	[NT]	113	<1	<1	0	87	95
m+p-xylene	mg/kg	2	Org-023	[NT]	113	<2	<2	0	98	100
o-Xylene	mg/kg	1	Org-023	[NT]	113	<1	<1	0	99	103
Naphthalene	mg/kg	1	Org-023	[NT]	113	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	113	76	76	0	113	103

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	301228-250
Date extracted	-			[NT]	131	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	131	02/08/2022	02/08/2022		01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	131	<25	<25	0	90	98
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	131	<25	<25	0	90	98
Benzene	mg/kg	0.2	Org-023	[NT]	131	<0.2	<0.2	0	88	102
Toluene	mg/kg	0.5	Org-023	[NT]	131	<0.5	<0.5	0	92	88
Ethylbenzene	mg/kg	1	Org-023	[NT]	131	<1	<1	0	84	98
m+p-xylene	mg/kg	2	Org-023	[NT]	131	<2	<2	0	94	102
o-Xylene	mg/kg	1	Org-023	[NT]	131	<1	<1	0	95	104
Naphthalene	mg/kg	1	Org-023	[NT]	131	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	131	77	77	0	89	84

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	141	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	141	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	141	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	141	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	141	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	141	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	141	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	141	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	141	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	141	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	141	94	88	7	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	161	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	161	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	161	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	161	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	161	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	161	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	161	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	161	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	161	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	161	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	161	95	94	1	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	172	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	172	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	172	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	172	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	172	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	172	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	172	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	172	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	172	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	172	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	172	98	106	8	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	180	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	180	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	180	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	180	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	180	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	180	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	180	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	180	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	180	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	180	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	180	108	103	5	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	201	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	201	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	201	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	201	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	201	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	201	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	201	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	201	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	201	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	201	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	201	102	102	0	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	217	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	217	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	217	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	217	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	217	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	217	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	217	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	217	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	217	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	217	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	217	71	86	19	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	247	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	247	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	247	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	247	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	247	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	247	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	247	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	247	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	247	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	247	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	247	78	70	11	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	269	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	269	01/08/2022	01/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	269	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	269	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	269	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	269	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	269	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	269	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	269	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	269	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	269	86	81	6	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date extracted	-			28/07/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			03/08/2022	1	02/08/2022	02/08/2022		02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	1	<50	<50	0	95	104
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	1	<100	<100	0	110	101
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	1	<100	<100	0	86	88
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	1	<50	<50	0	95	104
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	1	<100	<100	0	110	101
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	1	<100	<100	0	86	88
Surrogate o-Terphenyl	%		Org-020	84	1	70	69	1	101	99

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-52
Date extracted	-			[NT]	26	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	26	02/08/2022	02/08/2022		02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	26	<50	<50	0	116	108
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	26	<100	<100	0	94	93
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	26	<100	<100	0	86	78
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	26	<50	<50	0	116	108
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	26	<100	<100	0	94	93
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	26	<100	<100	0	86	78
Surrogate o-Terphenyl	%		Org-020	[NT]	26	79	78	1	99	94

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	301228-86
Date extracted	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	46	02/08/2022	02/08/2022		03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	46	<50	<50	0	115	121
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	46	<100	<100	0	98	102
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	46	<100	<100	0	100	108
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	46	<50	<50	0	115	121
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	46	<100	<100	0	98	102
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	46	<100	<100	0	100	108
Surrogate o-Terphenyl	%		Org-020	[NT]	46	75	79	5	102	106

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301228-118
Date extracted	-			[NT]	63	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	63	03/08/2022	03/08/2022		03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	63	<50	<50	0	115	121
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	63	<100	<100	0	105	98
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	63	<100	<100	0	71	111
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	63	<50	<50	0	115	121
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	63	<100	<100	0	105	98
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	63	<100	<100	0	71	111
Surrogate o-Terphenyl	%		Org-020	[NT]	63	75	78	4	85	105

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301228-142
Date extracted	-			[NT]	74	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	74	03/08/2022	03/08/2022		02/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	74	<50	<50	0	115	116
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	74	<100	<100	0	107	105
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	74	<100	<100	0	71	69
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	74	<50	<50	0	115	116
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	74	<100	<100	0	107	105
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	74	<100	<100	0	71	69
Surrogate o-Terphenyl	%		Org-020	[NT]	74	76	75	1	88	94

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	301228-173
Date extracted	-			[NT]	99	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	99	03/08/2022	03/08/2022		02/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	99	<50	<50	0	99	111
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	99	<100	<100	0	104	103
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	99	<100	<100	0	86	93
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	99	<50	<50	0	99	111
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	99	<100	<100	0	104	103
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	99	<100	<100	0	86	93
Surrogate o-Terphenyl	%		Org-020	[NT]	99	79	83	5	80	87

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	301228-204
Date extracted	-			[NT]	113	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	113	03/08/2022	03/08/2022		03/08/2022	02/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	113	<50	<50	0	110	98
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	113	<100	<100	0	108	106
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	113	<100	<100	0	86	75
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	113	<50	<50	0	110	98
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	113	<100	<100	0	108	106
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	113	<100	<100	0	86	75
Surrogate o-Terphenyl	%		Org-020	[NT]	113	82	79	4	87	79

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	301228-250
Date extracted	-			[NT]	131	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	131	03/08/2022	03/08/2022		03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	131	<50	<50	0	105	90
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	131	<100	<100	0	110	95
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	131	<100	<100	0	114	85
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	131	<50	<50	0	105	90
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	131	<100	<100	0	110	95
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	131	<100	<100	0	114	85
Surrogate o-Terphenyl	%		Org-020	[NT]	131	81	85	5	83	80

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	141	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	141	03/08/2022	03/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	141	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	141	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	141	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	141	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	141	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	141	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	141	71	91	25	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	161	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	161	02/08/2022	02/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	161	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	161	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	161	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	161	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	161	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	161	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	161	87	94	8	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	172	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	172	03/08/2022	03/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	172	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	172	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	172	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	172	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	172	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	172	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	172	86	86	0	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	180	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	180	03/08/2022	03/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	180	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	180	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	180	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	180	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	180	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	180	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	180	83	86	4	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	201	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	201	02/08/2022	02/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	201	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	201	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	201	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	201	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	201	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	201	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	201	81	82	1	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	217	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	217	02/08/2022	02/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	217	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	217	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	217	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	217	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	217	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	217	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	217	81	84	4	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	247	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	247	03/08/2022	03/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	247	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	247	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	247	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	247	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	247	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	247	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	247	76	83	9	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	269	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	269	03/08/2022	03/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	269	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	269	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	269	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	269	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	269	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	269	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	269	77	79	3	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date extracted	-			28/07/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			02/08/2022	1	30/07/2022	30/07/2022		30/07/2022	30/07/2022
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	78
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	79	77
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	84
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	82
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	84
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	79	83
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	85	83
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	94	90
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	105	1	83	80	4	84	87

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-52
Date extracted	-			[NT]	26	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	26	30/07/2022	30/07/2022		30/07/2022	30/07/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	82	80
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	79	79
Fluorene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	86	86
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	98	86
Anthracene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	104	82
Pyrene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	103	83
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	91	85
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	26	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	26	<0.05	<0.05	0	84	84
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	26	81	86	6	102	85

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	301228-86
Date extracted	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	46	30/07/2022	30/07/2022		29/07/2022	29/07/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	97	103
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	95	99
Fluorene	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	101	101
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	46	0.1	0.1	0	110	118
Anthracene	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	46	0.3	0.3	0	104	110
Pyrene	mg/kg	0.1	Org-022/025	[NT]	46	0.3	0.4	29	109	117
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	46	0.2	0.2	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	46	0.2	0.2	0	89	95
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	46	0.3	0.4	29	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	46	0.2	0.3	40	112	114
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	46	0.1	0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	46	0.2	0.2	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	46	87	86	1	105	119

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301228-118
Date extracted	-			[NT]	63	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	63	30/07/2022	30/07/2022		29/07/2022	29/07/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	88	86
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	87	85
Fluorene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	90	88
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	100	98
Anthracene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	92	96
Pyrene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	97	92
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	83	77
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	63	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	63	<0.05	<0.05	0	96	106
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	63	76	82	8	94	96

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301228-142
Date extracted	-			[NT]	74	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	74	29/07/2022	29/07/2022		31/07/2022	31/07/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	72	74
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	71	69
Fluorene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	74	74
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	73	80
Anthracene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	72	80
Pyrene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	79	91
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	77	77
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	74	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	74	<0.05	<0.05	0	72	78
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	74	98	104	6	73	88

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	301228-173
Date extracted	-			[NT]	99	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	99	29/07/2022	29/07/2022		31/07/2022	31/07/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	84	84
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	85	81
Fluorene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	86	82
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	82	80
Anthracene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	82	80
Pyrene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	89	89
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	83	71
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	99	<0.2	0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	99	<0.05	0.2	120	90	92
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	0.5	133	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	0.4	120	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	99	94	101	7	88	93

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	301228-204
Date extracted	-			[NT]	113	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	113	29/07/2022	29/07/2022		02/08/2022	02/08/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	97	99
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	101	97
Fluorene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	101	99
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	110	106
Anthracene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	106	102
Pyrene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	123	117
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	87	81
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	113	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	113	<0.05	<0.05	0	94	84
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	113	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	113	104	98	6	117	122

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	301228-250
Date extracted	-			[NT]	131	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	131	29/07/2022	29/07/2022		02/08/2022	02/08/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	131	<0.1	<0.1	0	99	90
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	131	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	131	<0.1	<0.1	0	99	87
Fluorene	mg/kg	0.1	Org-022/025	[NT]	131	<0.1	<0.1	0	97	88
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	131	0.2	0.2	0	106	96
Anthracene	mg/kg	0.1	Org-022/025	[NT]	131	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	131	0.4	0.3	29	106	90
Pyrene	mg/kg	0.1	Org-022/025	[NT]	131	0.4	0.4	0	109	105
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	131	0.2	0.2	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	131	0.2	0.2	0	93	75
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	131	0.4	0.3	29	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	131	0.2	0.2	0	94	72
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	131	0.2	0.2	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	131	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	131	0.1	0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	131	94	108	14	112	121

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	141	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	141	31/07/2022	31/07/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	141	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	141	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	141	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	141	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	141	0.4	0.2	67	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	141	0.2	<0.1	67	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	141	0.8	0.5	46	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	141	0.8	0.5	46	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	141	0.5	0.3	50	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	141	0.4	0.2	67	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	141	0.6	0.4	40	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	141	0.3	0.2	40	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	141	0.2	0.1	67	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	141	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	141	0.2	0.2	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	141	84	83	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	161	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	161	31/07/2022	31/07/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	161	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	161	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	161	81	76	6	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	172	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	172	31/07/2022	31/07/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	172	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	172	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	172	82	87	6	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	180	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	180	31/07/2022	31/07/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	180	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	180	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	180	91	90	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	201	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	201	02/08/2022	02/08/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	201	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	201	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	201	113	119	5	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	217	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	217	02/08/2022	02/08/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	217	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	217	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	217	115	117	2	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	247	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	247	02/08/2022	02/08/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	247	0.2	0.2	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	247	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	247	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	247	125	117	7	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	269	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	269	02/08/2022	02/08/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	269	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	269	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	269	107	103	4	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date extracted	-			28/07/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			02/08/2022	1	30/07/2022	30/07/2022		30/07/2022	30/07/2022
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	82	80
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	85	82
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	71	79
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	85	85
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	84
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	84
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	82
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	68	76
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	82
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	68	66
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	98	1	80	79	1	79	84

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-52
Date extracted	-			[NT]	26	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	26	30/07/2022	30/07/2022		30/07/2022	30/07/2022
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	78	73
HCB	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	85	76
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	97	78
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	103	83
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	102	82
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	98	82
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	96	85
Endrin	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	90	78
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	94	80
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	64	77
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	26	80	81	1	86	85

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	301228-86
Date extracted	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	46	30/07/2022	30/07/2022		29/07/2022	29/07/2022
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	92	100
HCB	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	106	110
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	95	99
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	113	116
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	106	110
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	105	113
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	106	110
Endrin	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	94	110
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	96	104
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	94	97
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	46	86	85	1	105	115

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date extracted	-			[NT]	63	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	63	30/07/2022	30/07/2022		29/07/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	86	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	92	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	85	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	101	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	94	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	92	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	92	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	86	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	82	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	70	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	63	84	85	1	95	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	[NT]
Date extracted	-			[NT]	74	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	74	29/07/2022	29/07/2022		31/07/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	78	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	78	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	77	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	79	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	78	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	78	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	80	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	64	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	78	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	74	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	74	97	105	8	80	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date extracted	-			[NT]	99	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	99	29/07/2022	29/07/2022		31/07/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	86	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	92	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	81	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	87	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	82	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	84	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	84	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	76	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	80	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	72	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	99	93	98	5	91	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			[NT]	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			[NT]	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	82	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	86	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	78	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	85	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	84	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	82	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	82	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	79	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	81	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	79	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	101	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			[NT]	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			[NT]	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	94	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	96	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	105	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	89	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	101	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	116	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	92	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date extracted	-			28/07/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			02/08/2022	1	30/07/2022	30/07/2022		30/07/2022	30/07/2022
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	88
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	69	75
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	99	97
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	79	105
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	88
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	89
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	96	94
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	98	1	80	79	1	79	84

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-52
Date extracted	-			[NT]	26	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	26	30/07/2022	30/07/2022		30/07/2022	30/07/2022
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	82	64
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	87	67
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	103	71
Malathion	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	105	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	102	76
Parathion	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	95	68
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	100	72
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	26	80	81	1	86	89

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	301228-86
Date extracted	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	29/07/2022
Date analysed	-			[NT]	46	30/07/2022	30/07/2022		29/07/2022	29/07/2022
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	98	100
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	93	99
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	97	101
Malathion	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	132	116
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	104	110
Parathion	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	101	98
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	104	119
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	46	86	85	1	105	115

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date extracted	-			[NT]	63	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	63	30/07/2022	30/07/2022		29/07/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	74	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	79	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	79	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	95	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	90	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	107	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	82	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	63	84	85	1	95	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	[NT]
Date extracted	-			[NT]	74	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	74	29/07/2022	29/07/2022		31/07/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	107	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	65	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	63	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	101	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	82	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	64	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	66	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	74	97	105	8	80	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date extracted	-			[NT]	99	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	99	29/07/2022	29/07/2022		31/07/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	115	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	73	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	63	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	99	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	80	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	70	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	72	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	99	93	98	5	91	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			[NT]	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			[NT]	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	102	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	88	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	76	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	75	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	72	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	88	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	81	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	101	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			[NT]	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			[NT]	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	97	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	93	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	130	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	110	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	89	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	84	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date extracted	-			28/07/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			02/08/2022	1	30/07/2022	30/07/2022		30/07/2022	30/07/2022
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	116	100
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	98	1	80	79	1	79	84

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-52
Date extracted	-			[NT]	26	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	26	30/07/2022	30/07/2022		30/07/2022	30/07/2022
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	26	<0.1	<0.1	0	126	100
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	26	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	26	80	81	1	86	89

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	301228-86
Date extracted	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	46	30/07/2022	30/07/2022		29/07/2022	29/07/2022
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	46	<0.1	<0.1	0	74	70
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	46	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	46	86	85	1	105	115

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date extracted	-			[NT]	63	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	63	30/07/2022	30/07/2022		29/07/2022	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	63	<0.1	<0.1	0	73	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	63	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	63	84	85	1	95	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	[NT]
Date extracted	-			[NT]	74	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	74	29/07/2022	29/07/2022		31/07/2022	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	74	<0.1	<0.1	0	74	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	74	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	74	97	105	8	80	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date extracted	-			[NT]	99	28/07/2022	28/07/2022		28/07/2022	[NT]
Date analysed	-			[NT]	99	29/07/2022	29/07/2022		31/07/2022	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	99	<0.1	<0.1	0	120	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	99	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	99	93	98	5	91	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			[NT]	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			[NT]	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	[NT]	[NT]	[NT]	[NT]	89	[NT]
Surrogate TCMX	%		Org-021	[NT]	[NT]	[NT]	[NT]	[NT]	101	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			[NT]	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			[NT]	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	[NT]	[NT]	[NT]	[NT]	78	[NT]
Surrogate TCMX	%		Org-021	[NT]	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date prepared	-			29/07/2022	1	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			29/07/2022	1	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	<4	1	5	4	22	91	78
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	96	83
Chromium	mg/kg	1	Metals-020	<1	1	13	11	17	90	86
Copper	mg/kg	1	Metals-020	<1	1	21	16	27	93	98
Lead	mg/kg	1	Metals-020	<1	1	15	13	14	96	82
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	106	107
Nickel	mg/kg	1	Metals-020	<1	1	8	6	29	96	84
Zinc	mg/kg	1	Metals-020	<1	1	27	22	20	95	78

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-52
Date prepared	-			[NT]	26	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			[NT]	26	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	[NT]	26	8	<4	67	97	81
Cadmium	mg/kg	0.4	Metals-020	[NT]	26	<0.4	<0.4	0	99	79
Chromium	mg/kg	1	Metals-020	[NT]	26	19	14	30	94	85
Copper	mg/kg	1	Metals-020	[NT]	26	17	10	52	96	97
Lead	mg/kg	1	Metals-020	[NT]	26	22	22	0	100	84
Mercury	mg/kg	0.1	Metals-021	[NT]	26	<0.1	<0.1	0	104	105
Nickel	mg/kg	1	Metals-020	[NT]	26	8	5	46	98	83
Zinc	mg/kg	1	Metals-020	[NT]	26	26	15	54	98	74

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	301228-86
Date prepared	-			[NT]	46	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			[NT]	46	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	[NT]	46	6	6	0	94	79
Cadmium	mg/kg	0.4	Metals-020	[NT]	46	<0.4	<0.4	0	97	80
Chromium	mg/kg	1	Metals-020	[NT]	46	36	42	15	92	84
Copper	mg/kg	1	Metals-020	[NT]	46	22	22	0	94	98
Lead	mg/kg	1	Metals-020	[NT]	46	40	44	10	97	88
Mercury	mg/kg	0.1	Metals-021	[NT]	46	<0.1	<0.1	0	113	108
Nickel	mg/kg	1	Metals-020	[NT]	46	7	7	0	96	82
Zinc	mg/kg	1	Metals-020	[NT]	46	120	110	9	96	77

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301228-118
Date prepared	-			[NT]	63	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			[NT]	63	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	[NT]	63	8	7	13	87	76
Cadmium	mg/kg	0.4	Metals-020	[NT]	63	<0.4	<0.4	0	90	78
Chromium	mg/kg	1	Metals-020	[NT]	63	18	16	12	86	100
Copper	mg/kg	1	Metals-020	[NT]	63	12	11	9	88	121
Lead	mg/kg	1	Metals-020	[NT]	63	26	24	8	90	#
Mercury	mg/kg	0.1	Metals-021	[NT]	63	<0.1	<0.1	0	119	117
Nickel	mg/kg	1	Metals-020	[NT]	63	8	8	0	89	87
Zinc	mg/kg	1	Metals-020	[NT]	63	23	23	0	89	#

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301228-142
Date prepared	-			[NT]	74	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			[NT]	74	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	[NT]	74	8	<4	67	96	82
Cadmium	mg/kg	0.4	Metals-020	[NT]	74	<0.4	<0.4	0	98	82
Chromium	mg/kg	1	Metals-020	[NT]	74	22	18	20	93	82
Copper	mg/kg	1	Metals-020	[NT]	74	12	17	34	96	95
Lead	mg/kg	1	Metals-020	[NT]	74	24	12	67	99	83
Mercury	mg/kg	0.1	Metals-021	[NT]	74	<0.1	<0.1	0	107	118
Nickel	mg/kg	1	Metals-020	[NT]	74	7	8	13	98	83
Zinc	mg/kg	1	Metals-020	[NT]	74	14	16	13	97	73

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	301228-173
Date prepared	-			[NT]	99	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			[NT]	99	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	[NT]	99	4	5	22	98	77
Cadmium	mg/kg	0.4	Metals-020	[NT]	99	<0.4	<0.4	0	102	80
Chromium	mg/kg	1	Metals-020	[NT]	99	15	14	7	96	86
Copper	mg/kg	1	Metals-020	[NT]	99	40	65	48	99	100
Lead	mg/kg	1	Metals-020	[NT]	99	44	55	22	102	85
Mercury	mg/kg	0.1	Metals-021	[NT]	99	<0.1	<0.1	0	97	109
Nickel	mg/kg	1	Metals-020	[NT]	99	12	13	8	101	83
Zinc	mg/kg	1	Metals-020	[NT]	99	160	160	0	100	81

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	301228-204
Date prepared	-			[NT]	113	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			[NT]	113	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	[NT]	113	5	6	18	88	72
Cadmium	mg/kg	0.4	Metals-020	[NT]	113	<0.4	<0.4	0	86	77
Chromium	mg/kg	1	Metals-020	[NT]	113	17	20	16	93	74
Copper	mg/kg	1	Metals-020	[NT]	113	88	68	26	93	91
Lead	mg/kg	1	Metals-020	[NT]	113	75	61	21	87	#
Mercury	mg/kg	0.1	Metals-021	[NT]	113	<0.1	<0.1	0	97	90
Nickel	mg/kg	1	Metals-020	[NT]	113	18	16	12	91	71
Zinc	mg/kg	1	Metals-020	[NT]	113	280	260	7	87	#

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	301228-250
Date prepared	-			[NT]	131	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Date analysed	-			[NT]	131	29/07/2022	29/07/2022		29/07/2022	29/07/2022
Arsenic	mg/kg	4	Metals-020	[NT]	131	5	5	0	89	72
Cadmium	mg/kg	0.4	Metals-020	[NT]	131	<0.4	<0.4	0	86	80
Chromium	mg/kg	1	Metals-020	[NT]	131	30	42	33	94	72
Copper	mg/kg	1	Metals-020	[NT]	131	18	22	20	94	85
Lead	mg/kg	1	Metals-020	[NT]	131	30	39	26	88	##
Mercury	mg/kg	0.1	Metals-021	[NT]	131	<0.1	0.1	0	88	82
Nickel	mg/kg	1	Metals-020	[NT]	131	5	6	18	92	70
Zinc	mg/kg	1	Metals-020	[NT]	131	86	110	24	86	##

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	141	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	141	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	141	9	7	25	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	141	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	141	36	31	15	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	141	25	22	13	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	141	42	40	5	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	141	0.1	0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	141	7	7	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	141	99	92	7	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	161	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	161	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	161	5	5	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	161	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	161	12	11	9	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	161	11	13	17	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	161	17	17	0	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	161	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	161	6	6	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	161	21	22	5	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	172	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	172	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	172	6	6	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	172	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	172	15	14	7	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	172	10	9	11	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	172	18	19	5	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	172	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	172	5	5	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	172	17	16	6	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	180	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	180	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	180	<4	<4	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	180	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	180	5	5	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	180	9	5	57	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	180	44	16	93	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	180	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	180	<1	<1	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	180	19	6	104	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	201	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	201	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	201	5	4	22	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	201	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	201	13	13	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	201	14	17	19	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	201	13	11	17	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	201	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	201	5	5	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	201	15	16	6	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	217	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	217	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	217	5	6	18	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	217	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	217	12	13	8	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	217	16	17	6	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	217	15	14	7	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	217	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	217	7	8	13	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	217	29	35	19	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	247	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	247	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	247	<4	<4	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	247	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	247	33	36	9	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	247	30	26	14	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	247	6	5	18	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	247	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	247	49	53	8	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	247	28	26	7	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	269	29/07/2022	29/07/2022		[NT]	[NT]
Date analysed	-			[NT]	269	29/07/2022	29/07/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	269	5	5	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	269	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	269	15	15	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	269	20	21	5	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	269	11	11	0	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	269	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	269	9	9	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	269	17	18	6	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-5
Date prepared	-			28/07/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			28/07/2022	1	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	106	98

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	301228-86
Date prepared	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Date analysed	-			[NT]	46	28/07/2022	28/07/2022		28/07/2022	28/07/2022
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	46	<5	<5	0	105	100

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	74	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	74	28/07/2022	28/07/2022		[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	74	<5	<5	0	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	99	28/07/2022	28/07/2022		[NT]	[NT]
Date analysed	-			[NT]	99	28/07/2022	28/07/2022		[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	99	<5	<5	0	[NT]	[NT]

QUALITY CONTROL: Misc Inorg - Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			01/08/2022	15	01/08/2022	01/08/2022		01/08/2022	[NT]
Date analysed	-			01/08/2022	15	01/08/2022	01/08/2022		01/08/2022	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	15	6.6	6.5	2	102	[NT]

QUALITY CONTROL: CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	301228-16
Date prepared	-			02/08/2022	15	02/08/2022	02/08/2022		02/08/2022	02/08/2022
Date analysed	-			02/08/2022	15	02/08/2022	02/08/2022		02/08/2022	02/08/2022
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	15	2.8	2.6	7	97	106
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	15	0.2	0.1	67	96	94
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	15	5.6	5.1	9	91	110
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	15	0.6	0.5	18	103	98

QUALITY CONTROL: CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	153	02/08/2022	02/08/2022		[NT]	[NT]
Date analysed	-			[NT]	153	02/08/2022	02/08/2022		[NT]	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-020	[NT]	153	3.5	3.9	11	[NT]	[NT]
Exchangeable K	meq/100g	0.1	Metals-020	[NT]	153	0.2	0.2	0	[NT]	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-020	[NT]	153	1.9	2.2	15	[NT]	[NT]
Exchangeable Na	meq/100g	0.1	Metals-020	[NT]	153	<0.1	<0.1	0	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Acid Extractable Metals in Soil:
- The laboratory RPD acceptance criteria has been exceeded for 301228-26 for Cu & Zn. Therefore a triplicate result has been issued as laboratory sample number 301228-315.
- The laboratory RPD acceptance criteria has been exceeded for 301228-74 for Pb. Therefore a triplicate result has been issued as laboratory sample number 301228-316.
- The laboratory RPD acceptance criteria has been exceeded for 301228-99 for Cu. Therefore a triplicate result has been issued as laboratory sample number 301228-317.
- The laboratory RPD acceptance criteria has been exceeded for 301228-180 for Cu, Pb & Zn. Therefore a triplicate result has been issued as laboratory sample number 301228-318.
- # Percent recovery is not possible to report due to the inhomogeneous nature of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.
-## Low spike recovery was obtained for this sample. The sample was re-digested and re-spiked and the low recovery was confirmed. This is due to matrix interferences. However, an acceptable recovery was obtained for the LCS.

PAHs in Soil - The RPD for duplicate results is accepted due to the non homogenous nature of sample/s 301228-99,99d.

TRH Soil C10-C40 NEPM - # Percent recovery for the surrogate/matrix spike is not possible to report as the high concentration of analytes in sample/s 301228-241 have caused interference.

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Factual description of asbestos identified in the soil samples: NEPM
Sample 301228-98; Chrysotile asbestos identified in 0.1890g of fibrous matted material

Sample 301228-131; Chrysotile asbestos identified in 8.8223g of fibre cement material >7mm

Sample 301228-174; Chrysotile, Amosite & Crocidolite asbestos identified in 0.0178g of fibrous matted material

Sample 301228-175; Chrysotile asbestos identified in 0.0033g of fibrous matted material

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	*EnviroLab*
Project Manager:	DIH	**Order Number:**		**Sampler:** PJ	*12 Ashley Street Chatswood NSW 2067*
Email:	David.Holden@douglaspartners.com.au; Jack.Hichliffe@douglaspartners.com.au			**Attn:**	*Aileen Hie*
Turnaround time:	☑ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day			**Contact:**	*99106200*
Prior Storage:	☑ Fridge ☐ Freezer ☐ Shelf	**Do samples contain 'potential' HBM?**	☐ No ☐ Yes (If YES, then handle, transport and store in accordance with FPM HAZID)		

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
1	BH167	0.2	0.3	21.07.22	S	G /P	x		x									BH01
2	BH167	0.7	0.8	21.07.22	S	G /P							x					
3	BH167	0.9	1	21.07.22	S	G /P		x										
4	BH167	1.4	1.5	21.07.22	S	G /P							x					
5	BH168	0.2	0.3	21.07.22	S	G /P	x		x									BH02
6	BH168	0.7	0.8	21.07.22	S	G /P		x	x									
7	BH168	1.1	1.2	21.07.22	S	G /P		x										
8	BH168	1.6	1.7	21.07.22	S	G /P							x					
9	BH169	0.2	0.3	21.07.22	S	G /P	x		x									BH03
10	BH169	0.3	0.4	21.07.22	S	G /P							x					
11	BH169	0.6	0.7	21.07.22	S	G /P							x					
12	TP101	0.1	0.2	18.07.22	S	G /P		x	x									
13	TP101	0,2	0.3	18.07.22	S	G /P							x					
14	TP101	0.6	0.7	18.07.22	S	G /P							x					

Metals to analyse: Std			**LAB RECEIPT**
Number of samples in container: 292	**Transported to laboratory by:** DP		**Lab Ref. No:** 301228
Send results to: Douglas Partners Pty Ltd			**Received by:** AP ELS SYD
Address:	**Phone:**		**Date & Time:** 22-7-22 1615
Relinquished by: PJ 22/7/22	**Date:**	**Signed:**	**Signed:**

301228 AP

Douglas Partners
Geotechnics / Environment / Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	*EnviroLab*
Project Manager:	DIH	**Order Number:**		**Dispatch date:**	*12 Ashley Street Chatswood NSW 2067*

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M-material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
15	TP102	0.1	0.2	18.07.22	S	G / P	x		x	x								
16	TP102	0.2	0.3	18.07.22	S	G / P		x		x								
17	TP102	0.6	0.7	18.07.22	S	G / P							x					
18	TP103	0	0.1	18.07.22	S	G / P		x	x									
19	TP103	0.5	0.6	18.07.22	S	G / P							x					
20	TP104	0.1	0.2	18.07.22	S	G / P		x	x									
21	TP104	0.4	0.5	18.07.22	S	G / P							x					
22	TP104	0.9	1	18.07.22	S	G / P							x					
23	TP105	0	0.1	18.07.22	S	G / P		x	x									
24	TP105	0.1	0.2	18.07.22	S	G / P							x					
25	TP105	0.7	0.8	18.07.22	S	G / P							x					
26	TP106	0	0.2	18.07.22	S	G / P	x		x									
27	TP106	0.2	0.3	18.07.22	S	G / P		x										
28	TP106	0.7	0.8	18.07.22	S	G / P							x					
29	TP107	0	0.2	18.07.22	S	G / P			x									
30	TP107	0.5	0.7	18.07.22	S	G / P	x		x									
31	TP107	1	1.2	18.07.22	S	G / P		x										
32	TP107	1.5	1.7	18.07.22	S	G / P							x					

301228 AP

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	*EnviroLab*
Project Manager:	DIH			**Dispatch date:**	22-07-22

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
33	TP108	0	0.2	18.07.22	S	G / P		x	x									
34	TP108	0.4	0.6	18.07.22	S	G / P							x					
35	TP108	0.9	1	18.07.22	S	G / P							x					
36	TP109	0	0.2	18.07.22	S	G / P		x	x									
37	TP109	0.5	0.7	18.07.22	S	G / P							x					
38	TP109	0.7	0.9	18.07.22	S	G / P		x										
39	TP109	1.3	1.5	18.07.22	S	G / P							x					
40	TP110	0	0.2	18.07.22	S	G / P							x					
41	TP110	0.5	0.7	18.07.22	S	G / P		x	x									
42	TP110	1	1.2	18.07.22	S	G / P			x									
43	TP110	1.3	1.5	18.07.22	S	G / P		x										
44	TP110	1.8	1.9	18.07.22	S	G / P							x					
45	TP111	0	0.2	18.07.22	S	G / P			x									
46	TP111	0.5	0.7	18.07.22	S	G / P	x		x									
47	TP111	0.9	1.1	18.07.22	S	G / P		x										
48	TP111	1.4	1.6	18.07.22	S	G / P							x					
49	TP112	0	0.2	18.07.22	S	G / P		x	x									
50	TP112	0.25	0.35	18.07.22	S	G / P							x					
51	TP112	0.7	0.9	18.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
52	TP113	0	0.2	18.07.22	S	G / P	x		x									
53	TP113	0.3	0.5	18.07.22	S	G / P		x										
54	TP113	0.8	1	18.07.22	S	G / P							x					
55	TP114	0	0.2	18.07.22	S	G / P		x	x									
56	TP114	0.3	0.5	18.07.22	S	G / P							x					
57	TP114	0.8	1	18.07.22	S	G / P		x										
58	TP115	0	0.2	18.07.22	S	G / P		x	x									
59	TP115	0.5	0.7	18.07.22	S	G / P							x					
60	TP116	0	0.2	18.07.22	S	G / P		x	x									
61	TP116	0.4	0.6	18.07.22	S	G / P							x					
62	TP116	0.9	1	18.07.22	S	G / P							x					
63	TP117	0	0.2	18.07.22	S	G / P	x		x	x								
64	TP117	0.45	0.6	18.07.22	S	G / P		x		x								
65	TP117	0.9	1	18.07.22	S	G / P							x					
66	TP118	0	0.2	18.07.22	S	G / P							x					
67	TP118	0.5	0.7	18.07.22	S	G / P		x	x	x								
68	TP118	1	1.2	18.07.22	S	G / P			x									
69	TP118	1.5	1.7	18.07.22	S	G / P		x										
70	TP118	2	2.2	18.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
71	TP119	0	0.2	18.07.22	S	G / P		x	x									
72	TP119	0.2	0.4	18.07.22	S	G / P		x										
73	TP119	0.7	0.9	18.07.22	S	G / P							x					
74	TP120	0.1	0.2	19.07.22	S	G / P	x		x									
75	TP120	0.3	0.4	19.07.22	S	G / P		x										
76	TP120	0.8	0.9	19.07.22	S	G / P							x					
77	TP121	0.1	0.2	19.07.22	S	G / P		x	x									
78	TP121	0.3	0.4	19.07.22	S	G / P							x					
79	TP121	0.8	0.9	19.07.22	S	G / P							x					
80	TP122	0.1	0.2	19.07.22	S	G / P		x	x	x								
81	TP122	0.3	0.4	19.07.22	S	G / P		x		x								
82	TP122	0.8	0.9	19.07.22	S	G / P							x					
83	TP123	0.1	0.2	19.07.22	S	G / P		x	x									
84	TP123	0.3	0.4	19.07.22	S	G / P							x					
85	TP123	0.8	0.9	19.07.22	S	G / P							x					
86	TP124	0.1	0.2	19.07.22	S	G / P	x		x									
87	TP124	0.4	0.5	19.07.22	S	G / P							x					
88	TP124	0.9	1	19.07.22	S	G / P		x	x									
89	TP124	1.4	1.5	19.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
90	TP124	1.8	1.9	19.07.22	S	G / P		x										
91	TP124	2.3	2.4	19.07.22	S	G / P							x					
92	TP125	0.1	0.2	19.07.22	S	G / P	x		x									
93	TP125	0.4	0.5	19.07.22	S	G / P							x					
94	TP125	0.9	1	19.07.22	S	G / P		x	x									
95	TP125	1	1.1	19.07.22	S	G / P		x										
96	TP125	1.4	1.5	19.07.22	S	G / P							x					
97	TP125A	0.5	0.6	19.07.22	S	G / P		x	x									
98	TP125A	0.8	0.9	19.07.22	S	G / P			x									
99	TP126	0.1	0.2	19.07.22	S	G / P	x		x									
100	TP126	0.4	0.5	19.07.22	S	G / P							x					
101	TP126	0.9	1	19.07.22	S	G / P		x	x									
102	TP126	1	1.1	19.07.22	S	G / P		x										
103	TP126	1.4	1.5	19.07.22	S	G / P							x					
104	TP126A	0.5	0.6	19.07.22	S	G / P	x		x									
105	TP126A	0.8	0.9	19.07.22	S	G / P			x									
106	TP127	0.1	0.2	19.07.22	S	G / P								x				
107	TP127	0.4	0.5	19.07.22	S	G / P		x	x									
108	TP127	0.9	1	19.07.22	S	G / P			x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
109	TP127	1	1.1	19.07.22	S	G / P		x										
110	TP127	1.4	1.5	19.07.22	S	G / P							x					
111	TP128	0.1	0.2	19.07.22	S	G / P	x		x									
112	TP128	0.4	0.5	19.07.22	S	G / P			x									
113	TP128	1	1.1	19.07.22	S	G / P		x	x	x								
114	TP128	1.1	1.2	19.07.22	S	G / P							x					
115	TP128	1.6	1.7	19.07.22	S	G / P							x					
116	TP129	0.1	0.2	19.07.22	S	G / P	x		x									
117	TP129	0.4	0.5	19.07.22	S	G / P			x									
118	TP129	0.9	1	19.07.22	S	G / P		x	x									
119	TP129	1.4	1.5	19.07.22	S	G / P			x									
120	TP129	1.5	1.6	19.07.22	S	G / P		x										
121	TP129	1.9	2	19.07.22	S	G / P							x					
122	TP130	0.1	0.2	19.07.22	S	G / P	x		x									
123	TP130	0.4	0.5	19.07.22	S	G / P							x					
124	TP130	0.9	1	19.07.22	S	G / P		x	x									
125	TP130	1.2	1.3	19.07.22	S	G / P		x										
126	TP130	1.5	1.7	19.07.22	S	G / P							x					
127	TP131	0.1	0.2	19.07.22	S	G / P		x	x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
128	TP131	0.4	0.5	19.07.22	S	G / P							x					
129	TP131	0.9	1	19.07.22	S	G / P	x		x	x								
130	TP131	1.4	1.5	19.07.22	S	G / P							x					
131	TP131	1.9	2	19.07.22	S	G / P		x	x									
132	TP131	2.4	2.5	19.07.22	S	G / P			x									
133	TP131	2.5	2.6	19.07.22	S	G / P		x	x									
134	TP131	3	3.1	19.07.22	S	G / P		x										
135	TP131	3.4	3.5	19.07.22	S	G / P							x					
136	TP131A	0.4	0.5	19.07.22	S	G / P		x	x									
137	TP131A	1.4	1.5	19.07.22	S	G / P			x									
138	TP132	0.1	0.2	19.07.22	S	G / P			x									
139	TP132	0.4	0.5	19.07.22	S	G / P	x		x	x								
140	TP132	0.9	1	19.07.22	S	G / P			x									
141	TP132	1.4	1.5	19.07.22	S	G / P		x	x									
142	TP132	1.7	1.8	19.07.22	S	G / P		x										
143	TP132	1.9	2	19.07.22	S	G / P							x					
144	TP132	2.4	2.5	19.07.22	S	G / P							x					
145	TP133	0.1	0.2	19.07.22	S	G / P							x					
146	TP133	0.6	0.7	19.07.22	S	G / P	x		x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
147	TP133	1.2	1.3	19.07.22	S	G / P			x									
148	TP133	1.9	2	19.07.22	S	G / P							x					
149	TP133	2.9	3	19.07.22	S	G / P		x	x									
150	TP134	0.1	0.2	19.07.22	S	G / P	x		x									
131	TP134	0.6	0.7	19.07.22	S	G / P							x					
152	TP134	0.9	1	19.07.22	S	G / P			x									
153	TP134	1.9	2	19.07.22	S	G / P		x	x	x								
134	TP134	2.9	3	19.07.22	S	G / P							x					
155	TP134	3.4	3.5	19.07.22	S	G / P		x	x									
156	TP135	0.1	0.2	19.07.22	S	G / P							x					
157	TP135	0.5	0.6	19.07.22	S	G / P		x	x									
158	TP135	1	1.1	19.07.22	S	G / P							x					
159	TP135	1.5	1.6	19.07.22	S	G / P		x	x									
160	TP135	2.5	2.6	19.07.22	S	G / P							x					
161	TP135	3.5	3.6	19.07.22	S	G / P		x	x									
162	TP136	0.1	0.2	19.07.22	S	G / P	x		x									
163	TP136	0.5	0.6	19.07.22	S	G / P			x									
164	TP136	1	1:1	19.07.22	S	G / P							x					
165	TP136	1.5	1.6	19.07.22	S	G / P		x	x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
NR	TP136	2	2.1	19.07.22	S	G / P	x		x									
166	TP136	2.5	2.6	19.07.22	S	G / P							x					
167	TP136	2.8	2.9	19.07.22	S	G / P		x										
168	TP137	0.1	0.2	19.07.22	S	G / P		x	x									
169	TP137	0.5	0.6	19.07.22	S	G / P							x					
170	TP137	1	1.1	19.07.22	S	G / P	x		x									
171	TP137	1.5	1.6	19.07.22	S	G / P							x					
172	TP137	2.5	2.6	19.07.22	S	G / P		x	x	x								
173	TP137	3.5	3.6	19.07.22	S	G / P		x										
174	TP138	0.1	0.2	19.07.22	S	G / P	x		x									
175	TP138	0.5	0.6	19.07.22	S	G / P			x									
NR 176	~~176~~ 177	TP138	0.9	1	19.07.22	S	G / P		x	x								
	~~177~~ 178	TP138	1	1.1	19.07.22	S	G / P		x									
NR	TP138	1.4	1.5	19.07.22	S	G / P							x					
177	TP138A	0.7	0.8	19.07.22	S	G / P		x	x									
178	TP139	0.1	0.2	20.07.22	S	G / P	x		x									
179	TP139	0.5	0.6	20.07.22	S	G / P			x	x								
180	TP139	1	1.1	20.07.22	S	G / P		x	x									
181	TP139	1.2	1.3	20.07.22	S	G / P		x	x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
182	TP139	1.4	1.5	20.07.22	S	G / P		x										
NR	TP139	1.9	2	20.07.22	S	G / P							x					
183	TP140	0.1	0.2	20.07.22	S	G / P		x	x									
184	TP140	0.3	0.4	20.07.22	S	G / P							x					
185	TP140	0.8	0.9	20.07.22	S	G / P							x					
186	TP141	0.1	0.2	20.07.22	S	G / P	x											
187	TP141	0.4	0.5	20.07.22	S	G / P		x										
188	TP141	0.9	1	20.07.22	S	G / P							x					
189	TP142	0.1	0.2	20.07.22	S	G / P		x	x									
190	TP142	0.3	0.4	20.07.22	S	G / P							x					
191	TP142	0.8	0.9	20.07.22	S	G / P							x					
192	TP143	0.1	0.2	20.07.22	S	G / P		x	x									
193	TP143	0.4	0.5	20.07.22	S	G / P							x					
194	TP143	0.9	1	20.07.22	S	G / P							x					
195	TP144	0.1	0.2	20.07.22	S	G / P	x		x									
only JAR → 196	TP144	0.3	0.4	20.07.22	S	G / P		x										
197	TP144	0.8	0.9	20.07.22	S	G / P							x					
198	TP145	0.1	0.2	20.07.22	S	G / P	x		x									
199	TP145	0.3	0.4	20.07.22	S	G / P							x					

checked bags from 193 & 194

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
200	TP145	0.8	0.9	20.07.22	S	G / P							x					
201	TP146	0.1	0.2	20.07.22	S	G / P		x	x									
202	TP146	0.3	0.4	20.07.22	S	G / P							x					
203	TP146	0.8	0.9	20.07.22	S	G / P							x					
204	TP147	0.1	0.2	20.07.22	S	G / P		x	x									
205	TP147	0.2	0.3	20.07.22	S	G / P							x					
206	TP147	0.7	0.8	20.07.22	S	G / P							x					
207	TP148	0.1	0.2	20.07.22	S	G / P	x		x									
208	TP148	0.3	0.4	20.07.22	S	G / P		x										
209	TP148	0.8	0.9	20.07.22	S	G / P							x					
210	TP149	0.1	0.2	20.07.22	S	G / P	x		x									
211 (Jar only)	TP149	0.4	0.5	20.07.22	S	G / P		x	x									
NR (Bag only)	TP149 #314	0.9	1	20.07.22	S	G / P			x									
212 (Jar only)	TP149	1	1.1	20.07.22	S	G / P		x										
213	TP149	1.5	1.6	20.07.22	S	G / P							x					
214	TP150	0.1	0.2	20.07.22	S	G / P		x	x									
215	TP150	0.3	0.4	20.07.22	S	G / P							x					
216	TP150	0.8	0.9	20.07.22	S	G / P							x					
217	TP151	0.1	0.2	20.07.22	S	G / P		x	x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
218	TP151	0.3	0.4	20.07.22	S	G / P							x					
219	TP151	0.8	0.9	20.07.22	S	G / P							x					
220	TP152	0.1	0.2	20.07.22	S	G / P	x		x									
221	TP152	0.4	0.5	20.07.22	S	G / P		x										
222	TP152	0.9	1	20.07.22	S	G / P							x					
Jar only 223	TP153	0.1	0.2	20.07.22	S	G / P		x	x									
224	TP153	0.3	0.4	20.07.22	S	G / P							x					
225	TP153	0.8	0.9	20.07.22	S	G / P							x					
226	TP154	0.1	0.2	20.07.22	S	G / P	x		x									
227	TP154	0.3	0.4	20.07.22	S	G / P							x					
228	TP154	0.8	0.9	20.07.22	S	G / P							x					
229	TP155	0.1	0.2	20.07.22	S	G / P		x	x									
286 ~~230~~	TP155	0.3	0.4	20.07.22	S	G / P		x										
287 ~~231~~	TP155	0.8	0.9	20.07.22	S	G / P							x					
230 ~~232~~	TP156	0.1	0.2	20.07.22	S	G / P		x	x									
231 ~~233~~	TP156	0.3	0.4	20.07.22	S	G / P							x					
232 ~~234~~	TP156	0.8	0.9	20.07.22	S	G / P							x					
233 ~~235~~	TP157	0.1	0.2	20.07.22	S	G / P	x		x									
234 ~~236~~	TP157	0.3	0.4	20.07.22	S	G / P		x										

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
235 ~~237~~	TP157	0.8	0.9	20.07.22	S	G / P							x					
236	TP158	0.1	0.2	20.07.22	S	G / P		x	x									
237	TP158	0.3	0.4	20.07.22	S	G / P							x					
NR ~~238~~	TP158	0.8	0.9	20.07.22	S	G / P							x					
238 ~~239~~	TP159	0.1	0.2	20.07.22	S	G / P		x	x									
239 ~~240~~	TP159	0.3	0.4	20.07.22	S	G / P							x					
240 ~~241~~	TP159	0.8	0.9	20.07.22	S	G / P							x					
241 ~~242~~	TP160	0.1	0.2	20.07.22	S	G / P	x		x									
~~242~~ ~~243~~	TP160	0.3	0.4	20.07.22	S	G / P		x										
243 ~~243~~	TP160	0.8	0.9	20.07.22	S	G / P							x					
244	TP161	0.1	0.2	20.07.22	S	G / P	x		x									
245	TP161	0.3	0.4	20.07.22	S	G / P							x					
246	TP161	0.8	0.9	20.07.22	S	G / P							x					
247	TP162	0.1	0.2	21.07.22	S	G / P		x	x									
248	TP162	0.2	0.3	21.07.22	S	G / P							x					
249	TP162	0.7	0.8	21.07.22	S	G / P							x					
250	TP163	0.1	0.2	21.07.22	S	G / P		x	x									
251	TP163	0.3	0.4	21.07.22	S	G / P							x					
252	TP163	0.8	0.9	21.07.22	S	G / P							x					

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301228 AP

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
253	TP164	0.1	0.2	21.07.22	S	G /P	x		x									
254	TP164	0.3	0.4	21.07.22	S	G /P		x										
255	TP164	0.8	0.9	21.07.22	S	G /P							x					
256	TP165	0.1	0.2	21.07.22	S	G /P		x	x									
257	TP165	0.3	0.4	21.07.22	S	G /P							x					
258	TP165	0.8	0.9	21.07.22	S	G /P							x					
259	TP166	0	0.1	21.07.22	S	G /P		x	x									
260	TP166	0.2	0.3	21.07.22	S	G /P	x		x									
261	TP166	0.3	0.4	21.07.22	S	G /P		x	x									
262	TP166	0.5	0.6	21.07.22	S	G /P		x										
263	TP166	1	1.1	21.07.22	S	G /P							x					
264	BD1/20220718			18.07.22	S	G												Forward for inter-lab
265	BD2/20220718			18.07.22	S	G		x										
266	BD1/20220719			19.07.22	S	G												Forward for inter-lab
267	BD2/20220719			19.07.22	S	G		x										
268	BD3/20220719			19.07.22	S	G												Forward for inter-lab
269	BD4/20220719			19.07.22	S	G		x										
270	BD5/20220719			19.07.22	S	G												Forward for inter-lab
271	BD6/20220719			19.07.22	S	G												Forward for inter-lab

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW
Project Manager:	DIH		

To: *EnviroLab*
Dispatch date: 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S-Soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
272	BD7/20220719			19.07.22	S	G												Forward for inter-lab
273	BD1/20220720			20.07.22	S	G		x										
274	BD2/20220720			20.07.22	S	G												Forward for inter-lab
290	BD1/20220721			21.07.22	S	G		x									291	BD8_220719
293	Trip Spike			19.07.22	S	G						x					294	137 - 0.8 - 0.9
292	Trip Blank			19.07.22	S	G						x					295	132A 0.4 - 0.5
275 281	ACM1			19.07.22	M	P					x						296	132A 1.4 - 1.5
276	ACM2			19.07.22	M	P					x					Extra	297	133 0.5 - 0.7
277	ACM3			19.07.22	M	P					x					Bags	298	130 1.0 - 1.1
278	ACM4			19.07.22	M	P					x					299	extra	3.5 - 3.5
279	ACM5			19.07.22	M	P					x					300	↓	0.1 - 0.2
280	ACM6			19.07.22	M	P					x					301		140 0.1 - 0.2
281	ACM7			19.07.22	M	P					x						302	124
282	ACM8			19.07.22	M	P					x						303	131
283	TP130	1.0															304	32A 1.4 - 1.5
284	" 149	0.8															305	" 0.4 - 0.5
285	130	0.8															306	138
286	155	0.8															307	145
287	155	0.3															308	155 133 0.3 - 0.4

Extras AP.

Extra soil.

288 BD3 - 220720
289 BD6 - 220719
290 BD1 - 20220721

~~113~~ ~~115~~ 155 0.8 - 0.9

#313

309 ~~155 0.8 - 0.9~~ 145
310 ~~155 0.8 - 0.9~~ 155 0.3 - 0.4
311 155 0.8 -
312 142 0.2 - 0.5

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301228 AP

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	EnviroLab / ALS
Project Manager:	DIH	**Order Number:**		**Sampler:**	PJ
					12 Ashley Street Chatswood NSW 2067
Email:	David.Holden@douglaspartners.com.au; Jack.Hichliffe@douglaspartners.com.au			**Attn:**	Aileen Hie
Turnaround time:	☑ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day			**Contact:**	99106200
Prior Storage:	☑ Fridge ☐ Freezer ☐ Shelf	**Do samples contain 'potential' HBM?**	☐ No ☐ Yes (If YES, then handle, transport and store in accordance with FPM HAZID)		

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 3										Notes/ Preservation/ Additional Requirements
264	BD1/20220718			18.07.22	S	G	x										Combo 3 = metals, TRH, BTEX, PAH
266	BD1/20220719			19.07.22	S	G	x										
268	BD3/20220719			19.07.22	S	G	x										
270	~~289~~ BD5/20220719			19.07.22	S	G	x										
289	BD6/20220719			19.07.22	S	G	x										
272	BD7/20220719			19.07.22	S	G	x										
274	BD2/20220720			20.07.22	S	G	x										

Metals to analyse: Std			**LAB RECEIPT**
Number of samples in container:	7	**Transported to laboratory by:** DP	**Lab Ref. No:**
Send results to:	Douglas Partners Pty Ltd		**Received by:**
Address:		**Phone:**	**Date & Time:**
Relinquished by:	PJ 22/7/22	**Date:** **Signed:**	**Signed:**

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SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden

Sample Login Details

Your reference	211619.02, Kemps Creek, NSW
Envirolab Reference	301228
Date Sample Received	26/07/2022
Date Instructions Received	26/07/2022
Date Results Expected to be Reported	04/08/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	306 Soil, 8 Material
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
BH167-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH167-0.7-0.8													✓
BH167-0.9-1	✓	✓	✓	✓									
BH167-1.4-1.5													✓
BH168-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH168-0.7-0.8	✓	✓	✓	✓					✓				
BH168-1.1-1.2	✓	✓	✓	✓									
BH168-1.6-1.7													✓
BH169-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH169-0.3-0.4													✓
BH169-0.6-0.7													✓
TP101-0.1-0.2	✓	✓	✓	✓									
TP101-0,2-0.3													✓
TP101-0.6-0.7													✓
TP102-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
TP102-0.2-0.3	✓	✓	✓	✓						✓	✓		
TP102-0.6-0.7													✓
TP103-0-0.1	✓	✓	✓	✓									
TP103-0.5-0.6													✓
TP104-0.1-0.2	✓	✓	✓	✓									
TP104-0.4-0.5													✓
TP104-0.9-1													✓
TP105-0-0.1	✓	✓	✓	✓									
TP105-0.1-0.2													✓
TP105-0.7-0.8													✓
TP106-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP106-0.2-0.3	✓	✓	✓	✓									
TP106-0.7-0.8													✓
TP107-0-0.2													✓
TP107-0.5-0.7	✓	✓	✓	✓	✓	✓	✓	✓					
TP107-1-1.2	✓	✓	✓	✓									
TP107-1.5-1.7													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP108-0-0.2	✓	✓	✓	✓									
TP108-0.4-0.6													✓
TP108-0.9-1													✓
TP109-0-0.2	✓	✓	✓	✓									
TP109-0.5-0.7													✓
TP109-0.7-0.9	✓	✓	✓	✓									
TP109-1.3-1.5													✓
TP110-0-0.2													✓
TP110-0.5-0.7	✓	✓	✓	✓									
TP110-1-1.2													✓
TP110-1.3-1.5	✓	✓	✓	✓									
TP110-1.8-1.9													✓
TP111-0-0.2													✓
TP111-0.5-0.7	✓	✓	✓	✓	✓	✓	✓	✓					
TP111-0.9-1.1	✓	✓	✓	✓									
TP111-1.4-1.6													✓
TP112-0-0.2	✓	✓	✓	✓									
TP112-0.25-0.35													✓
TP112-0.7-0.9													✓
TP113-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP113-0.3-0.5	✓	✓	✓	✓									
TP113-0.8-1													✓
TP114-0-0.2	✓	✓	✓	✓									
TP114-0.3-0.5													✓
TP114-0.8-1	✓	✓	✓	✓									
TP115-0-0.2	✓	✓	✓	✓									
TP115-0.5-0.7													✓
TP116-0-0.2	✓	✓	✓	✓									
TP116-0.4-0.6													✓
TP116-0.9-1													✓
TP117-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
TP117-0.45-0.6	✓	✓	✓	✓						✓	✓		

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP117-0.9-1													✓
TP118-0-0.2													✓
TP118-0.5-0.7	✓	✓	✓	✓						✓	✓		
TP118-1-1.2													✓
TP118-1.5-1.7	✓	✓	✓	✓									
TP118-2-2.2													✓
TP119-0-0.2	✓	✓	✓	✓									
TP119-0.2-0.4	✓	✓	✓	✓									
TP119-0.7-0.9													✓
TP120-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP120-0.3-0.4	✓	✓	✓	✓									
TP120-0.8-0.9													✓
TP121-0.1-0.2	✓	✓	✓	✓									
TP121-0.3-0.4													✓
TP121-0.8-0.9													✓
TP122-0.1-0.2	✓	✓	✓	✓					✓	✓	✓		
TP122-0.3-0.4	✓	✓	✓	✓						✓	✓		
TP122-0.8-0.9													✓
TP123-0.1-0.2	✓	✓	✓	✓					✓				
TP123-0.3-0.4													✓
TP123-0.8-0.9													✓
TP124-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP124-0.4-0.5													✓
TP124-0.9-1	✓	✓	✓	✓					✓				
TP124-1.4-1.5													✓
TP124-1.8-1.9	✓	✓	✓	✓									
TP124-2.3-2.4													✓
TP125-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP125-0.4-0.5													✓
TP125-0.9-1	✓	✓	✓	✓					✓				
TP125-1-1.1	✓	✓	✓	✓									
TP125-1.4-1.5													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP125A-0.5-0.6	✓	✓	✓	✓					✓				
TP125A-0.8-0.9									✓				
TP126-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP126-0.4-0.5													✓
TP126-0.9-1	✓	✓	✓	✓					✓				
TP126-1-1.1	✓	✓	✓	✓									
TP126-1.4-1.5													✓
TP126A-0.5-0.6	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP126A-0.8-0.9									✓				
TP127-0.1-0.2													✓
TP127-0.4-0.5	✓	✓	✓	✓					✓				
TP127-0.9-1									✓				
TP127-1-1.1	✓	✓	✓	✓									
TP127-1.4-1.5													✓
TP128-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP128-0.4-0.5									✓				
TP128-1-1.1	✓	✓	✓	✓					✓	✓	✓		
TP128-1.1-1.2													✓
TP128-1.6-1.7													✓
TP129-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP129-0.4-0.5									✓				
TP129-0.9-1	✓	✓	✓	✓					✓				
TP129-1.4-1.5									✓				
TP129-1.5-1.6	✓	✓	✓	✓									
TP129-1.9-2													✓
TP130-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP130-0.4-0.5													✓
TP130-0.9-1	✓	✓	✓	✓					✓				
TP130-1.2-1.3	✓	✓	✓	✓									
TP130-1.5-1.7													✓
TP131-0.1-0.2	✓	✓	✓	✓					✓				
TP131-0.4-0.5													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP131-0.9-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TP131-1.4-1.5													✓
TP131-1.9-2	✓	✓	✓	✓					✓				
TP131-2.4-2.5									✓				
TP131-2.5-2.6	✓	✓	✓	✓					✓				
TP131-3-3.1	✓	✓	✓	✓									
TP131-3.4-3.5													✓
TP131A-0.4-0.5	✓	✓	✓	✓					✓				
TP131A-1.4-1.5									✓				
TP132-0.1-0.2									✓				
TP132-0.4-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TP132-0.9-1													✓
TP132-1.4-1.5	✓	✓	✓	✓					✓				
TP132-1.7-1.8	✓	✓	✓	✓									
TP132-1.9-2													✓
TP132-2.4-2.5													✓
TP133-0.1-0.2													✓
TP133-0.6-0.7	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP133-1.2-1.3									✓				
TP133-1.9-2													✓
TP133-2.9-3	✓	✓	✓	✓					✓				
TP134-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP134-0.6-0.7													✓
TP134-0.9-1									✓				
TP134-1.9-2	✓	✓	✓	✓					✓	✓	✓		
TP134-2.9-3													✓
TP134-3.4-3.5	✓	✓	✓	✓					✓				
TP135-0.1-0.2													✓
TP135-0.5-0.6	✓	✓	✓	✓					✓				
TP135-1-1.1													✓
TP135-1.5-1.6	✓	✓	✓	✓					✓				
TP135-2.5-2.6													✓

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TP135-3.5-3.6	✓	✓	✓	✓									
TP136-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP136-0.5-0.6									✓				
TP136-1-1.1													✓
TP136-1.5-1.6	✓	✓	✓	✓					✓				
TP136-2.5-2.6													✓
TP136-2.8-2.9	✓	✓	✓	✓									
TP137-0.1-0.2	✓	✓	✓	✓					✓				
TP137-0.5-0.6													✓
TP137-1-1.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP137-1.5-1.6													✓
TP137-2.5-2.6	✓	✓	✓	✓					✓	✓	✓		
TP137-3.5-3.6	✓	✓	✓	✓									
TP138-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP138-0.5-0.6									✓				
TP138-1-1.1	✓	✓	✓	✓									
TP138A-0.7-0.8	✓	✓	✓	✓					✓				
TP139-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP139-0.5-0.6									✓	✓	✓		
TP139-1-1.1	✓	✓	✓	✓					✓				
TP139-1.2-1.3	✓	✓	✓	✓					✓				
TP139-1.4-1.5	✓	✓	✓	✓									
TP140-0.1-0.2	✓	✓	✓	✓					✓				
TP140-0.3-0.4													✓
TP140-0.8-0.9													✓
TP141-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP141-0.4-0.5	✓	✓	✓	✓									
TP141-0.9-1													✓
TP142-0.1-0.2	✓	✓	✓	✓					✓				
TP142-0.3-0.4													✓
TP142-0.8-0.9													✓
TP143-0.1-0.2	✓	✓	✓	✓					✓				

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP143-0.4-0.5													✓
TP143-0.9-1													✓
TP144-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP144-0.3-0.4	✓	✓	✓	✓									
TP144-0.8-0.9													✓
TP145-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP145-0.3-0.4													✓
TP145-0.8-0.9													✓
TP146-0.1-0.2	✓	✓	✓	✓					✓				
TP146-0.3-0.4													✓
TP146-0.8-0.9													✓
TP147-0.1-0.2	✓	✓	✓	✓					✓				
TP147-0.2-0.3													✓
TP147-0.7-0.8													✓
TP148-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP148-0.3-0.4	✓	✓	✓	✓									
TP148-0.8-0.9													✓
TP149-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP149-0.4-0.5	✓	✓	✓	✓									
TP149-1-1.1	✓	✓	✓	✓									
TP149-1.5-1.6													✓
TP150-0.1-0.2	✓	✓	✓	✓					✓				
TP150-0.3-0.4													✓
TP150-0.8-0.9													✓
TP151-0.1-0.2	✓	✓	✓	✓					✓				
TP151-0.3-0.4													✓
TP151-0.8-0.9													✓
TP152-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP152-0.4-0.5	✓	✓	✓	✓									
TP152-0.9-1													✓
TP153-0.1-0.2	✓	✓	✓	✓									
TP153-0.3-0.4													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP153-0.8-0.9													✓
TP154-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP154-0.3-0.4													✓
TP154-0.8-0.9													✓
TP155-0.1-0.2	✓	✓	✓	✓					✓				
TP156-0.1-0.2	✓	✓	✓	✓					✓				
TP156-0.3-0.4													✓
TP156-0.8-0.9													✓
TP157-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP157-0.3-0.4	✓	✓	✓	✓									
TP157-0.8-0.9													✓
TP158-0.1-0.2	✓	✓	✓	✓					✓				
TP158-0.3-0.4													✓
TP159-0.1-0.2	✓	✓	✓	✓					✓				
TP159-0.3-0.4													✓
TP159-0.8-0.9													✓
TP160-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP160-0.3-0.4	✓	✓	✓	✓									
TP160-0.8-0.9													✓
TP161-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP161-0.3-0.4													✓
TP161-0.8-0.9													✓
TP162-0.1-0.2	✓	✓	✓	✓					✓				
TP162-0.2-0.3													✓
TP162-0.7-0.8													✓
TP163-0.1-0.2	✓	✓	✓	✓					✓				
TP163-0.3-0.4													✓
TP163-0.8-0.9													✓
TP164-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP164-0.3-0.4	✓	✓	✓	✓									
TP164-0.8-0.9													✓
TP165-0.1-0.2	✓	✓	✓	✓					✓				

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP165-0.3-0.4													✓
TP165-0.8-0.9													✓
TP166-0-0.1	✓	✓	✓	✓					✓				
TP166-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP166-0.3-0.4	✓	✓	✓	✓					✓				
TP166-0.5-0.6	✓	✓	✓	✓									
TP166-1-1.1													✓
-													✓
BD2/20220718	✓	✓	✓	✓									
-													✓
BD2/20220719	✓	✓	✓	✓									
-													✓
BD4/20220719	✓	✓	✓	✓									
-													✓
-													✓
-													✓
BD1/20220720	✓	✓	✓	✓									
-													✓
ACM1												✓	
ACM2												✓	
ACM3												✓	
ACM4												✓	
ACM5												✓	
ACM6												✓	
ACM7												✓	
ACM8												✓	
TP130-1.0													✓
TP149-0.8													✓
-													✓
TP155-0.8-0.9													✓
TP155-0.3-0.4	✓	✓	✓	✓									
BD3/20220720													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
-													✓
BD1/20220720	✓	✓	✓	✓									
BD8/20220720													✓
Trip Blank	✓												
Trip Spike	✓												
-													✓
132A-0.4-0.5													✓
132A-1.4-1.5													✓
133-0.6-0.7													✓
130-1.0-1.1													✓
-													✓
-													✓
-													✓
-													✓
-													✓
32A-1.4-1.5													✓
32A-0.4-0.5													✓
138-0.9-1.0													✓
-													✓
-													✓
-													✓
-													✓
-													✓
-													✓
158-0.8-0.9													✓
TP149-0.9-1									✓				

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

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Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 301228-A

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.02, Kemps Creek, NSW**
Number of Samples	additional analysis
Date samples received	26/07/2022
Date completed instructions received	27/07/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	04/08/2022
Date of Issue	04/08/2022

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Asbestos Approved By
Analysed by Asbestos Approved Analyst: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Diego Bigolin, Inorganics Supervisor
Giovanni Agosti, Group Technical Manager
Kyle Gavrily, Senior Chemist
Lucy Zhu, Asbestos Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		301228-A-166	301228-A-175	301228-A-295
Your Reference	UNITS	TP136	TP138	132A
Depth		2.5-2.6	0.5-0.6	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	89	86	89

svTRH (C10-C40) in Soil				
Our Reference		301228-A-166	301228-A-175	301228-A-295
Your Reference	UNITS	TP136	TP138	132A
Depth		2.5-2.6	0.5-0.6	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	03/08/2022	03/08/2022	03/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	82	88	91

PAHs in Soil				
Our Reference		301228-A-166	301228-A-175	301228-A-295
Your Reference	UNITS	TP136	TP138	132A
Depth		2.5-2.6	0.5-0.6	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	28/07/2022	28/07/2022	28/07/2022
Date analysed	-	02/08/2022	02/08/2022	02/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	0.3
Pyrene	mg/kg	<0.1	<0.1	0.4
Benzo(a)anthracene	mg/kg	<0.1	<0.1	0.2
Chrysene	mg/kg	<0.1	<0.1	0.2
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	0.3
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.2
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	1.8
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	103	113	124

Acid Extractable metals in soil				
Our Reference		301228-A-166	301228-A-175	301228-A-295
Your Reference	UNITS	TP136	TP138	132A
Depth		2.5-2.6	0.5-0.6	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil
Date prepared	-	01/08/2022	01/08/2022	01/08/2022
Date analysed	-	01/08/2022	01/08/2022	01/08/2022
Arsenic	mg/kg	7	4	8
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	16	13	32
Copper	mg/kg	11	16	24
Lead	mg/kg	19	24	37
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	6	5	7
Zinc	mg/kg	15	74	96

Moisture				
Our Reference		301228-A-166	301228-A-175	301228-A-295
Your Reference	UNITS	TP136	TP138	132A
Depth		2.5-2.6	0.5-0.6	0.4-0.5
Date Sampled		19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil
Date prepared	-	27/07/2022	27/07/2022	27/07/2022
Date analysed	-	28/07/2022	28/07/2022	28/07/2022
Moisture	%	11	15	11

Organochlorine Pesticides in soil		
Our Reference		301228-A-166
Your Reference	UNITS	TP136
Depth		2.5-2.6
Date Sampled		19/07/2022
Type of sample		Soil
Date extracted	-	28/07/2022
Date analysed	-	02/08/2022
alpha-BHC	mg/kg	<0.1
HCB	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	94

Organophosphorus Pesticides in Soil		
Our Reference		301228-A-166
Your Reference	UNITS	TP136
Depth		2.5-2.6
Date Sampled		19/07/2022
Type of sample		Soil
Date extracted	-	28/07/2022
Date analysed	-	02/08/2022
Dichlorvos	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Parathion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Ethion	mg/kg	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1
Surrogate TCMX	%	94

PCBs in Soil		
Our Reference		301228-A-166
Your Reference	UNITS	TP136
Depth		2.5-2.6
Date Sampled		19/07/2022
Type of sample		Soil
Date extracted	-	28/07/2022
Date analysed	-	02/08/2022
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate TCMX	%	94

Misc Soil - Inorg		
Our Reference		301228-A-166
Your Reference	UNITS	TP136
Depth		2.5-2.6
Date Sampled		19/07/2022
Type of sample		Soil
Date prepared	-	28/07/2022
Date analysed	-	28/07/2022
Total Phenolics (as Phenol)	mg/kg	<5

Asbestos ID - soils NEPM					
Our Reference		301228-A-166	301228-A-304	301228-A-305	301228-A-306
Your Reference	UNITS	TP136	32A	32A	138
Depth		2.5-2.6	1.4-1.5	0.4-0.5	0.9-1.0
Date Sampled		19/07/2022	19/07/2022	19/07/2022	19/07/2022
Type of sample		Soil	Soil	Soil	Soil
Date analysed	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Sample mass tested	g	779.56	750.54	663.62	753.82
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–
FA and AF Estimation*	g	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			01/08/2022	[NT]	[NT]	[NT]	[NT]	01/08/2022	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	110	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	113	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	99	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	110	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	114	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	117	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	70	[NT]	[NT]	[NT]	[NT]	93	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			03/08/2022	[NT]	[NT]	[NT]	[NT]	03/08/2022	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	108	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	108	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	86	[NT]
Surrogate o-Terphenyl	%		Org-020	88	[NT]	[NT]	[NT]	[NT]	87	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			02/08/2022	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	79	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	88	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	105	[NT]	[NT]	[NT]	[NT]	106	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date prepared	-			01/08/2022	[NT]	[NT]	[NT]	[NT]	01/08/2022	[NT]
Date analysed	-			01/08/2022	[NT]	[NT]	[NT]	[NT]	01/08/2022	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	89	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	86	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	86	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			02/08/2022	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	116	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	98	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			02/08/2022	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	130	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	98	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	[NT]
Date extracted	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			02/08/2022	[NT]	[NT]	[NT]	[NT]	02/08/2022	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-021	98	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: Misc Soil - Inorg					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Date analysed	-			28/07/2022	[NT]	[NT]	[NT]	[NT]	28/07/2022	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	[NT]	[NT]	[NT]	[NT]	106	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

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SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden

Sample Login Details

Your reference	211619.02, Kemps Creek, NSW
Envirolab Reference	301228-A
Date Sample Received	26/07/2022
Date Instructions Received	27/07/2022
Date Results Expected to be Reported	04/08/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	additional analysis
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

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Analysis Underway, details on the following page:

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
BH167-0.2-0.3										✓
BH167-0.7-0.8										✓
BH167-0.9-1										✓
BH167-1.4-1.5										✓
BH168-0.2-0.3										✓
BH168-0.7-0.8										✓
BH168-1.1-1.2										✓
BH168-1.6-1.7										✓
BH169-0.2-0.3										✓
BH169-0.3-0.4										✓
BH169-0.6-0.7										✓
TP101-0.1-0.2										✓
TP101-0,2-0.3										✓
TP101-0.6-0.7										✓
TP102-0.1-0.2										✓
TP102-0.2-0.3										✓
TP102-0.6-0.7										✓
TP103-0-0.1										✓
TP103-0.5-0.6										✓
TP104-0.1-0.2										✓
TP104-0.4-0.5										✓
TP104-0.9-1										✓
TP105-0-0.1										✓
TP105-0.1-0.2										✓
TP105-0.7-0.8										✓
TP106-0-0.2										✓
TP106-0.2-0.3										✓
TP106-0.7-0.8										✓
TP107-0-0.2										✓
TP107-0.5-0.7										✓
TP107-1-1.2										✓
TP107-1.5-1.7										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP108-0-0.2										✓
TP108-0.4-0.6										✓
TP108-0.9-1										✓
TP109-0-0.2										✓
TP109-0.5-0.7										✓
TP109-0.7-0.9										✓
TP109-1.3-1.5										✓
TP110-0-0.2										✓
TP110-0.5-0.7										✓
TP110-1-1.2										✓
TP110-1.3-1.5										✓
TP110-1.8-1.9										✓
TP111-0-0.2										✓
TP111-0.5-0.7										✓
TP111-0.9-1.1										✓
TP111-1.4-1.6										✓
TP112-0-0.2										✓
TP112-0.25-0.35										✓
TP112-0.7-0.9										✓
TP113-0-0.2										✓
TP113-0.3-0.5										✓
TP113-0.8-1										✓
TP114-0-0.2										✓
TP114-0.3-0.5										✓
TP114-0.8-1										✓
TP115-0-0.2										✓
TP115-0.5-0.7										✓
TP116-0-0.2										✓
TP116-0.4-0.6										✓
TP116-0.9-1										✓
TP117-0-0.2										✓
TP117-0.45-0.6										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP117-0.9-1										✓
TP118-0-0.2										✓
TP118-0.5-0.7										✓
TP118-1-1.2										✓
TP118-1.5-1.7										✓
TP118-2-2.2										✓
TP119-0-0.2										✓
TP119-0.2-0.4										✓
TP119-0.7-0.9										✓
TP120-0.1-0.2										✓
TP120-0.3-0.4										✓
TP120-0.8-0.9										✓
TP121-0.1-0.2										✓
TP121-0.3-0.4										✓
TP121-0.8-0.9										✓
TP122-0.1-0.2										✓
TP122-0.3-0.4										✓
TP122-0.8-0.9										✓
TP123-0.1-0.2										✓
TP123-0.3-0.4										✓
TP123-0.8-0.9										✓
TP124-0.1-0.2										✓
TP124-0.4-0.5										✓
TP124-0.9-1										✓
TP124-1.4-1.5										✓
TP124-1.8-1.9										✓
TP124-2.3-2.4										✓
TP125-0.1-0.2										✓
TP125-0.4-0.5										✓
TP125-0.9-1										✓
TP125-1-1.1										✓
TP125-1.4-1.5										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP125A-0.5-0.6										✓
TP125A-0.8-0.9										✓
TP126-0.1-0.2										✓
TP126-0.4-0.5										✓
TP126-0.9-1										✓
TP126-1-1.1										✓
TP126-1.4-1.5										✓
TP126A-0.5-0.6										✓
TP126A-0.8-0.9										✓
TP127-0.1-0.2										✓
TP127-0.4-0.5										✓
TP127-0.9-1										✓
TP127-1-1.1										✓
TP127-1.4-1.5										✓
TP128-0.1-0.2										✓
TP128-0.4-0.5										✓
TP128-1-1.1										✓
TP128-1.1-1.2										✓
TP128-1.6-1.7										✓
TP129-0.1-0.2										✓
TP129-0.4-0.5										✓
TP129-0.9-1										✓
TP129-1.4-1.5										✓
TP129-1.5-1.6										✓
TP129-1.9-2										✓
TP130-0.1-0.2										✓
TP130-0.4-0.5										✓
TP130-0.9-1										✓
TP130-1.2-1.3										✓
TP130-1.5-1.7										✓
TP131-0.1-0.2										✓
TP131-0.4-0.5										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP131-0.9-1										✓
TP131-1.4-1.5										✓
TP131-1.9-2										✓
TP131-2.4-2.5										✓
TP131-2.5-2.6										✓
TP131-3-3.1										✓
TP131-3.4-3.5										✓
TP131A-0.4-0.5										✓
TP131A-1.4-1.5										✓
TP132-0.1-0.2										✓
TP132-0.4-0.5										✓
TP132-0.9-1										✓
TP132-1.4-1.5										✓
TP132-1.7-1.8										✓
TP132-1.9-2										✓
TP132-2.4-2.5										✓
TP133-0.1-0.2										✓
TP133-0.6-0.7										✓
TP133-1.2-1.3										✓
TP133-1.9-2										✓
TP133-2.9-3										✓
TP134-0.1-0.2										✓
TP134-0.6-0.7										✓
TP134-0.9-1										✓
TP134-1.9-2										✓
TP134-2.9-3										✓
TP134-3.4-3.5										✓
TP135-0.1-0.2										✓
TP135-0.5-0.6										✓
TP135-1-1.1										✓
TP135-1.5-1.6										✓
TP135-2.5-2.6										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP135-3.5-3.6										✓
TP136-0.1-0.2										✓
TP136-0.5-0.6										✓
TP136-1-1.1										✓
TP136-1.5-1.6										✓
TP136-2.5-2.6	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TP136-2.8-2.9										✓
TP137-0.1-0.2										✓
TP137-0.5-0.6										✓
TP137-1-1.1										✓
TP137-1.5-1.6										✓
TP137-2.5-2.6										✓
TP137-3.5-3.6										✓
TP138-0.1-0.2										✓
TP138-0.5-0.6	✓	✓	✓	✓						
TP138-1-1.1										✓
TP138A-0.7-0.8										✓
TP139-0.1-0.2										✓
TP139-0.5-0.6										✓
TP139-1-1.1										✓
TP139-1.2-1.3										✓
TP139-1.4-1.5										✓
TP140-0.1-0.2										✓
TP140-0.3-0.4										✓
TP140-0.8-0.9										✓
TP141-0.1-0.2										✓
TP141-0.4-0.5										✓
TP141-0.9-1										✓
TP142-0.1-0.2										✓
TP142-0.3-0.4										✓
TP142-0.8-0.9										✓
TP143-0.1-0.2										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP143-0.4-0.5										✓
TP143-0.9-1										✓
TP144-0.1-0.2										✓
TP144-0.3-0.4										✓
TP144-0.8-0.9										✓
TP145-0.1-0.2										✓
TP145-0.3-0.4										✓
TP145-0.8-0.9										✓
TP146-0.1-0.2										✓
TP146-0.3-0.4										✓
TP146-0.8-0.9										✓
TP147-0.1-0.2										✓
TP147-0.2-0.3										✓
TP147-0.7-0.8										✓
TP148-0.1-0.2										✓
TP148-0.3-0.4										✓
TP148-0.8-0.9										✓
TP149-0.1-0.2										✓
TP149-0.4-0.5										✓
TP149-1-1.1										✓
TP149-1.5-1.6										✓
TP150-0.1-0.2										✓
TP150-0.3-0.4										✓
TP150-0.8-0.9										✓
TP151-0.1-0.2										✓
TP151-0.3-0.4										✓
TP151-0.8-0.9										✓
TP152-0.1-0.2										✓
TP152-0.4-0.5										✓
TP152-0.9-1										✓
TP153-0.1-0.2										✓
TP153-0.3-0.4										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP153-0.8-0.9										✓
TP154-0.1-0.2										✓
TP154-0.3-0.4										✓
TP154-0.8-0.9										✓
TP155-0.1-0.2										✓
TP156-0.1-0.2										✓
TP156-0.3-0.4										✓
TP156-0.8-0.9										✓
TP157-0.1-0.2										✓
TP157-0.3-0.4										✓
TP157-0.8-0.9										✓
TP158-0.1-0.2										✓
TP158-0.3-0.4										✓
TP159-0.1-0.2										✓
TP159-0.3-0.4										✓
TP159-0.8-0.9										✓
TP160-0.1-0.2										✓
TP160-0.3-0.4										✓
TP160-0.8-0.9										✓
TP161-0.1-0.2										✓
TP161-0.3-0.4										✓
TP161-0.8-0.9										✓
TP162-0.1-0.2										✓
TP162-0.2-0.3										✓
TP162-0.7-0.8										✓
TP163-0.1-0.2										✓
TP163-0.3-0.4										✓
TP163-0.8-0.9										✓
TP164-0.1-0.2										✓
TP164-0.3-0.4										✓
TP164-0.8-0.9										✓
TP165-0.1-0.2										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
TP165-0.3-0.4										✓
TP165-0.8-0.9										✓
TP166-0-0.1										✓
TP166-0.2-0.3										✓
TP166-0.3-0.4										✓
TP166-0.5-0.6										✓
TP166-1-1.1										✓
-										✓
BD2/20220718										✓
-										✓
BD2/20220719										✓
-										✓
BD4/20220719										✓
-										✓
-										✓
-										✓
BD1/20220720										✓
-										✓
ACM1										✓
ACM2										✓
ACM3										✓
ACM4										✓
ACM5										✓
ACM6										✓
ACM7										✓
ACM8										✓
TP130-1.0										✓
TP149-0.8										✓
-										✓
TP155-0.8-0.9										✓
TP155-0.3-0.4										✓
BD3/20220720										✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	On Hold
-										✓
BD1/20220720										✓
BD8/20220720										✓
Trip Blank										✓
Trip Spike										✓
-										✓
132A-0.4-0.5	✓	✓	✓	✓						
132A-1.4-1.5										✓
-										✓
130-1.0-1.1										✓
-										✓
-										✓
-										✓
-										✓
-										✓
32A-1.4-1.5									✓	
32A-0.4-0.5									✓	
138-0.9-1.0									✓	
-										✓
-										✓
-										✓
--0.3-0.4										✓
155-0.8-0.9										✓
-										✓
158-0.8-0.9										✓
TP149-0.9-1										✓

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

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Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 301228-B

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.02, Kemps Creek, NSW**
Number of Samples	306 Soil, 8 Material
Date samples received	26/07/2022
Date completed instructions received	28/07/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	04/08/2022
Date of Issue	04/08/2022

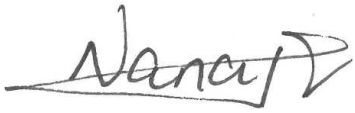
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Asbestos Approved By
Analysed by Asbestos Approved Analyst: Nyovan Moonean
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Lucy Zhu, Asbestos Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

Asbestos ID - soils NEPM						
Our Reference		301228-B-15	301228-B-20	301228-B-23	301228-B-26	301228-B-29
Your Reference	UNITS	TP102	TP104	TP105	TP106	TP107
Depth		0.1-0.2	0.1-0.2	0-0.1	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	495.23	548.88	506.62	434.16	479.34
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-B-30	301228-B-33	301228-B-36	301228-B-41	301228-B-42
Your Reference	UNITS	TP107	TP108	TP109	TP110	TP110
Depth		0.5-0.7	0-0.2	0-0.2	0.5-0.7	1-1.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	603.14	461.99	420.49	497.46	589.49
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-B-45	301228-B-46	301228-B-49	301228-B-52	301228-B-55
Your Reference	UNITS	TP111	TP111	TP112	TP113	TP114
Depth		0-0.2	0.5-0.7	0-0.2	0-0.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	446.42	551.28	463.88	594.77	443.1
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		301228-B-60	301228-B-63	301228-B-67	301228-B-68	301228-B-71
Your Reference	UNITS	TP116	TP117	TP118	TP118	TP119
Depth		0-0.2	0-0.2	0.5-0.7	1-1.2	0-0.2
Date Sampled		18/07/2022	18/07/2022	18/07/2022	18/07/2022	18/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Sample mass tested	g	466.25	583.66	437.28	505.42	934.95
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils			
Our Reference		301228-B-195	301228-B-210
Your Reference	UNITS	TP144	TP149
Depth		0.1-0.2	0.1-0.2
Date Sampled		20/07/2022	20/07/2022
Type of sample		Soil	Soil
Date analysed	-	04/08/2022	04/08/2022
Sample mass tested	g	Approx. 35g	Approx. 45g
Sample Description	-	Brown coarse-grained soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Asbestos: A portion of the supplied sample was sub-sampled for asbestos according to ASB-001 asbestos subsampling procedure. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab/MPL recommends supplying 40-60g or 500ml of sample in its own container.
Note: Samples requested for Asbestos testing were sub-sampled from jars provided by the client.

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	*EnviroLab*
Project Manager:	DIH	**Order Number:**		**Sampler:** PJ	*12 Ashley Street Chatswood NSW 2067*
Email:	David.Holden@douglaspartners.com.au; Jack.Hichliffe@douglaspartners.com.au			**Attn:**	*Aileen Hie*
Turnaround time:	☑ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day			**Contact:**	*99106200*
Prior Storage:	☑ Fridge ☐ Freezer ☐ Shelf	**Do samples contain 'potential' HBM?**	☐ No ☐ Yes (If YES, then handle, transport and store in accordance with FPM HAZID)		

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
1	BH167	0.2	0.3	21.07.22	S	G /P	x		x									BH01
2	BH167	0.7	0.8	21.07.22	S	G /P							x					
3	BH167	0.9	1	21.07.22	S	G /P		x										
4	BH167	1.4	1.5	21.07.22	S	G /P							x					
5	BH168	0.2	0.3	21.07.22	S	G /P	x		x									BH02
6	BH168	0.7	0.8	21.07.22	S	G /P		x	x									
7	BH168	1.1	1.2	21.07.22	S	G /P		x										
8	BH168	1.6	1.7	21.07.22	S	G /P							x					
9	BH169	0.2	0.3	21.07.22	S	G /P	x		x									BH03
10	BH169	0.3	0.4	21.07.22	S	G /P							x					
11	BH169	0.6	0.7	21.07.22	S	G /P							x					
12	TP101	0.1	0.2	18.07.22	S	G /P		x	x									
13	TP101	0,2	0.3	18.07.22	S	G /P							x					
14	TP101	0.6	0.7	18.07.22	S	G /P							x					

Metals to analyse: Std			**LAB RECEIPT**
Number of samples in container: 292	**Transported to laboratory by:** DP		**Lab Ref. No:** 301228
Send results to: Douglas Partners Pty Ltd			**Received by:** AP ELS SYD
Address:	**Phone:**		**Date & Time:** 22-7-22 1615
Relinquished by: PJ 22/7/22	**Date:**	**Signed:**	**Signed:**

Ref = 301228-C
AF/FA bags rec'd 28/07/2022 16:00.

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	*EnviroLab*
Project Manager:	DIH	**Order Number:**		**Dispatch date:**	*12 Ashley Street Chatswood NSW 2067*

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
15	TP102	0.1	0.2	18.07.22	S	G / P	x		x	x								
16	TP102	0.2	0.3	18.07.22	S	G / P		x		x								
17	TP102	0.6	0.7	18.07.22	S	G / P							x					
18	TP103	0	0.1	18.07.22	S	G / P		x	x									
19	TP103	0.5	0.6	18.07.22	S	G / P							x					
20	TP104	0.1	0.2	18.07.22	S	G / P		x	x									
21	TP104	0.4	0.5	18.07.22	S	G / P							x					
22	TP104	0.9	1	18.07.22	S	G / P							x					
23	TP105	0	0.1	18.07.22	S	G / P		x	x									
24	TP105	0.1	0.2	18.07.22	S	G / P							x					
25	TP105	0.7	0.8	18.07.22	S	G / P							x					
26	TP106	0	0.2	18.07.22	S	G / P	x		x									
27	TP106	0.2	0.3	18.07.22	S	G / P		x										
28	TP106	0.7	0.8	18.07.22	S	G / P							x					
29	TP107	0	0.2	18.07.22	S	G / P			x									
30	TP107	0.5	0.7	18.07.22	S	G / P	x		x									
31	TP107	1	1.2	18.07.22	S	G / P		x										
32	TP107	1.5	1.7	18.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW
Project Manager:	DIH	**To:**	*EnviroLab*
		Dispatch date:	22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
33	TP108	0	0.2	18.07.22	S	G / P		x	x									
34	TP108	0.4	0.6	18.07.22	S	G / P							x					
35	TP108	0.9	1	18.07.22	S	G / P							x					
36	TP109	0	0.2	18.07.22	S	G / P		x	x									
37	TP109	0.5	0.7	18.07.22	S	G / P							x					
38	TP109	0.7	0.9	18.07.22	S	G / P		x										
39	TP109	1.3	1.5	18.07.22	S	G / P							x					
40	TP110	0	0.2	18.07.22	S	G / P							x					
41	TP110	0.5	0.7	18.07.22	S	G / P		x	x									
42	TP110	1	1.2	18.07.22	S	G / P			x									
43	TP110	1.3	1.5	18.07.22	S	G / P		x										
44	TP110	1.8	1.9	18.07.22	S	G / P							x					
45	TP111	0	0.2	18.07.22	S	G / P			x									
46	TP111	0.5	0.7	18.07.22	S	G / P	x		x									
47	TP111	0.9	1.1	18.07.22	S	G / P		x										
48	TP111	1.4	1.6	18.07.22	S	G / P							x					
49	TP112	0	0.2	18.07.22	S	G / P		x	x									
50	TP112	0.25	0.35	18.07.22	S	G / P							x					
51	TP112	0.7	0.9	18.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** EnviroLab
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
52	TP113	0	0.2	18.07.22	S	G / P	x		x									
53	TP113	0.3	0.5	18.07.22	S	G / P		x										
54	TP113	0.8	1	18.07.22	S	G / P							x					
55	TP114	0	0.2	18.07.22	S	G / P		x	x									
56	TP114	0.3	0.5	18.07.22	S	G / P							x					
57	TP114	0.8	1	18.07.22	S	G / P		x										
58	TP115	0	0.2	18.07.22	S	G / P		x	x									
59	TP115	0.5	0.7	18.07.22	S	G / P							x					
60	TP116	0	0.2	18.07.22	S	G / P		x	x									
61	TP116	0.4	0.6	18.07.22	S	G / P							x					
62	TP116	0.9	1	18.07.22	S	G / P							x					
63	TP117	0	0.2	18.07.22	S	G / P	x		x	x								
64	TP117	0.45	0.6	18.07.22	S	G / P		x		x								
65	TP117	0.9	1	18.07.22	S	G / P							x					
66	TP118	0	0.2	18.07.22	S	G / P							x					
67	TP118	0.5	0.7	18.07.22	S	G / P		x	x	x								
68	TP118	1	1.2	18.07.22	S	G / P			x									
69	TP118	1.5	1.7	18.07.22	S	G / P		x										
70	TP118	2	2.2	18.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	Suburb: Kemps Creek, NSW	To: EnviroLab
Project Manager:	DIH		Dispatch date: 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
71	TP119	0	0.2	18.07.22	S	G / P		x	x									
72	TP119	0.2	0.4	18.07.22	S	G / P		x										
73	TP119	0.7	0.9	18.07.22	S	G / P							x					
74	TP120	0.1	0.2	19.07.22	S	G / P	x		x									
75	TP120	0.3	0.4	19.07.22	S	G / P		x										
76	TP120	0.8	0.9	19.07.22	S	G / P							x					
77	TP121	0.1	0.2	19.07.22	S	G / P		x	x									
78	TP121	0.3	0.4	19.07.22	S	G / P							x					
79	TP121	0.8	0.9	19.07.22	S	G / P							x					
80	TP122	0.1	0.2	19.07.22	S	G / P		x	x	x								
81	TP122	0.3	0.4	19.07.22	S	G / P		x		x								
82	TP122	0.8	0.9	19.07.22	S	G / P							x					
83	TP123	0.1	0.2	19.07.22	S	G / P		x	x									
84	TP123	0.3	0.4	19.07.22	S	G / P							x					
85	TP123	0.8	0.9	19.07.22	S	G / P							x					
86	TP124	0.1	0.2	19.07.22	S	G / P	x		x									
87	TP124	0.4	0.5	19.07.22	S	G / P							x					
88	TP124	0.9	1	19.07.22	S	G / P		x	x									
89	TP124	1.4	1.5	19.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
90	TP124	1.8	1.9	19.07.22	S	G / P		x										
91	TP124	2.3	2.4	19.07.22	S	G / P							x					
92	TP125	0.1	0.2	19.07.22	S	G / P	x		x									
93	TP125	0.4	0.5	19.07.22	S	G / P							x					
94	TP125	0.9	1	19.07.22	S	G / P		x	x									
95	TP125	1	1.1	19.07.22	S	G / P		x										
96	TP125	1.4	1.5	19.07.22	S	G / P							x					
97	TP125A	0.5	0.6	19.07.22	S	G / P		x	x									
98	TP125A	0.8	0.9	19.07.22	S	G / P			x									
99	TP126	0.1	0.2	19.07.22	S	G / P	x		x									
100	TP126	0.4	0.5	19.07.22	S	G / P							x					
101	TP126	0.9	1	19.07.22	S	G / P		x	x									
102	TP126	1	1.1	19.07.22	S	G / P		x										
103	TP126	1.4	1.5	19.07.22	S	G / P							x					
104	TP126A	0.5	0.6	19.07.22	S	G / P	x		x									
105	TP126A	0.8	0.9	19.07.22	S	G / P			x									
106	TP127	0.1	0.2	19.07.22	S	G / P								x				
107	TP127	0.4	0.5	19.07.22	S	G / P		x	x									
108	TP127	0.9	1	19.07.22	S	G / P			x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW
Project Manager:	DIH		

To: *EnviroLab*
Dispatch date: 22-07-22

Lab ID	Sample ID: Location / Other ID	Sample ID: Depth From	Sample ID: Depth To	Date Sampled	Sample Type: S - soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
109	TP127	1	1.1	19.07.22	S	G / P		x										
110	TP127	1.4	1.5	19.07.22	S	G / P							x					
111	TP128	0.1	0.2	19.07.22	S	G / P	x		x									
112	TP128	0.4	0.5	19.07.22	S	G / P			x									
113	TP128	1	1.1	19.07.22	S	G / P		x	x	x								
114	TP128	1.1	1.2	19.07.22	S	G / P							x					
115	TP128	1.6	1.7	19.07.22	S	G / P							x					
116	TP129	0.1	0.2	19.07.22	S	G / P	x		x									
117	TP129	0.4	0.5	19.07.22	S	G / P			x									
118	TP129	0.9	1	19.07.22	S	G / P		x	x									
119	TP129	1.4	1.5	19.07.22	S	G / P			x									
120	TP129	1.5	1.6	19.07.22	S	G / P		x										
121	TP129	1.9	2	19.07.22	S	G / P							x					
122	TP130	0.1	0.2	19.07.22	S	G / P	x		x									
123	TP130	0.4	0.5	19.07.22	S	G / P							x					
124	TP130	0.9	1	19.07.22	S	G / P		x	x									
125	TP130	1.2	1.3	19.07.22	S	G / P		x										
126	TP130	1.5	1.7	19.07.22	S	G / P							x					
127	TP131	0.1	0.2	19.07.22	S	G / P		x	x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Sample ID: Depth From	Sample ID: Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
128	TP131	0.4	0.5	19.07.22	S	G / P							x					
129	TP131	0.9	1	19.07.22	S	G / P	x		x	x								
130	TP131	1.4	1.5	19.07.22	S	G / P							x					
131	TP131	1.9	2	19.07.22	S	G / P		x	x									
132	TP131	2.4	2.5	19.07.22	S	G / P			x									
133	TP131	2.5	2.6	19.07.22	S	G / P		x	x									
134	TP131	3	3.1	19.07.22	S	G / P		x										
135	TP131	3.4	3.5	19.07.22	S	G / P							x					
136	TP131A	0.4	0.5	19.07.22	S	G / P		x	x									
137	TP131A	1.4	1.5	19.07.22	S	G / P			x									
138	TP132	0.1	0.2	19.07.22	S	G / P			x									
139	TP132	0.4	0.5	19.07.22	S	G / P	x		x	x								
140	TP132	0.9	1	19.07.22	S	G / P			x									
141	TP132	1.4	1.5	19.07.22	S	G / P		x	x									
142	TP132	1.7	1.8	19.07.22	S	G / P		x										
143	TP132	1.9	2	19.07.22	S	G / P							x					
144	TP132	2.4	2.5	19.07.22	S	G / P							x					
145	TP133	0.1	0.2	19.07.22	S	G / P							x					
146	TP133	0.6	0.7	19.07.22	S	G / P	x		x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** EnviroLab
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
147	TP133	1.2	1.3	19.07.22	S	G / P			x									
148	TP133	1.9	2	19.07.22	S	G / P							x					
149	TP133	2.9	3	19.07.22	S	G / P		x	x									
150	TP134	0.1	0.2	19.07.22	S	G / P	x		x									
151	TP134	0.6	0.7	19.07.22	S	G / P							x					
152	TP134	0.9	1	19.07.22	S	G / P			x									
153	TP134	1.9	2	19.07.22	S	G / P		x	x	x								
154	TP134	2.9	3	19.07.22	S	G / P							x					
155	TP134	3.4	3.5	19.07.22	S	G / P		x	x									
156	TP135	0.1	0.2	19.07.22	S	G / P							x					
157	TP135	0.5	0.6	19.07.22	S	G / P		x	x									
158	TP135	1	1.1	19.07.22	S	G / P							x					
159	TP135	1.5	1.6	19.07.22	S	G / P		x	x									
160	TP135	2.5	2.6	19.07.22	S	G / P							x					
161	TP135	3.5	3.6	19.07.22	S	G / P		x	x									
162	TP136	0.1	0.2	19.07.22	S	G / P	x		x									
163	TP136	0.5	0.6	19.07.22	S	G / P			x									
164	TP136	1	1.1	19.07.22	S	G / P							x					
165	TP136	1.5	1.6	19.07.22	S	G / P		x	x									

JAM only

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW
Project Manager:	DIH	**To:**	*EnviroLab*
		Dispatch date:	22-07-22

Lab ID	Sample ID: Location / Other ID	Sample ID: Depth From	Sample ID: Depth To	Date Sampled	Sample Type: S - soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
NR	TP136	2	2.1	19.07.22	S	G / P	x		x									
166	TP136	2.5	2.6	19.07.22	S	G / P							x					
167	TP136	2.8	2.9	19.07.22	S	G / P		x										
168	TP137	0.1	0.2	19.07.22	S	G / P		x	x									
169	TP137	0.5	0.6	19.07.22	S	G / P							x					
170	TP137	1	1.1	19.07.22	S	G / P	x		x									
171	TP137	1.5	1.6	19.07.22	S	G / P							x					
172	TP137	2.5	2.6	19.07.22	S	G / P		x	x	x								
173	TP137	3.5	3.6	19.07.22	S	G / P		x										
174	TP138	0.1	0.2	19.07.22	S	G / P	x		x									
175	TP138	0.5	0.6	19.07.22	S	G / P			x									
NR [175]	TP138	0.9	1	19.07.22	S	G / P		x	x									
176 [177]	TP138	1	1.1	19.07.22	S	G / P		x										
NR	TP138	1.4	1.5	19.07.22	S	G / P							x					
177	TP138A	0.7	0.8	19.07.22	S	G / P		x	x									
178	TP139	0.1	0.2	20.07.22	S	G / P	x		x									
179	TP139	0.5	0.6	20.07.22	S	G / P			x	x								
180	TP139	1	1.1	20.07.22	S	G / P		x	x									
181	TP139	1.2	1.3	20.07.22	S	G / P		x	x									

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW
Project Manager:	DIH		

To: *EnviroLab*
Dispatch date: 22-07-22

	Sample ID			Date Sampled	Sample Type	Container Type	Analytes										Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M-material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold				
182	TP139	1.4	1.5	20.07.22	S	G / P		x									
NR	TP139	1.9	2	20.07.22	S	G / P							x				
183	TP140	0.1	0.2	20.07.22	S	G / P		x	x								
184	TP140	0.3	0.4	20.07.22	S	G / P							x				
185	TP140	0.8	0.9	20.07.22	S	G / P							x				
186	TP141	0.1	0.2	20.07.22	S	G / P	x										
187	TP141	0.4	0.5	20.07.22	S	G / P		x									
188	TP141	0.9	1	20.07.22	S	G / P							x				
189	TP142	0.1	0.2	20.07.22	S	G / P		x	x								
190	TP142	0.3	0.4	20.07.22	S	G / P							x				
191	TP142	0.8	0.9	20.07.22	S	G / P							x				
192	TP143	0.1	0.2	20.07.22	S	G / P		x	x								
193	TP143	0.4	0.5	20.07.22	S	G / P							x				
194	TP143	0.9	1	20.07.22	S	G / P							x				
195	TP144	0.1	0.2	20.07.22	S	G / P	x		x		Ash ID - per amount						
only JAR 196	TP144	0.3	0.4	20.07.22	S	G / P		x									
197	TP144	0.8	0.9	20.07.22	S	G / P							x				
198	TP145	0.1	0.2	20.07.22	S	G / P	x		x								
199	TP145	0.3	0.4	20.07.22	S	G / P							x				

checked bags from 193 +4

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW
Project Manager:	DIH	**To:**	EnviroLab
		Dispatch date:	22-07-22

	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil M- material	G - glass P - plastic	Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					
200	TP145	0.8	0.9	20.07.22	S	G / P							x					
201	TP146	0.1	0.2	20.07.22	S	G / P		x	x									
202	TP146	0.3	0.4	20.07.22	S	G / P							x					
203	TP146	0.8	0.9	20.07.22	S	G / P							x					
204	TP147	0.1	0.2	20.07.22	S	G / P		x	x									
205	TP147	0.2	0.3	20.07.22	S	G / P							x					
206	TP147	0.7	0.8	20.07.22	S	G / P							x					
207	TP148	0.1	0.2	20.07.22	S	G / P	x		x									
208	TP148	0.3	0.4	20.07.22	S	G / P		x										
209	TP148	0.8	0.9	20.07.22	S	G / P							x					
210	TP149	0.1	0.2	20.07.22	S	G / P	x		x		Asb ID - per email							
211	TP149	0.4	0.5	20.07.22	S	G / P		x	x									
NR	TP149 #34	0.9	1	20.07.22	S	G / P			x									
212	TP149	1	1.1	20.07.22	S	G / P		x										
213	TP149	1.5	1.6	20.07.22	S	G / P							x					
214	TP150	0.1	0.2	20.07.22	S	G / P		x	x									
215	TP150	0.3	0.4	20.07.22	S	G / P							x					
216	TP150	0.8	0.9	20.07.22	S	G / P							x					
217	TP151	0.1	0.2	20.07.22	S	G / P		x	x									

Soil only

Bag only

Soil only

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** EnviroLab
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
218	TP151	0.3	0.4	20.07.22	S	G / P							x					
219	TP151	0.8	0.9	20.07.22	S	G / P							x					
220	TP152	0.1	0.2	20.07.22	S	G / P	x		x									
221	TP152	0.4	0.5	20.07.22	S	G / P		x										
222	TP152	0.9	1	20.07.22	S	G / P							x					
Jar only 223	TP153	0.1	0.2	20.07.22	S	G / P		x	x									
224	TP153	0.3	0.4	20.07.22	S	G / P							x					
225	TP153	0.8	0.9	20.07.22	S	G / P							x					
226	TP154	0.1	0.2	20.07.22	S	G / P	x		x									
227	TP154	0.3	0.4	20.07.22	S	G / P							x					
228	TP154	0.8	0.9	20.07.22	S	G / P							x					
229	TP155	0.1	0.2	20.07.22	S	G / P		x	x									
285 ~~230~~	TP155	0.3	0.4	20.07.22	S	G / P		x										
287 ~~231~~	TP155	0.8	0.9	20.07.22	S	G / P							x					
230 ~~232~~	TP156	0.1	0.2	20.07.22	S	G / P		x	x									
231 ~~233~~	TP156	0.3	0.4	20.07.22	S	G / P							x					
232 ~~234~~	TP156	0.8	0.9	20.07.22	S	G / P							x					
233 ~~235~~	TP157	0.1	0.2	20.07.22	S	G / P	x		x									
234 ~~236~~	TP157	0.3	0.4	20.07.22	S	G / P		x										

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:** Kemps Creek, NSW	**To:** *EnviroLab*
Project Manager:	DIH		**Dispatch date:** 22-07-22

Lab ID	Sample ID: Location / Other ID	Sample ID: Depth From	Sample ID: Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
235 ~~237~~	TP157	0.8	0.9	20.07.22	S	G / P							x					
236	TP158	0.1	0.2	20.07.22	S	G / P		x	x									
237	TP158	0.3	0.4	20.07.22	S	G / P							x					
NR ~~238~~	TP158	0.8	0.9	20.07.22	S	G / P							x					
238 ~~239~~	TP159	0.1	0.2	20.07.22	S	G / P		x	x									
239 ~~240~~	TP159	0.3	0.4	20.07.22	S	G / P							x					
240 ~~241~~	TP159	0.8	0.9	20.07.22	S	G / P							x					
241 ~~242~~	TP160	0.1	0.2	20.07.22	S	G / P	x		x									
~~242~~ 242 ~~243~~	TP160	0.3	0.4	20.07.22	S	G / P		x										
243 ~~243~~	TP160	0.8	0.9	20.07.22	S	G / P							x					
244	TP161	0.1	0.2	20.07.22	S	G / P	x		x									
245	TP161	0.3	0.4	20.07.22	S	G / P							x					
246	TP161	0.8	0.9	20.07.22	S	G / P							x					
247	TP162	0.1	0.2	21.07.22	S	G / P		x	x									
248	TP162	0.2	0.3	21.07.22	S	G / P							x					
249	TP162	0.7	0.8	21.07.22	S	G / P							x					
250	TP163	0.1	0.2	21.07.22	S	G / P		x	x									
251	TP163	0.3	0.4	21.07.22	S	G / P							x					
252	TP163	0.8	0.9	21.07.22	S	G / P							x					

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW
Project Manager:	DIH		
To:	*EnviroLab*		
Dispatch date:	22-07-22		

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
253	TP164	0.1	0.2	21.07.22	S	G /P	x		x									
254	TP164	0.3	0.4	21.07.22	S	G /P		x										
255	TP164	0.8	0.9	21.07.22	S	G /P							x					
256	TP165	0.1	0.2	21.07.22	S	G /P		x	x									
257	TP165	0.3	0.4	21.07.22	S	G /P							x					
258	TP165	0.8	0.9	21.07.22	S	G /P							x					
259	TP166	0	0.1	21.07.22	S	G /P		x	x									
260	TP166	0.2	0.3	21.07.22	S	G /P	x		x									
261	TP166	0.3	0.4	21.07.22	S	G /P		x	x									
262	TP166	0.5	0.6	21.07.22	S	G /P		x										
263	TP166	1	1.1	21.07.22	S	G /P							x					
264	BD1/20220718			18.07.22	S	G												Forward for inter-lab
265	BD2/20220718			18.07.22	S	G		x										
266	BD1/20220719			19.07.22	S	G												Forward for inter-lab
267	BD2/20220719			19.07.22	S	G		x										
268	BD3/20220719			19.07.22	S	G												Forward for inter-lab
269	BD4/20220719			19.07.22	S	G		x										
270	BD5/20220719			19.07.22	S	G												Forward for inter-lab
271	BD6/20220719			19.07.22	S	G												Forward for inter-lab

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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	Suburb: Kemps Creek, NSW	To: EnviroLab
Project Manager:	DIH		Dispatch date: 22-07-22

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S-Soil M-material	Container Type: G - glass P - plastic	Analytes: Combo 8	Combo 3	AF/FA	ph, CEC	Asbestos ID	TRH/BTEX	Hold					Notes/ Preservation/ Additional Requirements
272	BD7/20220719			19.07.22	S	G												Forward for inter-lab
273	BD1/20220720			20.07.22	S	G		x										
274	BD2/20220720			20.07.22	S	G												Forward for inter-lab
290	BD1/20220721			21.07.22	S	G		x									291	BD8_220719
293	Trip Spike			19.07.22	S	G						x					294	137 - 0.8 - 0.9
292	Trip Blank			19.07.22	S	G						x					295	132A 0.4 - 0.5
275 281	ACM1			19.07.22	M	P					x						296	132A 1.4 - 1.5
276	ACM2			19.07.22	M	P					x					Extra Bags	297	133 0.5 - 0.7
277	ACM3			19.07.22	M	P					x						298	130 1.0 - 1.1
278	ACM4			19.07.22	M	P					x					299	Extra	3.5 - 35
279	ACM5			19.07.22	M	P					x					300	↓	0.1 - 0.2
280	ACM6			19.07.22	M	P					x					301		140 0.1 - 0.2
281	ACM7			19.07.22	M	P					x						302	124
282	ACM8			19.07.22	M	P					x						303	131
Extras AP. 283	TP130	1.0															304	32A 1.4 - 1.5
284	... 149	0.8															305	... 0.4 - 05
285	130	0.8															306	138
286	155	0.8															307	145
287	155	0.3															308	155 133 0.3 - 04

288 BD3 - 220720
289 BD6 - 220719
290 BD1 - 20220721

~~113~~ ~~155~~ 155 0.8 - 0.9 #313

301228 €

~~307~~ ~~155~~ 0.8 ~~0.7~~ 4145
310 ~~155~~ 0.8 - 0.9 155 0.3.04
311 155 0.8 - 0.9
312 142 0.2 - 0.6

Extra on.

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden

Sample Login Details

Your reference	211619.02, Kemps Creek, NSW
Envirolab Reference	301228-B
Date Sample Received	26/07/2022
Date Instructions Received	28/07/2022
Date Results Expected to be Reported	04/08/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	306 Soil, 8 Material
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
BH167-0.2-0.3			✓
BH167-0.7-0.8			✓
BH167-0.9-1			✓
BH167-1.4-1.5			✓
BH168-0.2-0.3			✓
BH168-0.7-0.8			✓
BH168-1.1-1.2			✓
BH168-1.6-1.7			✓
BH169-0.2-0.3			✓
BH169-0.3-0.4			✓
BH169-0.6-0.7			✓
TP101-0.1-0.2			✓
TP101-0,2-0.3			✓
TP101-0.6-0.7			✓
TP102-0.1-0.2	✓		
TP102-0.2-0.3			✓
TP102-0.6-0.7			✓
TP103-0-0.1			✓
TP103-0.5-0.6			✓
TP104-0.1-0.2	✓		
TP104-0.4-0.5			✓
TP104-0.9-1			✓
TP105-0-0.1	✓		
TP105-0.1-0.2			✓
TP105-0.7-0.8			✓
TP106-0-0.2	✓		
TP106-0.2-0.3			✓
TP106-0.7-0.8			✓
TP107-0-0.2	✓		
TP107-0.5-0.7	✓		
TP107-1-1.2			✓
TP107-1.5-1.7			✓

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP108-0-0.2	✓		
TP108-0.4-0.6			✓
TP108-0.9-1			✓
TP109-0-0.2	✓		
TP109-0.5-0.7			✓
TP109-0.7-0.9			✓
TP109-1.3-1.5			✓
TP110-0-0.2			✓
TP110-0.5-0.7	✓		
TP110-1-1.2	✓		
TP110-1.3-1.5			✓
TP110-1.8-1.9			✓
TP111-0-0.2	✓		
TP111-0.5-0.7	✓		
TP111-0.9-1.1			✓
TP111-1.4-1.6			✓
TP112-0-0.2	✓		
TP112-0.25-0.35			✓
TP112-0.7-0.9			✓
TP113-0-0.2	✓		
TP113-0.3-0.5			✓
TP113-0.8-1			✓
TP114-0-0.2	✓		
TP114-0.3-0.5			✓
TP114-0.8-1			✓
TP115-0-0.2			✓
TP115-0.5-0.7			✓
TP116-0-0.2	✓		
TP116-0.4-0.6			✓
TP116-0.9-1			✓
TP117-0-0.2	✓		
TP117-0.45-0.6			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP117-0.9-1			✓
TP118-0-0.2			✓
TP118-0.5-0.7	✓		
TP118-1-1.2	✓		
TP118-1.5-1.7			✓
TP118-2-2.2			✓
TP119-0-0.2	✓		
TP119-0.2-0.4			✓
TP119-0.7-0.9			✓
TP120-0.1-0.2			✓
TP120-0.3-0.4			✓
TP120-0.8-0.9			✓
TP121-0.1-0.2			✓
TP121-0.3-0.4			✓
TP121-0.8-0.9			✓
TP122-0.1-0.2			✓
TP122-0.3-0.4			✓
TP122-0.8-0.9			✓
TP123-0.1-0.2			✓
TP123-0.3-0.4			✓
TP123-0.8-0.9			✓
TP124-0.1-0.2			✓
TP124-0.4-0.5			✓
TP124-0.9-1			✓
TP124-1.4-1.5			✓
TP124-1.8-1.9			✓
TP124-2.3-2.4			✓
TP125-0.1-0.2			✓
TP125-0.4-0.5			✓
TP125-0.9-1			✓
TP125-1-1.1			✓
TP125-1.4-1.5			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP125A-0.5-0.6			✓
TP125A-0.8-0.9			✓
TP126-0.1-0.2			✓
TP126-0.4-0.5			✓
TP126-0.9-1			✓
TP126-1-1.1			✓
TP126-1.4-1.5			✓
TP126A-0.5-0.6			✓
TP126A-0.8-0.9			✓
TP127-0.1-0.2			✓
TP127-0.4-0.5			✓
TP127-0.9-1			✓
TP127-1-1.1			✓
TP127-1.4-1.5			✓
TP128-0.1-0.2			✓
TP128-0.4-0.5			✓
TP128-1-1.1			✓
TP128-1.1-1.2			✓
TP128-1.6-1.7			✓
TP129-0.1-0.2			✓
TP129-0.4-0.5			✓
TP129-0.9-1			✓
TP129-1.4-1.5			✓
TP129-1.5-1.6			✓
TP129-1.9-2			✓
TP130-0.1-0.2			✓
TP130-0.4-0.5			✓
TP130-0.9-1			✓
TP130-1.2-1.3			✓
TP130-1.5-1.7			✓
TP131-0.1-0.2			✓
TP131-0.4-0.5			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP131-0.9-1			✓
TP131-1.4-1.5			✓
TP131-1.9-2			✓
TP131-2.4-2.5			✓
TP131-2.5-2.6			✓
TP131-3-3.1			✓
TP131-3.4-3.5			✓
TP131A-0.4-0.5			✓
TP131A-1.4-1.5			✓
TP132-0.1-0.2			✓
TP132-0.4-0.5			✓
TP132-0.9-1			✓
TP132-1.4-1.5			✓
TP132-1.7-1.8			✓
TP132-1.9-2			✓
TP132-2.4-2.5			✓
TP133-0.1-0.2			✓
TP133-0.6-0.7			✓
TP133-1.2-1.3			✓
TP133-1.9-2			✓
TP133-2.9-3			✓
TP134-0.1-0.2			✓
TP134-0.6-0.7			✓
TP134-0.9-1			✓
TP134-1.9-2			✓
TP134-2.9-3			✓
TP134-3.4-3.5			✓
TP135-0.1-0.2			✓
TP135-0.5-0.6			✓
TP135-1-1.1			✓
TP135-1.5-1.6			✓
TP135-2.5-2.6			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP135-3.5-3.6			✓
TP136-0.1-0.2			✓
TP136-0.5-0.6			✓
TP136-1-1.1			✓
TP136-1.5-1.6			✓
TP136-2.5-2.6			✓
TP136-2.8-2.9			✓
TP137-0.1-0.2			✓
TP137-0.5-0.6			✓
TP137-1-1.1			✓
TP137-1.5-1.6			✓
TP137-2.5-2.6			✓
TP137-3.5-3.6			✓
TP138-0.1-0.2			✓
TP138-0.5-0.6			✓
TP138-1-1.1			✓
TP138A-0.7-0.8			✓
TP139-0.1-0.2			✓
TP139-0.5-0.6			✓
TP139-1-1.1			✓
TP139-1.2-1.3			✓
TP139-1.4-1.5			✓
TP140-0.1-0.2			✓
TP140-0.3-0.4			✓
TP140-0.8-0.9			✓
TP141-0.1-0.2			✓
TP141-0.4-0.5			✓
TP141-0.9-1			✓
TP142-0.1-0.2			✓
TP142-0.3-0.4			✓
TP142-0.8-0.9			✓
TP143-0.1-0.2			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP143-0.4-0.5			✓
TP143-0.9-1			✓
TP144-0.1-0.2		✓	
TP144-0.3-0.4			✓
TP144-0.8-0.9			✓
TP145-0.1-0.2			✓
TP145-0.3-0.4			✓
TP145-0.8-0.9			✓
TP146-0.1-0.2			✓
TP146-0.3-0.4			✓
TP146-0.8-0.9			✓
TP147-0.1-0.2			✓
TP147-0.2-0.3			✓
TP147-0.7-0.8			✓
TP148-0.1-0.2			✓
TP148-0.3-0.4			✓
TP148-0.8-0.9			✓
TP149-0.1-0.2		✓	
TP149-0.4-0.5			✓
TP149-1-1.1			✓
TP149-1.5-1.6			✓
TP150-0.1-0.2			✓
TP150-0.3-0.4			✓
TP150-0.8-0.9			✓
TP151-0.1-0.2			✓
TP151-0.3-0.4			✓
TP151-0.8-0.9			✓
TP152-0.1-0.2			✓
TP152-0.4-0.5			✓
TP152-0.9-1			✓
TP153-0.1-0.2			✓
TP153-0.3-0.4			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP153-0.8-0.9			✓
TP154-0.1-0.2			✓
TP154-0.3-0.4			✓
TP154-0.8-0.9			✓
TP155-0.1-0.2			✓
TP156-0.1-0.2			✓
TP156-0.3-0.4			✓
TP156-0.8-0.9			✓
TP157-0.1-0.2			✓
TP157-0.3-0.4			✓
TP157-0.8-0.9			✓
TP158-0.1-0.2			✓
TP158-0.3-0.4			✓
TP159-0.1-0.2			✓
TP159-0.3-0.4			✓
TP159-0.8-0.9			✓
TP160-0.1-0.2			✓
TP160-0.3-0.4			✓
TP160-0.8-0.9			✓
TP161-0.1-0.2			✓
TP161-0.3-0.4			✓
TP161-0.8-0.9			✓
TP162-0.1-0.2			✓
TP162-0.2-0.3			✓
TP162-0.7-0.8			✓
TP163-0.1-0.2			✓
TP163-0.3-0.4			✓
TP163-0.8-0.9			✓
TP164-0.1-0.2			✓
TP164-0.3-0.4			✓
TP164-0.8-0.9			✓
TP165-0.1-0.2			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
TP165-0.3-0.4			✓
TP165-0.8-0.9			✓
TP166-0-0.1			✓
TP166-0.2-0.3			✓
TP166-0.3-0.4			✓
TP166-0.5-0.6			✓
TP166-1-1.1			✓
-			✓
BD2/20220718			✓
-			✓
BD2/20220719			✓
-			✓
BD4/20220719			✓
-			✓
-			✓
-			✓
BD1/20220720			✓
-			✓
ACM1			✓
ACM2			✓
ACM3			✓
ACM4			✓
ACM5			✓
ACM6			✓
ACM7			✓
ACM8			✓
TP130-1.0			✓
TP149-0.8			✓
-			✓
TP155-0.8-0.9			✓
TP155-0.3-0.4			✓
BD3/20220720			✓

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Sample ID	Asbestos ID - soils NEPM	Asbestos ID - soils	On Hold
-			✓
BD1/20220720			✓
BD8/20220720			✓
Trip Blank			✓
Trip Spike			✓
-			✓
132A-0.4-0.5			✓
132A-1.4-1.5			✓
133-0.6-0.7			✓
130-1.0-1.1			✓
-			✓
-			✓
-			✓
-			✓
-			✓
32A-1.4-1.5			✓
32A-0.4-0.5			✓
138-0.9-1.0			✓
-			✓
-			✓
-			✓
-			✓
-			✓
-			✓
158-0.8-0.9			✓
TP149-0.9-1			✓

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

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Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 301228-C

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.02, Kemps Creek, NSW**
Number of Samples	additional analysis
Date samples received	26/07/2022
Date completed instructions received	05/08/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

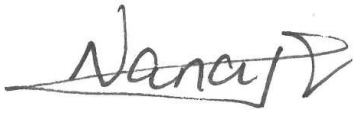
Date results requested by	10/08/2022
Date of Issue	10/08/2022

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Results Approved By
Giovanni Agosti, Group Technical Manager

Authorised By



Nancy Zhang, Laboratory Manager

Metals from Leaching Fluid pH 2.9 or 5				
Our Reference		301228-C-97	301228-C-183	301228-C-186
Your Reference	UNITS	TP125A	TP140	TP141
Depth		0.5-0.6	0.1-0.2	0.1-0.2
Date Sampled		19/07/2022	20/07/2022	20/07/2022
Type of sample		Soil	Soil	Soil
Date extracted	-	10/08/2022	10/08/2022	10/08/2022
Date analysed	-	10/08/2022	10/08/2022	10/08/2022
pH of soil for fluid# determ.	pH units	7.5	7.7	7.6
pH of soil TCLP (after HCl)	pH units	1.6	1.6	1.6
Extraction fluid used		1	1	1
pH of final Leachate	pH units	5.0	4.9	5.0
Lead	mg/L	<0.03	[NA]	0.09
Nickel	mg/L	[NA]	<0.02	[NA]

Method ID	Methodology Summary
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using AS 4439 and USEPA 1311. Please note that the mass used may be scaled down from default based on sample mass available. Samples are stored at 2-6oC before and after leachate preparation.
Metals-020	Determination of various metals by ICP-AES following buffer determination as per USEPA 1311 and hence AS 4439.3. Extraction Fluid 1 refers to the pH 5.0 buffer and Extraction Fluid 2 is the pH 2.9 buffer.

QUALITY CONTROL: Metals from Leaching Fluid pH 2.9 or 5					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			10/08/2022	97	10/08/2022	10/08/2022		10/08/2022	[NT]
Date analysed	-			10/08/2022	97	10/08/2022	10/08/2022		10/08/2022	[NT]
Lead	mg/L	0.03	Metals-020	<0.03	97	<0.03	<0.03	0	102	[NT]
Nickel	mg/L	0.02	Metals-020	<0.02	[NT]	[NT]	[NT]	[NT]	103	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

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SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden

Sample Login Details

Your reference	211619.02, Kemps Creek, NSW
Envirolab Reference	301228-C
Date Sample Received	26/07/2022
Date Instructions Received	05/08/2022
Date Results Expected to be Reported	10/08/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	additional analysis
Turnaround Time Requested	3 days
Temperature on Receipt (°C)	12
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
BH167-0.2-0.3							✓
BH167-0.7-0.8							✓
BH167-0.9-1							✓
BH167-1.4-1.5							✓
BH168-0.2-0.3							✓
BH168-0.7-0.8							✓
BH168-1.1-1.2							✓
BH168-1.6-1.7							✓
BH169-0.2-0.3							✓
BH169-0.3-0.4							✓
BH169-0.6-0.7							✓
TP101-0.1-0.2							✓
TP101-0,2-0.3							✓
TP101-0.6-0.7							✓
TP102-0.1-0.2							✓
TP102-0.2-0.3							✓
TP102-0.6-0.7							✓
TP103-0-0.1							✓
TP103-0.5-0.6							✓
TP104-0.1-0.2							✓
TP104-0.4-0.5							✓
TP104-0.9-1							✓
TP105-0-0.1							✓
TP105-0.1-0.2							✓
TP105-0.7-0.8							✓
TP106-0-0.2							✓
TP106-0.2-0.3							✓
TP106-0.7-0.8							✓
TP107-0-0.2							✓
TP107-0.5-0.7							✓
TP107-1-1.2							✓
TP107-1.5-1.7							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP108-0-0.2							✓
TP108-0.4-0.6							✓
TP108-0.9-1							✓
TP109-0-0.2							✓
TP109-0.5-0.7							✓
TP109-0.7-0.9							✓
TP109-1.3-1.5							✓
TP110-0-0.2							✓
TP110-0.5-0.7							✓
TP110-1-1.2							✓
TP110-1.3-1.5							✓
TP110-1.8-1.9							✓
TP111-0-0.2							✓
TP111-0.5-0.7							✓
TP111-0.9-1.1							✓
TP111-1.4-1.6							✓
TP112-0-0.2							✓
TP112-0.25-0.35							✓
TP112-0.7-0.9							✓
TP113-0-0.2							✓
TP113-0.3-0.5							✓
TP113-0.8-1							✓
TP114-0-0.2							✓
TP114-0.3-0.5							✓
TP114-0.8-1							✓
TP115-0-0.2							✓
TP115-0.5-0.7							✓
TP116-0-0.2							✓
TP116-0.4-0.6							✓
TP116-0.9-1							✓
TP117-0-0.2							✓
TP117-0.45-0.6							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP117-0.9-1							✓
TP118-0-0.2							✓
TP118-0.5-0.7							✓
TP118-1-1.2							✓
TP118-1.5-1.7							✓
TP118-2-2.2							✓
TP119-0-0.2							✓
TP119-0.2-0.4							✓
TP119-0.7-0.9							✓
TP120-0.1-0.2							✓
TP120-0.3-0.4							✓
TP120-0.8-0.9							✓
TP121-0.1-0.2							✓
TP121-0.3-0.4							✓
TP121-0.8-0.9							✓
TP122-0.1-0.2							✓
TP122-0.3-0.4							✓
TP122-0.8-0.9							✓
TP123-0.1-0.2							✓
TP123-0.3-0.4							✓
TP123-0.8-0.9							✓
TP124-0.1-0.2							✓
TP124-0.4-0.5							✓
TP124-0.9-1							✓
TP124-1.4-1.5							✓
TP124-1.8-1.9							✓
TP124-2.3-2.4							✓
TP125-0.1-0.2							✓
TP125-0.4-0.5							✓
TP125-0.9-1							✓
TP125-1-1.1							✓
TP125-1.4-1.5							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP125A-0.5-0.6	✓	✓	✓	✓	✓		
TP125A-0.8-0.9							✓
TP126-0.1-0.2							✓
TP126-0.4-0.5							✓
TP126-0.9-1							✓
TP126-1-1.1							✓
TP126-1.4-1.5							✓
TP126A-0.5-0.6							✓
TP126A-0.8-0.9							✓
TP127-0.1-0.2							✓
TP127-0.4-0.5							✓
TP127-0.9-1							✓
TP127-1-1.1							✓
TP127-1.4-1.5							✓
TP128-0.1-0.2							✓
TP128-0.4-0.5							✓
TP128-1-1.1							✓
TP128-1.1-1.2							✓
TP128-1.6-1.7							✓
TP129-0.1-0.2							✓
TP129-0.4-0.5							✓
TP129-0.9-1							✓
TP129-1.4-1.5							✓
TP129-1.5-1.6							✓
TP129-1.9-2							✓
TP130-0.1-0.2							✓
TP130-0.4-0.5							✓
TP130-0.9-1							✓
TP130-1.2-1.3							✓
TP130-1.5-1.7							✓
TP131-0.1-0.2							✓
TP131-0.4-0.5							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP131-0.9-1							✓
TP131-1.4-1.5							✓
TP131-1.9-2							✓
TP131-2.4-2.5							✓
TP131-2.5-2.6							✓
TP131-3-3.1							✓
TP131-3.4-3.5							✓
TP131A-0.4-0.5							✓
TP131A-1.4-1.5							✓
TP132-0.1-0.2							✓
TP132-0.4-0.5							✓
TP132-0.9-1							✓
TP132-1.4-1.5							✓
TP132-1.7-1.8							✓
TP132-1.9-2							✓
TP132-2.4-2.5							✓
TP133-0.1-0.2							✓
TP133-0.6-0.7							✓
TP133-1.2-1.3							✓
TP133-1.9-2							✓
TP133-2.9-3							✓
TP134-0.1-0.2							✓
TP134-0.6-0.7							✓
TP134-0.9-1							✓
TP134-1.9-2							✓
TP134-2.9-3							✓
TP134-3.4-3.5							✓
TP135-0.1-0.2							✓
TP135-0.5-0.6							✓
TP135-1-1.1							✓
TP135-1.5-1.6							✓
TP135-2.5-2.6							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP135-3.5-3.6							✓
TP136-0.1-0.2							✓
TP136-0.5-0.6							✓
TP136-1-1.1							✓
TP136-1.5-1.6							✓
TP136-2.5-2.6							✓
TP136-2.8-2.9							✓
TP137-0.1-0.2							✓
TP137-0.5-0.6							✓
TP137-1-1.1							✓
TP137-1.5-1.6							✓
TP137-2.5-2.6							✓
TP137-3.5-3.6							✓
TP138-0.1-0.2							✓
TP138-0.5-0.6							✓
TP138-1-1.1							✓
TP138A-0.7-0.8							✓
TP139-0.1-0.2							✓
TP139-0.5-0.6							✓
TP139-1-1.1							✓
TP139-1.2-1.3							✓
TP139-1.4-1.5							✓
TP140-0.1-0.2	✓	✓	✓	✓		✓	
TP140-0.3-0.4							✓
TP140-0.8-0.9							✓
TP141-0.1-0.2	✓	✓	✓	✓	✓		
TP141-0.4-0.5							✓
TP141-0.9-1							✓
TP142-0.1-0.2							✓
TP142-0.3-0.4							✓
TP142-0.8-0.9							✓
TP143-0.1-0.2							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP143-0.4-0.5							✓
TP143-0.9-1							✓
TP144-0.1-0.2							✓
TP144-0.3-0.4							✓
TP144-0.8-0.9							✓
TP145-0.1-0.2							✓
TP145-0.3-0.4							✓
TP145-0.8-0.9							✓
TP146-0.1-0.2							✓
TP146-0.3-0.4							✓
TP146-0.8-0.9							✓
TP147-0.1-0.2							✓
TP147-0.2-0.3							✓
TP147-0.7-0.8							✓
TP148-0.1-0.2							✓
TP148-0.3-0.4							✓
TP148-0.8-0.9							✓
TP149-0.1-0.2							✓
TP149-0.4-0.5							✓
TP149-1-1.1							✓
TP149-1.5-1.6							✓
TP150-0.1-0.2							✓
TP150-0.3-0.4							✓
TP150-0.8-0.9							✓
TP151-0.1-0.2							✓
TP151-0.3-0.4							✓
TP151-0.8-0.9							✓
TP152-0.1-0.2							✓
TP152-0.4-0.5							✓
TP152-0.9-1							✓
TP153-0.1-0.2							✓
TP153-0.3-0.4							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP153-0.8-0.9							✓
TP154-0.1-0.2							✓
TP154-0.3-0.4							✓
TP154-0.8-0.9							✓
TP155-0.1-0.2							✓
TP156-0.1-0.2							✓
TP156-0.3-0.4							✓
TP156-0.8-0.9							✓
TP157-0.1-0.2							✓
TP157-0.3-0.4							✓
TP157-0.8-0.9							✓
TP158-0.1-0.2							✓
TP158-0.3-0.4							✓
TP159-0.1-0.2							✓
TP159-0.3-0.4							✓
TP159-0.8-0.9							✓
TP160-0.1-0.2							✓
TP160-0.3-0.4							✓
TP160-0.8-0.9							✓
TP161-0.1-0.2							✓
TP161-0.3-0.4							✓
TP161-0.8-0.9							✓
TP162-0.1-0.2							✓
TP162-0.2-0.3							✓
TP162-0.7-0.8							✓
TP163-0.1-0.2							✓
TP163-0.3-0.4							✓
TP163-0.8-0.9							✓
TP164-0.1-0.2							✓
TP164-0.3-0.4							✓
TP164-0.8-0.9							✓
TP165-0.1-0.2							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
TP165-0.3-0.4							✓
TP165-0.8-0.9							✓
TP166-0-0.1							✓
TP166-0.2-0.3							✓
TP166-0.3-0.4							✓
TP166-0.5-0.6							✓
TP166-1-1.1							✓
-							✓
BD2/20220718							✓
-							✓
BD2/20220719							✓
-							✓
BD4/20220719							✓
-							✓
-							✓
-							✓
BD1/20220720							✓
-							✓
ACM1							✓
ACM2							✓
ACM3							✓
ACM4							✓
ACM5							✓
ACM6							✓
ACM7							✓
ACM8							✓
TP130-1.0							✓
TP149-0.8							✓
-							✓
TP155-0.8-0.9							✓
TP155-0.3-0.4							✓
BD3/20220720							✓

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Sample ID	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Lead	Nickel	On Hold
-							✓
BD1/20220720							✓
BD8/20220720							✓
Trip Blank							✓
Trip Spike							✓
-							✓
132A-0.4-0.5							✓
132A-1.4-1.5							✓
133-0.6-0.7							✓
130-1.0-1.1							✓
-							✓
-							✓
-							✓
-							✓
-							✓
32A-1.4-1.5							✓
32A-0.4-0.5							✓
138-0.9-1.0							✓
-							✓
-							✓
-							✓
-							✓
-							✓
-							✓
158-0.8-0.9							✓
TP149-0.9-1							✓
TP106 - [TRIPLICATE]-0-0.2							✓
TP120 - [TRIPLICATE]-0.1-0.2							✓
TP126 - [TRIPLICATE]-0.1-0.2							✓
TP139 - [TRIPLICATE]-1-1.1							✓

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

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Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 301228-D

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.02, Kemps Creek, NSW**
Number of Samples	Additional Testing on 1 Soil
Date samples received	26/07/2022
Date completed instructions received	09/08/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	10/08/2022
Date of Issue	10/08/2022

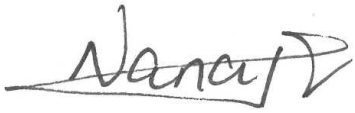
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Asbestos Approved By
Analysed by Asbestos Approved Analyst: Wonnie Condos, Nyovan Moonean
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Josh Williams, Organics and LC Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

sTPH in Soil (C10-C40)-Silica		
Our Reference		301228-D-241
Your Reference	UNITS	TP160
Depth		0.1-0.2
Date Sampled		20/07/2022
Type of sample		Soil
Date extracted	-	09/08/2022
Date analysed	-	10/08/2022
TPH C_{10} - C_{14}	mg/kg	890
TPH C_{15} - C_{28}	mg/kg	2,500
TPH C_{29} - C_{36}	mg/kg	<100
TPH >C_{10} -C_{16}	mg/kg	1,600
TPH >C_{16} -C_{34}	mg/kg	1,700
TPH >C_{34} -C_{40}	mg/kg	<100
Surrogate o-Terphenyl	%	#

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

QUALITY CONTROL: sTPH in Soil (C10-C40)-Silica						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			09/08/2022	[NT]	[NT]	[NT]	[NT]	09/08/2022	[NT]
Date analysed	-			10/08/2022	[NT]	[NT]	[NT]	[NT]	10/08/2022	[NT]
TPH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	78	[NT]
TPH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	82	[NT]
TPH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	71	[NT]
TPH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	78	[NT]
TPH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	82	[NT]
TPH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	71	[NT]
Surrogate o-Terphenyl	%		Org-020	84	[NT]	[NT]	[NT]	[NT]	117	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

sTPH in Soil (C10-C40)-Silica - # Percent recovery for the surrogate is not possible to report as the high concentration of analytes in sample 301228-d-1 have caused interference.

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SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden

Sample Login Details

Your reference	211619.02, Kemps Creek, NSW
Envirolab Reference	301228
Date Sample Received	26/07/2022
Date Instructions Received	26/07/2022
Date Results Expected to be Reported	04/08/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	306 Soil, 8 Material
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	12
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
BH167-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH167-0.7-0.8													✓
BH167-0.9-1	✓	✓	✓	✓									
BH167-1.4-1.5													✓
BH168-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH168-0.7-0.8	✓	✓	✓	✓					✓				
BH168-1.1-1.2	✓	✓	✓	✓									
BH168-1.6-1.7													✓
BH169-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
BH169-0.3-0.4													✓
BH169-0.6-0.7													✓
TP101-0.1-0.2	✓	✓	✓	✓									
TP101-0,2-0.3													✓
TP101-0.6-0.7													✓
TP102-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
TP102-0.2-0.3	✓	✓	✓	✓						✓	✓		
TP102-0.6-0.7													✓
TP103-0-0.1	✓	✓	✓	✓									
TP103-0.5-0.6													✓
TP104-0.1-0.2	✓	✓	✓	✓									
TP104-0.4-0.5													✓
TP104-0.9-1													✓
TP105-0-0.1	✓	✓	✓	✓									
TP105-0.1-0.2													✓
TP105-0.7-0.8													✓
TP106-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP106-0.2-0.3	✓	✓	✓	✓									
TP106-0.7-0.8													✓
TP107-0-0.2													✓
TP107-0.5-0.7	✓	✓	✓	✓	✓	✓	✓	✓					
TP107-1-1.2	✓	✓	✓	✓									
TP107-1.5-1.7													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP108-0-0.2	✓	✓	✓	✓									
TP108-0.4-0.6													✓
TP108-0.9-1													✓
TP109-0-0.2	✓	✓	✓	✓									
TP109-0.5-0.7													✓
TP109-0.7-0.9	✓	✓	✓	✓									
TP109-1.3-1.5													✓
TP110-0-0.2													✓
TP110-0.5-0.7	✓	✓	✓	✓									
TP110-1-1.2													✓
TP110-1.3-1.5	✓	✓	✓	✓									
TP110-1.8-1.9													✓
TP111-0-0.2													✓
TP111-0.5-0.7	✓	✓	✓	✓	✓	✓	✓	✓					
TP111-0.9-1.1	✓	✓	✓	✓									
TP111-1.4-1.6													✓
TP112-0-0.2	✓	✓	✓	✓									
TP112-0.25-0.35													✓
TP112-0.7-0.9													✓
TP113-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP113-0.3-0.5	✓	✓	✓	✓									
TP113-0.8-1													✓
TP114-0-0.2	✓	✓	✓	✓									
TP114-0.3-0.5													✓
TP114-0.8-1	✓	✓	✓	✓									
TP115-0-0.2	✓	✓	✓	✓									
TP115-0.5-0.7													✓
TP116-0-0.2	✓	✓	✓	✓									
TP116-0.4-0.6													✓
TP116-0.9-1													✓
TP117-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
TP117-0.45-0.6	✓	✓	✓	✓						✓	✓		

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP117-0.9-1													✓
TP118-0-0.2													✓
TP118-0.5-0.7	✓	✓	✓	✓						✓	✓		
TP118-1-1.2													✓
TP118-1.5-1.7	✓	✓	✓	✓									
TP118-2-2.2													✓
TP119-0-0.2	✓	✓	✓	✓									
TP119-0.2-0.4	✓	✓	✓	✓									
TP119-0.7-0.9													✓
TP120-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP120-0.3-0.4	✓	✓	✓	✓									
TP120-0.8-0.9													✓
TP121-0.1-0.2	✓	✓	✓	✓									
TP121-0.3-0.4													✓
TP121-0.8-0.9													✓
TP122-0.1-0.2	✓	✓	✓	✓					✓	✓	✓		
TP122-0.3-0.4	✓	✓	✓	✓						✓	✓		
TP122-0.8-0.9													✓
TP123-0.1-0.2	✓	✓	✓	✓					✓				
TP123-0.3-0.4													✓
TP123-0.8-0.9													✓
TP124-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP124-0.4-0.5													✓
TP124-0.9-1	✓	✓	✓	✓					✓				
TP124-1.4-1.5													✓
TP124-1.8-1.9	✓	✓	✓	✓									
TP124-2.3-2.4													✓
TP125-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP125-0.4-0.5													✓
TP125-0.9-1	✓	✓	✓	✓					✓				
TP125-1-1.1	✓	✓	✓	✓									
TP125-1.4-1.5													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP125A-0.5-0.6	✓	✓	✓	✓					✓				
TP125A-0.8-0.9									✓				
TP126-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP126-0.4-0.5													✓
TP126-0.9-1	✓	✓	✓	✓					✓				
TP126-1-1.1	✓	✓	✓	✓									
TP126-1.4-1.5													✓
TP126A-0.5-0.6	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP126A-0.8-0.9									✓				
TP127-0.1-0.2													✓
TP127-0.4-0.5	✓	✓	✓	✓					✓				
TP127-0.9-1									✓				
TP127-1-1.1	✓	✓	✓	✓									
TP127-1.4-1.5													✓
TP128-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP128-0.4-0.5									✓				
TP128-1-1.1	✓	✓	✓	✓					✓	✓	✓		
TP128-1.1-1.2													✓
TP128-1.6-1.7													✓
TP129-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP129-0.4-0.5									✓				
TP129-0.9-1	✓	✓	✓	✓					✓				
TP129-1.4-1.5									✓				
TP129-1.5-1.6	✓	✓	✓	✓									
TP129-1.9-2													✓
TP130-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP130-0.4-0.5													✓
TP130-0.9-1	✓	✓	✓	✓					✓				
TP130-1.2-1.3	✓	✓	✓	✓									
TP130-1.5-1.7													✓
TP131-0.1-0.2	✓	✓	✓	✓					✓				
TP131-0.4-0.5													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP131-0.9-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TP131-1.4-1.5													✓
TP131-1.9-2	✓	✓	✓	✓					✓				
TP131-2.4-2.5									✓				
TP131-2.5-2.6	✓	✓	✓	✓					✓				
TP131-3-3.1	✓	✓	✓	✓									
TP131-3.4-3.5													✓
TP131A-0.4-0.5	✓	✓	✓	✓					✓				
TP131A-1.4-1.5									✓				
TP132-0.1-0.2									✓				
TP132-0.4-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
TP132-0.9-1													✓
TP132-1.4-1.5	✓	✓	✓	✓					✓				
TP132-1.7-1.8	✓	✓	✓	✓									
TP132-1.9-2													✓
TP132-2.4-2.5													✓
TP133-0.1-0.2													✓
TP133-0.6-0.7	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP133-1.2-1.3									✓				
TP133-1.9-2													✓
TP133-2.9-3	✓	✓	✓	✓					✓				
TP134-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP134-0.6-0.7													✓
TP134-0.9-1									✓				
TP134-1.9-2	✓	✓	✓	✓					✓	✓	✓		
TP134-2.9-3													✓
TP134-3.4-3.5	✓	✓	✓	✓					✓				
TP135-0.1-0.2													✓
TP135-0.5-0.6	✓	✓	✓	✓					✓				
TP135-1-1.1													✓
TP135-1.5-1.6	✓	✓	✓	✓					✓				
TP135-2.5-2.6													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP135-3.5-3.6	✓	✓	✓	✓									
TP136-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP136-0.5-0.6									✓				
TP136-1-1.1													✓
TP136-1.5-1.6	✓	✓	✓	✓					✓				
TP136-2.5-2.6													✓
TP136-2.8-2.9	✓	✓	✓	✓									
TP137-0.1-0.2	✓	✓	✓	✓					✓				
TP137-0.5-0.6													✓
TP137-1-1.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP137-1.5-1.6													✓
TP137-2.5-2.6	✓	✓	✓	✓					✓	✓	✓		
TP137-3.5-3.6	✓	✓	✓	✓									
TP138-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP138-0.5-0.6									✓				
TP138-1-1.1	✓	✓	✓	✓									
TP138A-0.7-0.8	✓	✓	✓	✓					✓				
TP139-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP139-0.5-0.6									✓	✓	✓		
TP139-1-1.1	✓	✓	✓	✓					✓				
TP139-1.2-1.3	✓	✓	✓	✓					✓				
TP139-1.4-1.5	✓	✓	✓	✓									
TP140-0.1-0.2	✓	✓	✓	✓					✓				
TP140-0.3-0.4													✓
TP140-0.8-0.9													✓
TP141-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP141-0.4-0.5	✓	✓	✓	✓									
TP141-0.9-1													✓
TP142-0.1-0.2	✓	✓	✓	✓					✓				
TP142-0.3-0.4													✓
TP142-0.8-0.9													✓
TP143-0.1-0.2	✓	✓	✓	✓					✓				

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP143-0.4-0.5													✓
TP143-0.9-1													✓
TP144-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓					
TP144-0.3-0.4	✓	✓	✓	✓									
TP144-0.8-0.9													✓
TP145-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP145-0.3-0.4													✓
TP145-0.8-0.9													✓
TP146-0.1-0.2	✓	✓	✓	✓					✓				
TP146-0.3-0.4													✓
TP146-0.8-0.9													✓
TP147-0.1-0.2	✓	✓	✓	✓					✓				
TP147-0.2-0.3													✓
TP147-0.7-0.8													✓
TP148-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP148-0.3-0.4	✓	✓	✓	✓									
TP148-0.8-0.9													✓
TP149-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP149-0.4-0.5	✓	✓	✓	✓									
TP149-1-1.1	✓	✓	✓	✓									
TP149-1.5-1.6													✓
TP150-0.1-0.2	✓	✓	✓	✓					✓				
TP150-0.3-0.4													✓
TP150-0.8-0.9													✓
TP151-0.1-0.2	✓	✓	✓	✓					✓				
TP151-0.3-0.4													✓
TP151-0.8-0.9													✓
TP152-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP152-0.4-0.5	✓	✓	✓	✓									
TP152-0.9-1													✓
TP153-0.1-0.2	✓	✓	✓	✓									
TP153-0.3-0.4													✓

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TP153-0.8-0.9													✓
TP154-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP154-0.3-0.4													✓
TP154-0.8-0.9													✓
TP155-0.1-0.2	✓	✓	✓	✓					✓				
TP156-0.1-0.2	✓	✓	✓	✓					✓				
TP156-0.3-0.4													✓
TP156-0.8-0.9													✓
TP157-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP157-0.3-0.4	✓	✓	✓	✓									
TP157-0.8-0.9													✓
TP158-0.1-0.2	✓	✓	✓	✓					✓				
TP158-0.3-0.4													✓
TP159-0.1-0.2	✓	✓	✓	✓					✓				
TP159-0.3-0.4													✓
TP159-0.8-0.9													✓
TP160-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP160-0.3-0.4	✓	✓	✓	✓									
TP160-0.8-0.9													✓
TP161-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP161-0.3-0.4													✓
TP161-0.8-0.9													✓
TP162-0.1-0.2	✓	✓	✓	✓					✓				
TP162-0.2-0.3													✓
TP162-0.7-0.8													✓
TP163-0.1-0.2	✓	✓	✓	✓					✓				
TP163-0.3-0.4													✓
TP163-0.8-0.9													✓
TP164-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP164-0.3-0.4	✓	✓	✓	✓									
TP164-0.8-0.9													✓
TP165-0.1-0.2	✓	✓	✓	✓					✓				

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
TP165-0.3-0.4													✓
TP165-0.8-0.9													✓
TP166-0-0.1	✓	✓	✓	✓					✓				
TP166-0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP166-0.3-0.4	✓	✓	✓	✓					✓				
TP166-0.5-0.6	✓	✓	✓	✓									
TP166-1-1.1													✓
-													✓
BD2/20220718	✓	✓	✓	✓									
-													✓
BD2/20220719	✓	✓	✓	✓									
-													✓
BD4/20220719	✓	✓	✓	✓									
-													✓
-													✓
-													✓
BD1/20220720	✓	✓	✓	✓									
-													✓
ACM1												✓	
ACM2												✓	
ACM3												✓	
ACM4												✓	
ACM5												✓	
ACM6												✓	
ACM7												✓	
ACM8												✓	
TP130-1.0													✓
TP149-0.8													✓
-													✓
TP155-0.8-0.9													✓
TP155-0.3-0.4	✓	✓	✓	✓									
BD3/20220720													✓

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12 Ashley St Chatswood NSW 2067
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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Acid Extractable metalsin soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	Asbestos ID - materials	On Hold
-													✓
BD1/20220720	✓	✓	✓	✓									
BD8/20220720													✓
Trip Blank	✓												
Trip Spike	✓												
-													✓
132A-0.4-0.5													✓
132A-1.4-1.5													✓
133-0.6-0.7													✓
130-1.0-1.1													✓
-													✓
-													✓
-													✓
-													✓
-													✓
32A-1.4-1.5													✓
32A-0.4-0.5													✓
138-0.9-1.0													✓
-													✓
-													✓
-													✓
-													✓
-													✓
-													✓
158-0.8-0.9													✓
TP149-0.9-1									✓				

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

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Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 301718

Client Details

Client	Douglas Partners Pty Ltd
Attention	Jack Hinchliffe, David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.02, Kemps Creek NSW**
Number of Samples	33 Soil
Date samples received	28/07/2022
Date completed instructions received	29/07/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	05/08/2022
Date of Issue	05/08/2022

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Asbestos Approved By
Analysed by Asbestos Approved Analyst: Nyovan Moonean
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Diego Bigolin, Inorganics Supervisor
Giovanni Agosti, Group Technical Manager
Greta Petzold, Assistant Operation Manager
Josh Williams, Organics and LC Supervisor
Kyle Gavrily, Senior Chemist
Lucy Zhu, Asbestos Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301718-1	301718-2	301718-4	301718-6	301718-7
Your Reference	UNITS	TP170	TP170	TP170	TP171	TP171
Depth		0.1-0.2	0.9-0.7	1.3-1.4	0.1-0.2	0.4-0.5
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	100	98	98	93	79

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301718-10	301718-12	301718-13	301718-14	301718-17
Your Reference	UNITS	TP172	TP172	TP172	TP173	TP174
Depth		0.1-0.2	1.6-1.7	1.9-2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	96	94	98	96	98

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301718-18	301718-19	301718-21	301718-23	301718-24
Your Reference	UNITS	TP174	TP174	TP175	TP176	TP176
Depth		0.6-0.7	1.1-1.2	0.6-0.7	0.1-0.2	0.6-0.7
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	95	93	97	94	95

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		301718-25	301718-26	301718-29	301718-30	301718-31
Your Reference	UNITS	TP176	TP176	BD1/20220727	BD2/20220727	BD3/20220727
Depth		1.1-1.2	0.1-0.2	-	-	-
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	95	93	101	98	97

vTRH(C6-C10)/BTEXN in Soil			
Our Reference		301718-32	301718-33
Your Reference	UNITS	Trip Spike	Trip Blank
Depth		-	-
Date Sampled		27/07/2022	27/07/2022
Type of sample		Soil	Soil
Date extracted	-	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022
TRH C_6 - C_9	mg/kg	[NA]	<25
TRH C_6 - C_{10}	mg/kg	[NA]	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	[NA]	<25
Benzene	mg/kg	98%	<0.2
Toluene	mg/kg	97%	<0.5
Ethylbenzene	mg/kg	96%	<1
m+p-xylene	mg/kg	98%	<2
o-Xylene	mg/kg	99%	<1
Naphthalene	mg/kg	[NA]	<1
Total +ve Xylenes	mg/kg	[NA]	<1
Surrogate aaa-Trifluorotoluene	%	92	100

svTRH (C10-C40) in Soil						
Our Reference		301718-1	301718-2	301718-4	301718-6	301718-7
Your Reference	UNITS	TP170	TP170	TP170	TP171	TP171
Depth		0.1-0.2	0.9-0.7	1.3-1.4	0.1-0.2	0.4-0.5
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	05/08/2022	05/08/2022	05/08/2022	05/08/2022	05/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	79	80	83	83	79

svTRH (C10-C40) in Soil						
Our Reference		301718-10	301718-12	301718-13	301718-14	301718-17
Your Reference	UNITS	TP172	TP172	TP172	TP173	TP174
Depth		0.1-0.2	1.6-1.7	1.9-2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	05/08/2022	05/08/2022	05/08/2022	05/08/2022	05/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	81	80	83	82	85

svTRH (C10-C40) in Soil						
Our Reference		301718-18	301718-19	301718-21	301718-23	301718-24
Your Reference	UNITS	TP174	TP174	TP175	TP176	TP176
Depth		0.6-0.7	1.1-1.2	0.6-0.7	0.1-0.2	0.6-0.7
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	05/08/2022	05/08/2022	05/08/2022	05/08/2022	05/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	86	85	87	84	85

svTRH (C10-C40) in Soil						
Our Reference		301718-25	301718-26	301718-29	301718-30	301718-31
Your Reference	UNITS	TP176	TP176	BD1/20220727	BD2/20220727	BD3/20220727
Depth		1.1-1.2	0.1-0.2	-	-	-
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	05/08/2022	05/08/2022	05/08/2022	05/08/2022	05/08/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	79	82	80	79	79

PAHs in Soil						
Our Reference		301718-1	301718-2	301718-4	301718-6	301718-7
Your Reference	UNITS	TP170	TP170	TP170	TP171	TP171
Depth		0.1-0.2	0.9-0.7	1.3-1.4	0.1-0.2	0.4-0.5
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	84	81	86	92	84

PAHs in Soil						
Our Reference		301718-10	301718-12	301718-13	301718-14	301718-17
Your Reference	UNITS	TP172	TP172	TP172	TP173	TP174
Depth		0.1-0.2	1.6-1.7	1.9-2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	85	86	85	88	90

PAHs in Soil						
Our Reference		301718-18	301718-19	301718-21	301718-23	301718-24
Your Reference	UNITS	TP174	TP174	TP175	TP176	TP176
Depth		0.6-0.7	1.1-1.2	0.6-0.7	0.1-0.2	0.6-0.7
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.3
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	0.07
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	1.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	84	89	84	81	94

PAHs in Soil						
Our Reference		301718-25	301718-26	301718-29	301718-30	301718-31
Your Reference	UNITS	TP176	TP176	BD1/20220727	BD2/20220727	BD3/20220727
Depth		1.1-1.2	0.1-0.2	-	-	-
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	90	88	94	89	98

Organochlorine Pesticides in soil						
Our Reference		301718-2	301718-6	301718-12	301718-14	301718-17
Your Reference	UNITS	TP170	TP171	TP172	TP173	TP174
Depth		0.9-0.7	0.1-0.2	1.6-1.7	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	90	94	96	96	94

Organochlorine Pesticides in soil		
Our Reference		301718-24
Your Reference	UNITS	TP176
Depth		0.6-0.7
Date Sampled		27/07/2022
Type of sample		Soil
Date extracted	-	03/08/2022
Date analysed	-	04/08/2022
alpha-BHC	mg/kg	<0.1
HCB	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	90

Organophosphorus Pesticides in Soil						
Our Reference		301718-2	301718-6	301718-12	301718-14	301718-17
Your Reference	UNITS	TP170	TP171	TP172	TP173	TP174
Depth		0.9-0.7	0.1-0.2	1.6-1.7	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	90	94	96	96	94

Organophosphorus Pesticides in Soil		
Our Reference		301718-24
Your Reference	UNITS	TP176
Depth		0.6-0.7
Date Sampled		27/07/2022
Type of sample		Soil
Date extracted	-	03/08/2022
Date analysed	-	04/08/2022
Dichlorvos	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Parathion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Ethion	mg/kg	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1
Surrogate TCMX	%	90

PCBs in Soil						
Our Reference		301718-2	301718-6	301718-12	301718-14	301718-17
Your Reference	UNITS	TP170	TP171	TP172	TP173	TP174
Depth		0.9-0.7	0.1-0.2	1.6-1.7	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	90	94	96	96	94

PCBs in Soil		
Our Reference		301718-24
Your Reference	UNITS	TP176
Depth		0.6-0.7
Date Sampled		27/07/2022
Type of sample		Soil
Date extracted	-	03/08/2022
Date analysed	-	04/08/2022
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate TCMX	%	90

Acid Extractable metals in soil						
Our Reference		301718-1	301718-2	301718-4	301718-6	301718-7
Your Reference	UNITS	TP170	TP170	TP170	TP171	TP171
Depth		0.1-0.2	0.9-0.7	1.3-1.4	0.1-0.2	0.4-0.5
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Arsenic	mg/kg	<4	<4	5	5	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	10	17	13	16
Copper	mg/kg	4	6	25	13	13
Lead	mg/kg	3	4	14	13	13
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	4	5	13	7	8
Zinc	mg/kg	15	43	28	39	38

Acid Extractable metals in soil						
Our Reference		301718-10	301718-12	301718-13	301718-14	301718-17
Your Reference	UNITS	TP172	TP172	TP172	TP173	TP174
Depth		0.1-0.2	1.6-1.7	1.9-2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Arsenic	mg/kg	4	5	5	5	8
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	10	18	16	28	19
Copper	mg/kg	15	14	24	33	18
Lead	mg/kg	10	13	18	30	20
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	12	11	16	9
Zinc	mg/kg	36	37	29	37	24

Acid Extractable metals in soil						
Our Reference		301718-18	301718-19	301718-21	301718-23	301718-24
Your Reference	UNITS	TP174	TP174	TP175	TP176	TP176
Depth		0.6-0.7	1.1-1.2	0.6-0.7	0.1-0.2	0.6-0.7
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Arsenic	mg/kg	5	5	12	5	4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	22	17	25	18	19
Copper	mg/kg	34	22	19	13	9
Lead	mg/kg	16	14	26	19	15
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	15	10	12	6	5
Zinc	mg/kg	57	24	52	52	29

Acid Extractable metals in soil						
Our Reference		301718-25	301718-26	301718-29	301718-30	301718-31
Your Reference	UNITS	TP176	TP176	BD1/20220727	BD2/20220727	BD3/20220727
Depth		1.1-1.2	0.1-0.2	-	-	-
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Arsenic	mg/kg	6	9	6	10	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	19	17	18	14
Copper	mg/kg	27	13	27	28	25
Lead	mg/kg	15	24	18	30	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	11	8	13	14	10
Zinc	mg/kg	29	25	34	36	30

Acid Extractable metals in soil		
Our Reference		301718-34
Your Reference	UNITS	TP170 - [TRIPLICATE]
Depth		0.9-0.7
Date Sampled		27/07/2022
Type of sample		Soil
Date prepared	-	04/08/2022
Date analysed	-	04/08/2022
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	11
Copper	mg/kg	5
Lead	mg/kg	5
Mercury	mg/kg	<0.1
Nickel	mg/kg	6
Zinc	mg/kg	57

Misc Soil - Inorg						
Our Reference		301718-2	301718-6	301718-12	301718-14	301718-17
Your Reference	UNITS	TP170	TP171	TP172	TP173	TP174
Depth		0.9-0.7	0.1-0.2	1.6-1.7	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg		
Our Reference		301718-24
Your Reference	UNITS	TP176
Depth		0.6-0.7
Date Sampled		27/07/2022
Type of sample		Soil
Date prepared	-	04/08/2022
Date analysed	-	04/08/2022
Total Phenolics (as Phenol)	mg/kg	<5

Moisture						
Our Reference		301718-1	301718-2	301718-4	301718-6	301718-7
Your Reference	UNITS	TP170	TP170	TP170	TP171	TP171
Depth		0.1-0.2	0.9-0.7	1.3-1.4	0.1-0.2	0.4-0.5
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Moisture	%	10	14	19	23	19

Moisture						
Our Reference		301718-10	301718-12	301718-13	301718-14	301718-17
Your Reference	UNITS	TP172	TP172	TP172	TP173	TP174
Depth		0.1-0.2	1.6-1.7	1.9-2	0.1-0.2	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Moisture	%	16	16	19	15	17

Moisture						
Our Reference		301718-18	301718-19	301718-21	301718-23	301718-24
Your Reference	UNITS	TP174	TP174	TP175	TP176	TP176
Depth		0.6-0.7	1.1-1.2	0.6-0.7	0.1-0.2	0.6-0.7
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Moisture	%	17	19	17	20	17

Moisture						
Our Reference		301718-25	301718-26	301718-29	301718-30	301718-31
Your Reference	UNITS	TP176	TP176	BD1/20220727	BD2/20220727	BD3/20220727
Depth		1.1-1.2	0.1-0.2	-	-	-
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	03/08/2022	03/08/2022	03/08/2022	03/08/2022	03/08/2022
Date analysed	-	04/08/2022	04/08/2022	04/08/2022	04/08/2022	04/08/2022
Moisture	%	19	21	18	14	19

Asbestos ID - soils NEPM - ASB-001						
Our Reference		301718-1	301718-2	301718-3	301718-6	301718-7
Your Reference	UNITS	TP170	TP170	TP170	TP171	TP171
Depth		0.1-0.2	0.9-0.7	1.1-1.2	0.1-0.2	0.4-0.5
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	05/08/2022	05/08/2022	05/08/2022	05/08/2022	05/08/2022
Sample mass tested	g	910.69	1,182.22	990.3	986.99	878.17
Sample Description	-	Beige coarse-grained soil and rocks	Beige coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown clayey soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001						
Our Reference		301718-10	301718-11	301718-12	301718-14	301718-15
Your Reference	UNITS	TP172	TP172	TP172	TP173	TP173
Depth		0.1-0.2	0.8-0.9	1.6-1.7	0.1-0.2	0.6-0.7
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	05/08/2022	05/08/2022	05/08/2022	05/08/2022	05/08/2022
Sample mass tested	g	956.3	909.87	962.81	832.02	801.12
Sample Description	-	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001						
Our Reference		301718-17	301718-18	301718-20	301718-21	301718-23
Your Reference	UNITS	TP174	TP174	TP175	TP175	TP176
Depth		0.1-0.2	0.6-0.7	0.1-0.2	0.6-0.7	0.1-0.2
Date Sampled		27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	05/08/2022	05/08/2022	05/08/2022	05/08/2022	05/08/2022
Sample mass tested	g	854.96	764.67	920.66	790.35	834.24
Sample Description	-	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown clayey soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001			
Our Reference		301718-24	301718-26
Your Reference	UNITS	TP176	TP176
Depth		0.6-0.7	0.1-0.2
Date Sampled		27/07/2022	27/07/2022
Type of sample		Soil	Soil
Date analysed	-	05/08/2022	05/08/2022
Sample mass tested	g	749.19	898.49
Sample Description	-	Brown clayey soil and rocks	Brown coarse-grained soil and rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–
FA and AF Estimation*	g	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301718-6
Date extracted	-			03/08/2022	2	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	04/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	<25	2	<25	<25	0	105	98
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	2	<25	<25	0	105	98
Benzene	mg/kg	0.2	Org-023	<0.2	2	<0.2	<0.2	0	104	98
Toluene	mg/kg	0.5	Org-023	<0.5	2	<0.5	<0.5	0	103	97
Ethylbenzene	mg/kg	1	Org-023	<1	2	<1	<1	0	102	94
m+p-xylene	mg/kg	2	Org-023	<2	2	<2	<2	0	107	100
o-Xylene	mg/kg	1	Org-023	<1	2	<1	<1	0	107	99
Naphthalene	mg/kg	1	Org-023	<1	2	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	99	2	98	99	1	105	96

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301718-24
Date extracted	-			[NT]	14	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			[NT]	14	04/08/2022	04/08/2022		04/08/2022	04/08/2022
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	14	<25	<25	0	103	98
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	14	<25	<25	0	103	98
Benzene	mg/kg	0.2	Org-023	[NT]	14	<0.2	<0.2	0	103	98
Toluene	mg/kg	0.5	Org-023	[NT]	14	<0.5	<0.5	0	102	97
Ethylbenzene	mg/kg	1	Org-023	[NT]	14	<1	<1	0	100	95
m+p-xylene	mg/kg	2	Org-023	[NT]	14	<2	<2	0	104	100
o-Xylene	mg/kg	1	Org-023	[NT]	14	<1	<1	0	105	100
Naphthalene	mg/kg	1	Org-023	[NT]	14	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	14	96	82	16	102	95

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	17	03/08/2022	03/08/2022		[NT]	[NT]
Date analysed	-			[NT]	17	04/08/2022	04/08/2022		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	17	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	17	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	17	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	17	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	17	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	17	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	17	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	17	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	17	98	95	3	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301718-6
Date extracted	-			03/08/2022	2	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			05/08/2022	2	05/08/2022	05/08/2022		05/08/2022	05/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	2	<50	<50	0	112	122
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	2	<100	<100	0	105	115
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	2	<100	<100	0	86	105
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	2	<50	<50	0	112	122
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	2	<100	<100	0	105	115
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	2	<100	<100	0	86	105
Surrogate o-Terphenyl	%		Org-020	85	2	80	82	2	114	78

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301718-24
Date extracted	-			[NT]	14	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			[NT]	14	05/08/2022	05/08/2022		05/08/2022	05/08/2022
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	14	<50	<50	0	115	115
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	14	<100	<100	0	107	108
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	14	<100	<100	0	71	110
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	14	<50	<50	0	115	115
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	14	<100	<100	0	107	108
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	14	<100	<100	0	71	110
Surrogate o-Terphenyl	%		Org-020	[NT]	14	82	83	1	118	108

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	17	03/08/2022	03/08/2022		[NT]	[NT]
Date analysed	-			[NT]	17	05/08/2022	05/08/2022		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	17	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	17	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	17	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	17	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	17	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	17	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	17	85	89	5	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301718-6
Date extracted	-			03/08/2022	2	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	80	82
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	77	77
Fluorene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	82	80
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	84	80
Anthracene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	84	86
Pyrene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	91	95
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	83	85
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	2	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	2	<0.05	<0.05	0	82	88
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	110	2	81	93	14	82	87

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301718-24
Date extracted	-			[NT]	14	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			[NT]	14	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	86	79
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	81	79
Fluorene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	90	80
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	86	67
Anthracene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	94	63
Pyrene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	103	72
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	83	75
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	14	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	14	<0.05	<0.05	0	76	74
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	14	88	88	0	96	90

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	17	03/08/2022	03/08/2022		[NT]	[NT]
Date analysed	-			[NT]	17	04/08/2022	04/08/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	17	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	17	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	17	90	86	5	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301718-6
Date extracted	-			03/08/2022	2	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	04/08/2022
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	80	76
HCB	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	78	82
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	75	79
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	81	83
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	80	84
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	76	80
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	82	79
Endrin	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	76	76
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	74	76
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	62	62
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	102	2	90	96	6	93	96

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301718-24
Date extracted	-			[NT]	14	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			[NT]	14	04/08/2022	04/08/2022		04/08/2022	04/08/2022
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	86	78
HCB	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	92	82
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	87	81
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	91	87
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	94	88
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	90	84
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	90	84
Endrin	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	84	88
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	92	86
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	80	76
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	14	96	94	2	101	93

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	17	03/08/2022	03/08/2022		[NT]	[NT]
Date analysed	-			[NT]	17	04/08/2022	04/08/2022		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	17	94	93	1	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301718-6
Date extracted	-			03/08/2022	2	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	99	91
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	75	75
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	77	73
Malathion	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	105	103
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	82	84
Parathion	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	70	70
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	82	80
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	102	2	90	96	6	93	96

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301718-24
Date extracted	-			[NT]	14	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			[NT]	14	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	104	101
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	85	83
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	91	85
Malathion	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	118	118
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	94	90
Parathion	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	82	76
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	92	92
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	14	96	94	2	101	93

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	17	03/08/2022	03/08/2022		[NT]	[NT]
Date analysed	-			[NT]	17	04/08/2022	04/08/2022		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	17	94	93	1	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301718-6
Date extracted	-			03/08/2022	2	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	2	<0.1	<0.1	0	113	100
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	2	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	102	2	90	96	6	93	96

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	301718-24
Date extracted	-			[NT]	14	03/08/2022	03/08/2022		03/08/2022	03/08/2022
Date analysed	-			[NT]	14	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	14	<0.1	<0.1	0	127	120
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	14	96	94	2	101	93

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	17	03/08/2022	03/08/2022		[NT]	[NT]
Date analysed	-			[NT]	17	04/08/2022	04/08/2022		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	17	94	93	1	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	301718-6
Date prepared	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Date analysed	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	04/08/2022
Arsenic	mg/kg	4	Metals-020	<4	2	<4	<4	0	98	86
Cadmium	mg/kg	0.4	Metals-020	<0.4	2	<0.4	<0.4	0	94	70
Chromium	mg/kg	1	Metals-020	<1	2	10	10	0	107	80
Copper	mg/kg	1	Metals-020	<1	2	6	5	18	102	94
Lead	mg/kg	1	Metals-020	<1	2	4	5	22	103	83
Mercury	mg/kg	0.1	Metals-021	<0.1	2	<0.1	<0.1	0	98	98
Nickel	mg/kg	1	Metals-020	<1	2	5	5	0	103	77
Zinc	mg/kg	1	Metals-020	<1	2	43	48	11	103	74

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	14	04/08/2022	04/08/2022		[NT]	[NT]
Date analysed	-			[NT]	14	04/08/2022	04/08/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	14	5	5	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	14	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	14	28	25	11	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	14	33	28	16	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	14	30	31	3	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	14	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	14	16	15	6	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	14	37	36	3	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	17	04/08/2022	04/08/2022		[NT]	[NT]
Date analysed	-			[NT]	17	04/08/2022	04/08/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	17	8	8	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	17	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	17	19	20	5	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	17	18	20	11	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	17	20	17	16	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	17	9	10	11	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	17	24	24	0	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date prepared	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	[NT]
Date analysed	-			04/08/2022	2	04/08/2022	04/08/2022		04/08/2022	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	2	<5	<5	0	99	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 301718-2 for Cr,Cu,Pb and Ni. Therefore a triplicate result has been issued as laboratory sample number 301718-34.

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	*EnviroLab*
Project Manager:	DIH	**Order Number:**	**Sampler:** PJ		*12 Ashley Street Chatswood NSW 2067*
Email:	David.Holden@douglaspartners.com.au; Jack.Hinchliffe@douglaspartners.com.au			**Attn:**	*Aileen Hie*
Turnaround time:	☑ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day			**Contact:**	*99106200*
Prior Storage:	☑ Fridg ☐ Freezer ☐ Shelf	**Do samples contain 'potential' HBM?**			

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes						Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil W - water	G - glass P - plastic	Combo 8	Combo 3	AF/FA	Hold	TRH/BTEX		
1	TP170	0.1	0.2	27-07-22	S	G /P		x	x				
2	TP170	0.6	0.7	27-07-22	S	G /P	x		x				
3	TP170	1.1	1.2	27-07-22	S	G /P			x				
4	TP170	1.3	1.4	27-07-22	S	G /P		x					
5	TP170	1.7	1.8	27-07-22	S	G /P				x			
6	TP171	0.1	0.2	27-07-22	S	G /P	x		x				
7	TP171	0.4	0.5	27-07-22	S	G /P		x	x				
8	TP171	0.6	0.7	27-07-22	S	G /P				x			
9	TP171	1.1	1.2	27-07-22	S	G /P				x			
10	TP172	0.1	0.2	27-07-22	S	G /P		x	x				
11	TP172	0.8	0.9	27-07-22	S	G /P			x				
12	TP172	1.6	1.7	27-07-22	S	G /P	x		x				
13	TP172	1.9	2	27-07-22	S	G /P		x					
14	TP173	0.1	0.2	27-07-22	S	G /P	x		x				
15	TP173	0.6	0.7	27-07-22	S	G / P			x				
16	TP173	1.1	1.2	27-07-22	S	G / P				x			
17	TP174	0.1	0.2	27-07-22	S	G / P	x		x				
18	TP174	0.6	0.7	27-07-22	S	G / P		x	x				
19	TP174	1.1	1.2	27-07-22	S	G / P		x					

Metals to analyse:	Std		**LAB RECEIPT** Ev Syd
Number of samples in container:	33	**Transported to laboratory by:** DP	**Lab Ref. No:** 301718
Send results to:	Douglas Partners Pty Ltd		**Received by:** Ray
Address:	96 Hermitage Rd, West Ryde	**Phone:**	**Date & Time:** 28/7/22
Relinquished by:	PJ, 28/7/22	**Date:**	**Signed:**

updated COC 29/7

Project Manager:	DIH							Dispatch date:						
Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes							Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil W - water	G - glass P - plastic	Combo 8	Combo 3	AF/FA	Hold	TRH/BTEX			
20	TP175	0.1	0.2	27-07-22	S	G / P			x					
21	TP175	0.6	0.7	27-07-22	S	G / P		x	x					
22	TP175	1.1	1.2	27-07-22	S	G / P				x				
23	TP176	0.1	0.2	27-07-22	S	G / P		x	x					
24	TP176	0.6	0.7	27-07-22	S	G / P	x		x					
25	TP176	1.1	1.2	27-07-22	S	G / P		x						
26	TP177	0.1	0.2	27-07-22	S	G / P		x	x					
27	TP177	0.4	0.5	27-07-22	S	G / P				x				
28	TP177	0.9	1	27-07-22	S	G / P				x				
29	BD120220727			27-07-22	S	P		x						
30	BD220220727			27-07-22	S	P		x						
31	BD320220727			27-07-22	S	P		x						
32	Trip Spike			27-07-22	S	G					x			
33	Trip Blank			27-07-22	S	G					x			

Metals to analyse:	Std		**LAB RECEIPT**
Number of samples in container:	33	**Transported to laboratory by:** DP	**Lab Ref. No:**
Send results to:	Douglas Partners Pty Ltd		**Received by:**
Address:	96 Hermitage Rd, West Ryde	**Phone:**	**Date & Time:**
Relinquished by:	PJ, 28/7/22	**Date:**	**Signed:**

397-18
29/7/2022

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	Jack Hinchliffe, David Holden

Sample Login Details

Your reference	211619.02, Kemps Creek NSW
Envirolab Reference	301718
Date Sample Received	28/07/2022
Date Instructions Received	29/07/2022
Date Results Expected to be Reported	05/08/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	33 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	6
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metalsin soil	Misc Soil - Inorg	Asbestos ID - soils NEPM - ASB-001	On Hold
TP170-0.1-0.2	✓	✓	✓				✓		✓	
TP170-0.9-0.7	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TP170-1.1-1.2									✓	
TP170-1.3-1.4	✓	✓	✓				✓			
TP170-1.7-1.8										✓
TP171-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TP171-0.4-0.5	✓	✓	✓				✓		✓	
TP171-0.6-0.7										✓
TP171-1.1-1.2										✓
TP172-0.1-0.2	✓	✓	✓				✓		✓	
TP172-0.8-0.9									✓	
TP172-1.6-1.7	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TP172-1.9-2	✓	✓	✓				✓			
TP173-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TP173-0.6-0.7									✓	
TP173-1.1-1.2										✓
TP174-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TP174-0.6-0.7	✓	✓	✓				✓		✓	
TP174-1.1-1.2	✓	✓	✓				✓			
TP175-0.1-0.2									✓	
TP175-0.6-0.7	✓	✓	✓				✓		✓	
TP175-1.1-1.2										✓
TP176-0.1-0.2	✓	✓	✓				✓		✓	
TP176-0.6-0.7	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TP176-1.1-1.2	✓	✓	✓				✓			
TP176-0.1-0.2	✓	✓	✓				✓		✓	
TP177-0.4-0.5										✓
TP177-0.9-1										✓
BD1/20220727	✓	✓	✓				✓			
BD2/20220727	✓	✓	✓				✓			
BD3/20220727	✓	✓	✓				✓			
Trip Spike	✓									

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metalsin soil	Misc Soil - Inorg	Asbestos ID - soils NEPM - ASB-001	On Hold
Trip Blank	✓									

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

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 302544

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.02, Kemps Creek NSW**
Number of Samples	1 Material
Date samples received	05/08/2022
Date completed instructions received	05/08/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

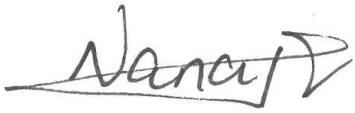
Date results requested by	10/08/2022
Date of Issue	09/08/2022

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Asbestos Approved By
Analysed by Asbestos Approved Analyst: Wonnie Condos
Authorised by Asbestos Approved Signatory: Lucy Zhu
Results Approved By
Lucy Zhu, Asbestos Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

Asbestos ID - materials		
Our Reference		302544-1
Your Reference	UNITS	AM9
Depth		Surface
Date Sampled		21/07/2022
Type of sample		Material
Date analysed	-	09/08/2022
Mass / Dimension of Sample	-	120x80x5mm
Sample Description	-	Beige fibre cement material & paint
Asbestos ID in materials	-	No asbestos detected Organic fibres detected
Trace Analysis	-	No asbestos detected

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.02	**Suburb:**	Kemps Creek, NSW	**To:**	*EnviroLab*
Project Manager:	DIH	**Order Number:**		**Sampler:** PJ	*12 Ashley Street Chatswood NSW 2067*
Email:	David.Holden@douglaspartners.com.au; Jack.Hichliffe@douglaspartners.com.au			**Attn:**	*Aileen Hie*
Turnaround time:	☐ Standard ☑ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day			**Contact:**	*99106200*
Prior Storage:	☐ Fridge ☐ Freezer ☑ Shelf	**Do samples contain 'potential' HBM?**	☐ No ☑ Yes (If YES, then handle, transport and store in accordance with FPM HAZID)		

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M - material	Container Type: G - glass P - plastic	Analytes: Asbestos ID											Notes/ Preservation/ Additional Requirements
(1)	AM9	Surface		21-07-22	M	P	x											

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 302544
Date Received: 05/08/22
Time Received: 1630
Received By: CH
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Metals to analyse: Std			**LAB RECEIPT**
Number of samples in container: 1	**Transported to laboratory by:** DP		**Lab Ref. No:**
Send results to: Douglas Partners Pty Ltd			**Received by:** Christine
Address:	**Phone:**		**Date & Time:** 05/08/22 1630
Relinquished by: DIH 4/8/22	**Date:**	**Signed:**	**Signed:**

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customerservice@envirolab.com.au
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SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden

Sample Login Details

Your reference	211619.02, Kemps Creek NSW
Envirolab Reference	302544
Date Sample Received	05/08/2022
Date Instructions Received	05/08/2022
Date Results Expected to be Reported	10/08/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	1 Material
Turnaround Time Requested	3 days
Temperature on Receipt (°C)	16
Cooling Method	None
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	Asbestos ID - materials
AM9-Surface	✓

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

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2226356**	Page	: 1 of 9
Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Contact	: Cez Bautista
Address	: FERRERS RD	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9809 0666	Telephone	: +61-2-8784 8555
Project	: 211619.02	Date Samples Received	: 26-Jul-2022 17:00
Order number	: ----	Date Analysis Commenced	: 29-Jul-2022
C-O-C number	: ----	Issue Date	: 03-Aug-2022 11:24
Sampler	: PJ		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075(SIM): Poor spike and surrogate recoveries due to matrix interferences.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BD1/20220718	BD1/20220719	BD3/20220719	BD5/20220719	BD6/20220719
			Sampling date / time	18-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00
Compound	CAS Number	LOR	Unit	ES2226356-001	ES2226356-002	ES2226356-003	ES2226356-004	ES2226356-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	15.2	17.4	16.5	18.2	16.6
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	8	7	7	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	17	23	21	23	22
Copper	7440-50-8	5	mg/kg	31	26	23	26	26
Lead	7439-92-1	5	mg/kg	15	19	12	14	18
Nickel	7440-02-0	2	mg/kg	11	13	11	13	14
Zinc	7440-66-6	5	mg/kg	43	30	25	28	31
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	1.2	1.2
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BD1/20220718	BD1/20220719	BD3/20220719	BD5/20220719	BD6/20220719
				Sampling date / time	18-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00
Compound	CAS Number	LOR	Unit		ES2226356-001	ES2226356-002	ES2226356-003	ES2226356-004	ES2226356-005
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**78.5**	**80.3**	**77.7**	**78.4**	**79.9**
2-Chlorophenol-D4	93951-73-6	0.5	%		**84.4**	**85.3**	**82.3**	**85.0**	**87.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**55.5**	**54.7**	**56.2**	**57.3**	**57.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**86.9**	**90.6**	**91.7**	**91.4**	**94.6**
Anthracene-d10	1719-06-8	0.5	%		**94.0**	**96.9**	**96.8**	**96.9**	**99.4**
4-Terphenyl-d14	1718-51-0	0.5	%		**91.7**	**95.8**	**96.5**	**96.3**	**101**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**97.3**	**88.7**	**86.7**	**91.0**	**84.3**
Toluene-D8	2037-26-5	0.2	%		**91.3**	**82.3**	**87.2**	**89.4**	**76.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BD1/20220718	BD1/20220719	BD3/20220719	BD5/20220719	BD6/20220719
				Sampling date / time	18-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00	19-Jul-2022 00:00
Compound	CAS Number	LOR	Unit		ES2226356-001	ES2226356-002	ES2226356-003	ES2226356-004	ES2226356-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	0.2	%		**87.9**	**82.6**	**87.2**	**92.3**	**75.8**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BD7/20220719	BD2/20220720	----	----	----
			Sampling date / time	19-Jul-2022 00:00	20-Jul-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2226356-006	ES2226356-007	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**17.2**	**23.2**	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**8**	**9**	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	**14**	**22**	----	----	----
Copper	7440-50-8	5	mg/kg	**16**	**24**	----	----	----
Lead	7439-92-1	5	mg/kg	**21**	**15**	----	----	----
Nickel	7440-02-0	2	mg/kg	**9**	**9**	----	----	----
Zinc	7440-66-6	5	mg/kg	**34**	**34**	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BD7/20220719	BD2/20220720	----	----	----
			Sampling date / time	19-Jul-2022 00:00	20-Jul-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2226356-006	ES2226356-007	--------	--------	--------
				Result	Result	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued								
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	----	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**75.0**	**81.3**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	**78.7**	**85.7**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	**53.1**	**55.6**	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**87.9**	**90.6**	----	----	----
Anthracene-d10	1719-06-8	0.5	%	**92.0**	**95.9**	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	**92.5**	**95.9**	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	**88.3**	**89.9**	----	----	----
Toluene-D8	2037-26-5	0.2	%	**78.0**	**84.6**	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BD7/20220719	BD2/20220720	----	----	----
				Sampling date / time	19-Jul-2022 00:00	20-Jul-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2226356-006	ES2226356-007	--------	--------	--------
					Result	Result	----	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	0.2	%		**77.3**	**81.6**	**----**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
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	: **ES2226356**	Page	: 1 of 7
Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Contact	: Cez Bautista
Address	: FERRERS RD	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9809 0666	Telephone	: +61-2-8784 8555
Project	: 211619.02	Date Samples Received	: 26-Jul-2022
Order number	: ----	Date Analysis Commenced	: 29-Jul-2022
C-O-C number	: ----	Issue Date	: 03-Aug-2022
Sampler	: PJ		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 7		
No. of samples analysed	: 7		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4488215)									
ES2226356-001	BD1/20220718	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	17	16	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	11	11	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	10	9	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	31	29	6.1	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	15	15	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	43	41	3.7	No Limit
ES2226482-004	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	26	21	20.5	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	16	20	19.5	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	8	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	13	24.8	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	9	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	23	30	27.1	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4488223)									
ES2226356-003	BD3/20220719	EA055: Moisture Content	----	0.1	%	16.5	17.6	6.5	0% - 50%
ES2226482-001	Anonymous	EA055: Moisture Content	----	0.1	%	18.7	18.2	2.6	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4488217)									
ES2226356-001	BD1/20220718	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2226482-004	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4486078)									
ES2226349-003	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4486078) - continued									
ES2226349-003	Anonymous	EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4486079)									
ES2226349-003	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4487524)									
ES2226296-021	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2226356-004	BD5/20220719	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4486079)									
ES2226349-003	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4487524)									
ES2226296-021	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2226356-004	BD5/20220719	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 4487524)									
ES2226296-021	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4487524) - continued									
ES2226296-021	Anonymous	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2226356-004	BD5/20220719	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4488215)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	104	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	105	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	112	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	106	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	107	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	104	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	95.0	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4488217)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	98.0	70.0	125
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4486078)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	116	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	111	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	110	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	109	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	113	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	111	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	113	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	111	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	104	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	113	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	100	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	111	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	87.4	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	84.0	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	81.5	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	83.6	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4486079)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	91.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	94.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	94.6	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4487524)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	118	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4486079)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4486079) - continued								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	95.1	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	92.9	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	101	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4487524)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	116	68.4	128
EP080: BTEXN (QCLot: 4487524)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	104	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	107	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	101	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	105	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	106	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	111	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**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4488215)							
ES2226356-001	BD1/20220718	EG005T: Arsenic	7440-38-2	50 mg/kg	97.3	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	102	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	100	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	99.6	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	101	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	99.7	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	98.2	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4488217)							
ES2226356-001	BD1/20220718	EG035T: Mercury	7439-97-6	5 mg/kg	95.0	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4486078)							
ES2226349-003	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	86.4	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	# 17.3	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4486079)							
ES2226349-003	Anonymous	EP071: C10 - C14 Fraction	----	480 mg/kg	107	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	104	53.0	131

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4486079) - continued							
ES2226349-003	Anonymous	EP071: C29 - C36 Fraction	----	2060 mg/kg	106	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4487524)							
ES2226296-021	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	87.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4486079)							
ES2226349-003	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	93.7	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	105	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	108	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4487524)							
ES2226296-021	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	86.8	70.0	130
EP080: BTEXN (QCLot: 4487524)							
ES2226296-021	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	88.6	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	84.7	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	85.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	82.6	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	87.7	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	87.0	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2226356**	Page	: 1 of 6
Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Telephone	: +61-2-8784 8555
Project	: 211619.02	Date Samples Received	: 26-Jul-2022
Site	: ----	Issue Date	: 03-Aug-2022
Sampler	: PJ	No. of samples received	: 7
Order number	: ----	No. of samples analysed	: 7

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2226349--003	Anonymous	**Pyrene**	129-00-0	17.3 %	70.0-130%	**Recovery less than lower data quality objective**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) BD1/20220718	**18-Jul-2022**	**----**	----	----	**29-Jul-2022**	01-Aug-2022	✓
Soil Glass Jar - Unpreserved (EA055) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**----**	----	----	**29-Jul-2022**	02-Aug-2022	✓
Soil Glass Jar - Unpreserved (EA055) BD2/20220720	**20-Jul-2022**	**----**	----	----	**29-Jul-2022**	03-Aug-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	14-Jan-2023	✓	**02-Aug-2022**	14-Jan-2023	✓
Soil Glass Jar - Unpreserved (EG005T) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	15-Jan-2023	✓	**02-Aug-2022**	15-Jan-2023	✓
Soil Glass Jar - Unpreserved (EG005T) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	16-Jan-2023	✓	**02-Aug-2022**	16-Jan-2023	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	15-Aug-2022	✓	**02-Aug-2022**	15-Aug-2022	✓
Soil Glass Jar - Unpreserved (EG035T) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	16-Aug-2022	✓	**02-Aug-2022**	16-Aug-2022	✓
Soil Glass Jar - Unpreserved (EG035T) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	17-Aug-2022	✓	**02-Aug-2022**	17-Aug-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM)) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	01-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	02-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	03-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	01-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	01-Aug-2022	✓	**29-Jul-2022**	01-Aug-2022	✓
Soil Glass Jar - Unpreserved (EP071) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	02-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	02-Aug-2022	✓	**29-Jul-2022**	02-Aug-2022	✓
Soil Glass Jar - Unpreserved (EP071) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	03-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	03-Aug-2022	✓	**29-Jul-2022**	03-Aug-2022	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	01-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	01-Aug-2022	✓	**29-Jul-2022**	01-Aug-2022	✓
Soil Glass Jar - Unpreserved (EP071) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	02-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	02-Aug-2022	✓	**29-Jul-2022**	02-Aug-2022	✓
Soil Glass Jar - Unpreserved (EP071) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	03-Aug-2022	✓	**01-Aug-2022**	07-Sep-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	03-Aug-2022	✓	**29-Jul-2022**	03-Aug-2022	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080) BD1/20220718	**18-Jul-2022**	**29-Jul-2022**	01-Aug-2022	✓	**29-Jul-2022**	01-Aug-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD1/20220719, BD3/20220719, BD5/20220719, BD6/20220719, BD7/20220719	**19-Jul-2022**	**29-Jul-2022**	02-Aug-2022	✓	**29-Jul-2022**	02-Aug-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD2/20220720	**20-Jul-2022**	**29-Jul-2022**	03-Aug-2022	✓	**29-Jul-2022**	03-Aug-2022	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
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.

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2226356**

Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Contact	: Cez Bautista
Address	: FERRERS RD	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: david.holden@douglaspartners.com.au	E-mail	: cez.bautista@alsglobal.com
Telephone	: +61 02 9809 0666	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 9809 4095	Facsimile	: +61-2-8784 8500
Project	: 211619.02	Page	: 1 of 3
Order number	: ----	Quote number	: EM2017DOUPAR0002 (EN/222)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: PJ		

Dates

Date Samples Received	: 26-Jul-2022 17:00	Issue Date	: 28-Jul-2022
Client Requested Due Date	: 03-Aug-2022	Scheduled Reporting Date	: **03-Aug-2022**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 18.7' C - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 7 / 7

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 laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **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	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - S-26 8 metals/TRH/BTEXN/PAH
ES2226356-001	18-Jul-2022 00:00	BD1/20220718	✓	✓
ES2226356-002	19-Jul-2022 00:00	BD1/20220719	✓	✓
ES2226356-003	19-Jul-2022 00:00	BD3/20220719	✓	✓
ES2226356-004	19-Jul-2022 00:00	BD5/20220719	✓	✓
ES2226356-005	19-Jul-2022 00:00	BD6/20220719	✓	✓
ES2226356-006	19-Jul-2022 00:00	BD7/20220719	✓	✓
ES2226356-007	20-Jul-2022 00:00	BD2/20220720	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE INVOICES

- A4 - AU Tax Invoice (INV)	Email	apinvoices@douglaspartners.com.au

DAVID HOLDEN

- *AU Certificate of Analysis - NATA (COA)	Email	david.holden@douglaspartners.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	david.holden@douglaspartners.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	david.holden@douglaspartners.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	david.holden@douglaspartners.com.au
- Chain of Custody (CoC) (COC)	Email	david.holden@douglaspartners.com.au
- EDI Format - ESDAT (ESDAT)	Email	david.holden@douglaspartners.com.au
- EDI Format - XTab (XTAB)	Email	david.holden@douglaspartners.com.au

JACK HINCHLIFFE

- *AU Certificate of Analysis - NATA (COA)	Email	Jack.Hinchliffe@douglaspartners.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Jack.Hinchliffe@douglaspartners.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Jack.Hinchliffe@douglaspartners.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Jack.Hinchliffe@douglaspartners.com.au
- Chain of Custody (CoC) (COC)	Email	Jack.Hinchliffe@douglaspartners.com.au
- EDI Format - ESDAT (ESDAT)	Email	Jack.Hinchliffe@douglaspartners.com.au
- EDI Format - XTab (XTAB)	Email	Jack.Hinchliffe@douglaspartners.com.au

SO1228

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No: 211619.02	**Suburb:** Kemps Creek, NSW		**To:** EnviroLab
Project Manager: DIH	**Order Number:**	**Sampler:** PJ	12 Ashley Street Chatswood NSW 2067
Email: David.Holden@douglaspartners.com.au; Jack.Hichliffe@douglaspartners.com.au			**Attn:** Aileen Hie
Turnaround time: ☑ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day			**Contact:** 99106200
Prior Storage: ☑ Fridge ☐ Freezer ☐ Shelf	**Do samples contain 'potential' HBM?** ☐ No ☐ Yes (If YES, then handle, transport and store in accordance with FPM HAZID)		

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil M- material	Container Type: G - glass P - plastic	Analytes: Combo 3	Notes/ Preservation/ Additional Requirements
1	BD1/20220718			18.07.22	S	G	x	Combo 3 = metals, TRH, BTEX, PAH
2	BD1/20220719			19.07.22	S	G	x	
3	BD3/20220719			19.07.22	S	G	x	
4	BD5/20220719			19.07.22	S	G	x	
5	BD6/20220719			19.07.22	S	G	x	
6	BD7/20220719			19.07.22	S	G	x	
7	BD2/20220720			20.07.22	S	G	x	

Environmental Division
Sydney
Work Order Reference
ES2226356
Telephone : +61-2-8784 8555

Metals to analyse: Std			**LAB RECEIPT**
Number of samples in container: 7	**Transported to laboratory by:** DP		**Lab Ref. No:**
Send results to: Douglas Partners Pty Ltd			**Received by:**
Address: EL S SYD	**Phone:**		**Date & Time:**
Relinquished by: PJ 22/7/22 AP	**Date:** 25/7/22	**Signed:**	**Signed:**

1300

Rec: L Chu 26/07/22 17:00

Appendix J2

DP (2021)

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 277541

Client Details

Client	Douglas Partners Pty Ltd
Attention	Jack Hinchliffe, David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**207450.01, Kemps Creek**
Number of Samples	70 Soil
Date samples received	08/09/2021
Date completed instructions received	08/09/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	15/09/2021
Date of Issue	15/09/2021

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Asbestos Approved By
Analysed by Asbestos Approved Analyst: Ridwan Wijaya, Nyovan Moonean
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Diego Bigolin, Inorganics Supervisor
Dragana Tomas, Senior Chemist
Hannah Nguyen, Metals Supervisor
Jenny He, Chemist
Josh Williams, LC Supervisor
Lucy Zhu, Asbestos Supervisor
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		277541-4	277541-10	277541-16	277541-17	277541-21
Your Reference	UNITS	TP2	TP4	TP6	TP6	TP8
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	109	114	114	114	111

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		277541-22	277541-24	277541-25	277541-26	277541-29
Your Reference	UNITS	TP8	TP9	TP10	TP10	TP12
Depth		0.5-0.6	0.5-0.6	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	111	114	115	117	114

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		277541-30	277541-33	277541-34	277541-41	277541-42
Your Reference	UNITS	TP12	BH14	BH14	TP18	TP18
Depth		0.5-0.6	0.1-0.2	0.4-0.5	0.1-0.2	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	122	115	108	116	110

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		277541-43	277541-44	277541-45	277541-46	277541-50
Your Reference	UNITS	TP19	TP19	TP20	TP20	BD2
Depth		0.1-0.2	0.5-0.6	0.1-0.2	0.5-0.6	-
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	112	109	106	112	117

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		277541-53	277541-54	277541-56	277541-65	277541-66
Your Reference	UNITS	BD5	SS1	SS3	TS1	TB1
Depth		-	-	-	-	-
Date Sampled		7/09/2021	6/09/2021	6/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	[NA]	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	[NA]	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	[NA]	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	100%	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	99%	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	99%	<1
m+p-xylene	mg/kg	<2	<2	<2	99%	<2
o-Xylene	mg/kg	<1	<1	<1	99%	<1
naphthalene	mg/kg	<1	<1	<1	[NA]	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	[NA]	<3
Surrogate aaa-Trifluorotoluene	%	112	112	115	103	117

svTRH (C10-C40) in Soil						
Our Reference		277541-4	277541-10	277541-16	277541-17	277541-21
Your Reference	UNITS	TP2	TP4	TP6	TP6	TP8
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021	11/09/2021	11/09/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	84	91	85	83	83

svTRH (C10-C40) in Soil						
Our Reference		277541-22	277541-24	277541-25	277541-26	277541-29
Your Reference	UNITS	TP8	TP9	TP10	TP10	TP12
Depth		0.5-0.6	0.5-0.6	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021	11/09/2021	11/09/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	86	83	84	84	88

svTRH (C10-C40) in Soil						
Our Reference		277541-30	277541-33	277541-34	277541-41	277541-42
Your Reference	UNITS	TP12	BH14	BH14	TP18	TP18
Depth		0.5-0.6	0.1-0.2	0.4-0.5	0.1-0.2	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021	11/09/2021	11/09/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	82	86	82	88	82

svTRH (C10-C40) in Soil						
Our Reference		277541-43	277541-44	277541-45	277541-46	277541-50
Your Reference	UNITS	TP19	TP19	TP20	TP20	BD2
Depth		0.1-0.2	0.5-0.6	0.1-0.2	0.5-0.6	-
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	12/09/2021	12/09/2021	12/09/2021	12/09/2021	12/09/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	82	92	83	85	83

svTRH (C10-C40) in Soil				
Our Reference		277541-53	277541-54	277541-56
Your Reference	UNITS	BD5	SS1	SS3
Depth		-	-	-
Date Sampled		7/09/2021	6/09/2021	6/09/2021
Type of sample		Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	12/09/2021	12/09/2021	12/09/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	84	79	82

PAHs in Soil						
Our Reference		277541-4	277541-10	277541-16	277541-17	277541-21
Your Reference	UNITS	TP2	TP4	TP6	TP6	TP8
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	90	85	84	83	98

PAHs in Soil						
Our Reference		277541-22	277541-24	277541-25	277541-26	277541-29
Your Reference	UNITS	TP8	TP9	TP10	TP10	TP12
Depth		0.5-0.6	0.5-0.6	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	87	85	84	85	91

PAHs in Soil						
Our Reference		277541-30	277541-33	277541-34	277541-41	277541-42
Your Reference	UNITS	TP12	BH14	BH14	TP18	TP18
Depth		0.5-0.6	0.1-0.2	0.4-0.5	0.1-0.2	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	83	91	89	88	76

PAHs in Soil						
Our Reference		277541-43	277541-44	277541-45	277541-46	277541-50
Your Reference	UNITS	TP19	TP19	TP20	TP20	BD2
Depth		0.1-0.2	0.5-0.6	0.1-0.2	0.5-0.6	-
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	76	72	76	75	76

PAHs in Soil				
Our Reference		277541-53	277541-54	277541-56
Your Reference	UNITS	BD5	SS1	SS3
Depth		-	-	-
Date Sampled		7/09/2021	6/09/2021	6/09/2021
Type of sample		Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	83	74	78

Organochlorine Pesticides in soil						
Our Reference		277541-4	277541-10	277541-16	277541-22	277541-24
Your Reference	UNITS	TP2	TP4	TP6	TP8	TP9
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	108	101	106	110	103

Organochlorine Pesticides in soil						
Our Reference		277541-25	277541-29	277541-33	277541-41	277541-43
Your Reference	UNITS	TP10	TP12	BH14	TP18	TP19
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	109	108	97	95

Organochlorine Pesticides in soil		
Our Reference		277541-45
Your Reference	UNITS	TP20
Depth		0.1-0.2
Date Sampled		7/09/2021
Type of sample		Soil
Date extracted	-	10/09/2021
Date analysed	-	13/09/2021
alpha-BHC	mg/kg	<0.1
HCB	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	95

Organophosphorus Pesticides in Soil						
Our Reference		277541-4	277541-10	277541-16	277541-22	277541-24
Your Reference	UNITS	TP2	TP4	TP6	TP8	TP9
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	108	101	106	110	103

Organophosphorus Pesticides in Soil						
Our Reference		277541-25	277541-29	277541-33	277541-41	277541-43
Your Reference	UNITS	TP10	TP12	BH14	TP18	TP19
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	109	108	97	95

Organophosphorus Pesticides in Soil		
Our Reference		277541-45
Your Reference	UNITS	TP20
Depth		0.1-0.2
Date Sampled		7/09/2021
Type of sample		Soil
Date extracted	-	10/09/2021
Date analysed	-	13/09/2021
Dichlorvos	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Parathion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Ethion	mg/kg	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1
Surrogate TCMX	%	95

PCBs in Soil						
Our Reference		277541-4	277541-10	277541-16	277541-22	277541-24
Your Reference	UNITS	TP2	TP4	TP6	TP8	TP9
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	108	101	106	110	103

PCBs in Soil						
Our Reference		277541-25	277541-29	277541-33	277541-41	277541-43
Your Reference	UNITS	TP10	TP12	BH14	TP18	TP19
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021	13/09/2021	13/09/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	109	108	97	95

PCBs in Soil		
Our Reference		277541-45
Your Reference	UNITS	TP20
Depth		0.1-0.2
Date Sampled		7/09/2021
Type of sample		Soil
Date extracted	-	10/09/2021
Date analysed	-	13/09/2021
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate TCMX	%	95

Acid Extractable metals in soil						
Our Reference		277541-4	277541-10	277541-16	277541-17	277541-21
Your Reference	UNITS	TP2	TP4	TP6	TP6	TP8
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Arsenic	mg/kg	11	10	7	5	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	22	19	13	10	17
Copper	mg/kg	14	12	16	18	30
Lead	mg/kg	25	21	15	9	17
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	8	7	4	19
Zinc	mg/kg	27	30	28	20	52

Acid Extractable metals in soil						
Our Reference		277541-22	277541-24	277541-25	277541-26	277541-29
Your Reference	UNITS	TP8	TP9	TP10	TP10	TP12
Depth		0.5-0.6	0.5-0.6	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Arsenic	mg/kg	5	11	5	8	7
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	19	18	17	19	13
Copper	mg/kg	26	22	33	33	15
Lead	mg/kg	16	16	14	18	15
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	19	16	13	20	9
Zinc	mg/kg	49	40	32	53	27

Acid Extractable metals in soil						
Our Reference		277541-30	277541-33	277541-34	277541-41	277541-42
Your Reference	UNITS	TP12	BH14	BH14	TP18	TP18
Depth		0.5-0.6	0.1-0.2	0.4-0.5	0.1-0.2	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Arsenic	mg/kg	6	10	10	9	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	14	19	18	20	19
Copper	mg/kg	38	24	23	13	21
Lead	mg/kg	16	19	13	25	12
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	17	6	5	6	7
Zinc	mg/kg	51	24	21	23	20

Acid Extractable metals in soil						
Our Reference		277541-43	277541-44	277541-45	277541-46	277541-50
Your Reference	UNITS	TP19	TP19	TP20	TP20	BD2
Depth		0.1-0.2	0.5-0.6	0.1-0.2	0.5-0.6	-
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Arsenic	mg/kg	10	9	9	7	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	19	18	20	19	13
Copper	mg/kg	19	23	16	24	34
Lead	mg/kg	20	15	15	14	15
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	6	5	8	6	15
Zinc	mg/kg	22	21	15	17	45

Acid Extractable metals in soil				
Our Reference		277541-53	277541-54	277541-56
Your Reference	UNITS	BD5	SS1	SS3
Depth		-	-	-
Date Sampled		7/09/2021	6/09/2021	6/09/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021
Arsenic	mg/kg	9	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	15	14	14
Copper	mg/kg	17	8	8
Lead	mg/kg	11	12	11
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	4	16	13
Zinc	mg/kg	16	43	33

Misc Soil - Inorg						
Our Reference		277541-4	277541-10	277541-16	277541-22	277541-24
Your Reference	UNITS	TP2	TP4	TP6	TP8	TP9
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		277541-25	277541-29	277541-33	277541-41	277541-43
Your Reference	UNITS	TP10	TP12	BH14	TP18	TP19
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg		
Our Reference		277541-45
Your Reference	UNITS	TP20
Depth		0.1-0.2
Date Sampled		7/09/2021
Type of sample		Soil
Date prepared	-	10/09/2021
Date analysed	-	10/09/2021
Total Phenolics (as Phenol)	mg/kg	<5

Moisture						
Our Reference		277541-4	277541-10	277541-16	277541-17	277541-21
Your Reference	UNITS	TP2	TP4	TP6	TP6	TP8
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021	11/09/2021	11/09/2021
Moisture	%	23	17	19	11	18

Moisture						
Our Reference		277541-22	277541-24	277541-25	277541-26	277541-29
Your Reference	UNITS	TP8	TP9	TP10	TP10	TP12
Depth		0.5-0.6	0.5-0.6	0.1-0.2	0.5-0.6	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021	11/09/2021	11/09/2021
Moisture	%	23	15	17	25	18

Moisture						
Our Reference		277541-30	277541-33	277541-34	277541-41	277541-42
Your Reference	UNITS	TP12	BH14	BH14	TP18	TP18
Depth		0.5-0.6	0.1-0.2	0.4-0.5	0.1-0.2	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021	11/09/2021	11/09/2021
Moisture	%	20	12	23	14	19

Moisture						
Our Reference		277541-43	277541-44	277541-45	277541-46	277541-50
Your Reference	UNITS	TP19	TP19	TP20	TP20	BD2
Depth		0.1-0.2	0.5-0.6	0.1-0.2	0.5-0.6	-
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021	11/09/2021	11/09/2021
Moisture	%	17	22	24	23	19

Moisture				
Our Reference		277541-53	277541-54	277541-56
Your Reference	UNITS	BD5	SS1	SS3
Depth		-	-	-
Date Sampled		7/09/2021	6/09/2021	6/09/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	10/09/2021	10/09/2021	10/09/2021
Date analysed	-	11/09/2021	11/09/2021	11/09/2021
Moisture	%	24	16	8.1

Asbestos ID - soils						
Our Reference		277541-4	277541-10	277541-16	277541-22	277541-24
Your Reference	UNITS	TP2	TP4	TP6	TP8	TP9
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.5-0.6	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	15/09/2021	15/09/2021	15/09/2021	15/09/2021	15/09/2021
Sample mass tested	g	Approx. 40g	Approx. 35g	Approx. 45g	Approx. 45g	Approx. 30g
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO	NO	NO	NO	NO
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils NEPM						
Our Reference		277541-25	277541-29	277541-33	277541-41	277541-43
Your Reference	UNITS	TP10	TP12	BH14	TP18	TP19
Depth		0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Date Sampled		7/09/2021	7/09/2021	7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021
Sample mass tested	g	483.2	625.41	542.77	661.76	584.23
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		277541-45	277541-54	277541-55	277541-56	277541-61
Your Reference	UNITS	TP20	SS1	SS2	SS3	SS8
Depth		0.1-0.2	-	-	-	-
Date Sampled		7/09/2021	6/09/2021	6/09/2021	6/09/2021	6/09/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021
Sample mass tested	g	629.19	626.65	744.47	744.23	593.87
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Misc Inorg - Soil				
Our Reference		277541-26	277541-34	277541-44
Your Reference	UNITS	TP10	BH14	TP19
Depth		0.5-0.6	0.4-0.5	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	13/09/2021	13/09/2021	13/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021
pH 1:5 soil:water	pH Units	8.0	5.6	5.6

CEC				
Our Reference		277541-26	277541-34	277541-44
Your Reference	UNITS	TP10	BH14	TP19
Depth		0.5-0.6	0.4-0.5	0.5-0.6
Date Sampled		7/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	13/09/2021	13/09/2021	13/09/2021
Date analysed	-	13/09/2021	13/09/2021	13/09/2021
Exchangeable Ca	meq/100g	15	1.5	1.4
Exchangeable K	meq/100g	0.2	0.2	0.1
Exchangeable Mg	meq/100g	18	11	11
Exchangeable Na	meq/100g	1.9	1.7	1.7
Cation Exchange Capacity	meq/100g	35	14	14

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-AES analytical finish.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	277541-10
Date extracted	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
TRH C_6 - C_9	mg/kg	25	Org-023	<25	4	<25	<25	0	118	116
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	4	<25	<25	0	118	116
Benzene	mg/kg	0.2	Org-023	<0.2	4	<0.2	<0.2	0	122	120
Toluene	mg/kg	0.5	Org-023	<0.5	4	<0.5	<0.5	0	122	120
Ethylbenzene	mg/kg	1	Org-023	<1	4	<1	<1	0	115	113
m+p-xylene	mg/kg	2	Org-023	<2	4	<2	<2	0	115	113
o-Xylene	mg/kg	1	Org-023	<1	4	<1	<1	0	124	120
naphthalene	mg/kg	1	Org-023	<1	4	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	121	4	109	109	0	121	116

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	[NT]
Date extracted	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Date analysed	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	41	<25	<25	0	115	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	41	<25	<25	0	115	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	41	<0.2	<0.2	0	118	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	41	<0.5	<0.5	0	117	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	41	<1	<1	0	113	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	41	<2	<2	0	114	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	41	<1	<1	0	122	[NT]
naphthalene	mg/kg	1	Org-023	[NT]	41	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	41	116	110	5	115	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	277541-10
Date extracted	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			11/09/2021	4	11/09/2021	11/09/2021		11/09/2021	11/09/2021
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	4	<50	<50	0	107	109
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	4	<100	<100	0	84	88
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	4	<100	<100	0	96	88
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	4	<50	<50	0	107	109
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	4	<100	<100	0	84	88
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	4	<100	<100	0	96	88
Surrogate o-Terphenyl	%		Org-020	84	4	84	85	1	101	105

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	[NT]
Date extracted	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Date analysed	-			[NT]	41	11/09/2021	11/09/2021		11/09/2021	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	41	<50	<50	0	105	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	41	<100	<100	0	79	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	41	<100	<100	0	89	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	41	<50	<50	0	105	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	41	<100	<100	0	79	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	41	<100	<100	0	89	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	41	88	82	7	103	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	277541-10
Date extracted	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			13/09/2021	4	13/09/2021	13/09/2021		13/09/2021	13/09/2021
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	95	97
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	87	91
Fluorene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	95	101
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	96	100
Anthracene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	98	106
Pyrene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	99	107
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	77	81
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	4	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	4	<0.05	<0.05	0	104	98
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	72	4	90	90	0	95	102

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	[NT]
Date extracted	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Date analysed	-			[NT]	41	13/09/2021	13/09/2021		13/09/2021	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	93	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	95	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	97	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	100	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	90	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	91	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	77	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	41	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	41	<0.05	<0.05	0	96	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	41	88	87	1	89	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	277541-10
Date extracted	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			13/09/2021	4	13/09/2021	13/09/2021		13/09/2021	13/09/2021
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	86	90
HCB	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	92	92
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	87	95
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	89	99
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	96	100
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	84	94
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	86	97
Endrin	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	76	106
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	84	92
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	82	86
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	99	4	108	106	2	117	121

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	[NT]
Date extracted	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Date analysed	-			[NT]	41	13/09/2021	13/09/2021		13/09/2021	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	92	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	89	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	79	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	89	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	72	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	84	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	94	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	92	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	84	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	78	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	41	97	103	6	121	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	277541-10
Date extracted	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			13/09/2021	4	13/09/2021	13/09/2021		13/09/2021	13/09/2021
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	66	66
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	95	104
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	75	85
Malathion	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	77	105
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	100	108
Parathion	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	76	78
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	70	76
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	99	4	108	106	2	117	121

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	[NT]
Date extracted	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Date analysed	-			[NT]	41	13/09/2021	13/09/2021		13/09/2021	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	69	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	95	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	73	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	89	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	90	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	66	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	78	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	41	97	103	6	121	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	277541-10
Date extracted	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			13/09/2021	4	13/09/2021	13/09/2021		13/09/2021	13/09/2021
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	4	<0.1	<0.1	0	100	100
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	4	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	99	4	108	106	2	117	121

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	[NT]
Date extracted	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Date analysed	-			[NT]	41	13/09/2021	13/09/2021		13/09/2021	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	41	<0.1	<0.1	0	80	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	41	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	41	97	103	6	121	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-8	277541-10
Date prepared	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Arsenic	mg/kg	4	Metals-020	<4	4	11	12	9	102	83
Cadmium	mg/kg	0.4	Metals-020	<0.4	4	<0.4	<0.4	0	99	73
Chromium	mg/kg	1	Metals-020	<1	4	22	23	4	102	79
Copper	mg/kg	1	Metals-020	<1	4	14	18	25	103	102
Lead	mg/kg	1	Metals-020	<1	4	25	28	11	100	79
Mercury	mg/kg	0.1	Metals-021	<0.1	4	<0.1	<0.1	0	101	94
Nickel	mg/kg	1	Metals-020	<1	4	9	10	11	102	78
Zinc	mg/kg	1	Metals-020	<1	4	27	34	23	100	#

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	[NT]
Date prepared	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Date analysed	-			[NT]	41	10/09/2021	10/09/2021		10/09/2021	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	41	9	8	12	99	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	41	<0.4	<0.4	0	96	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	41	20	19	5	96	[NT]
Copper	mg/kg	1	Metals-020	[NT]	41	13	11	17	100	[NT]
Lead	mg/kg	1	Metals-020	[NT]	41	25	23	8	94	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	41	<0.1	<0.1	0	97	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	41	6	5	18	98	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	41	23	17	30	97	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	277541-10
Date prepared	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Date analysed	-			10/09/2021	4	10/09/2021	10/09/2021		10/09/2021	10/09/2021
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	4	<5	<5	0	102	105

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	41	10/09/2021	10/09/2021		[NT]	[NT]
Date analysed	-			[NT]	41	10/09/2021	10/09/2021		[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	41	<5	<5	0	[NT]	[NT]

QUALITY CONTROL: Misc Inorg - Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			13/09/2021	[NT]	[NT]	[NT]	[NT]	13/09/2021	[NT]
Date analysed	-			13/09/2021	[NT]	[NT]	[NT]	[NT]	13/09/2021	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]

QUALITY CONTROL: CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			13/09/2021	[NT]	[NT]	[NT]	[NT]	13/09/2021	[NT]
Date analysed	-			13/09/2021	[NT]	[NT]	[NT]	[NT]	13/09/2021	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

8 metals in soil - # Percent recovery is not possible to report due to the inhomogeneous nature of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Asbestos: Excessive sample volumes were provided for asbestos analysis.
A portion of the supplied samples were sub-sampled according to Envirolab procedures.
We cannot guarantee that these sub-samples are indicative of the entire sample.
Envirolab recommends supplying 40-50g (50mL) of sample in its own container as per AS4964-2004.
Note: Samples 277541-4,10,16,22,24 were sub-sampled from bags provided by the client.

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	207450.01	**Suburb:**	Kemps Creek	**To:**	*Envirolab Services*
Project Manager:	David Holden	**Order Number:**		**Sampler:**	JH / NB		*12 Ashley St, Chatswood NSW 2067*
Email:	Jack.Hinchliffe; David.Holden@douglaspartners.com.au					**Attn:**	*Sample Receipt*
Turnaround time:	☑ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day					**Contact:**	*(02) 9910 6200 samplereceipt@envirolab.com.au*
Prior Storage:	☑ Fridge ☐ Freezer ☑ Shelf	**Do samples contain 'potential' HBM?**	☐ No ☐ Yes (If YES, then handle, transport and store in accordance with FPM HAZID)				

Lab ID	Sample ID: Location / Other ID	Depth From	Depth To	Date Sampled	Sample Type: S - soil W - water	Container Type: G - glass P - plastic	Analytes: Combo 8a	Combo 8	Combo 3	NEPM 500ml (AF/FA)	pH and CEC	BTEX	On Hold					Notes/ Preservation/Additional Requirements
1	TP1	0.1	0.2										X					
2	TP1	0.4	0.5										X					
3	TP1	1	1.1										X					
4	TP2	0.1	0.2				X											
5	TP2	0.5	0.6										X					
6	TP2	1	1.1										X					
7	TP3	0.1	0.2										X					
8	TP3	0.5	0.6										X					
9	TP3	1	1.1										X					
10	TP4	0.1	0.2				X											
11	TP4	0.5	0.6										X					
12	TP4	1	1.1										X					
13	TP5	0.1	0.2										X					
14	TP5	0.5	0.6										X					

Chatswood NSW
Ph: (02) 9910
Job No: 207450
Date Received: 08/09/21
Time Received: 1500
Received By: CH
Temp: Cool/Ambient
Cooling: Icepack
Security:

Metals to analyse:			
Number of samples in container:		**Transported to laboratory by:**	JH
Send results to:	Douglas Partners Pty Ltd		
Address:	96 Hermitage Road, West Ryde NSW 2114	**Phone:**	(02) 9809 0666
Relinquished by:	JH	**Date:** 8/9/2021	**Signed:** JH

LAB RECEIPT

Lab Ref. No:	
Received by:	Christine
Date & Time:	08/09/21 1500
Signed:	

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	207450.01	**Suburb:**	Kemps Creek	**To:**	*Envirolab Services*
Project Manager:	David Holden	**Order Number:**		**Dispatch date:**	08/09/2021
					12 Ashley St, Chatswood NSW 2067

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil W - water	G - glass P - plastic	Combo 8a	Combo 8	Combo 3	NEPM 500ml (AF/FA)	pH and CEC	BTEX	On Hold					
15	TP5	1	1.1	7/09/21									X					
16	TP6	0.1	0.2	7/09/21			X	/										
17	TP6	0.5	0.6	7/09/21					X									
18	TP6	1	1.1	7/09/21									X					
19	TP7	0.1	0.2	7/09/21									X					
20	TP7	0.5	0.6	7/09/21									X					
21	TP8	0.1	0.2	7/09/21					X									
22	TP8	0.5	0.6	7/09/21			X											
23	TP9	0.1	0.2	7/09/21									X					
24	TP9	0.5	0.6	7/09/21			X											
25	TP10	0.1	0.2	7/09/21				X		X								
26	TP10	0.5	0.6	7/09/21					X		X		X					
27	TP11	0.1	0.2	7/09/21									X					
28	TP11	0.5	0.6	7/09/21									X					
29	TP12	0.1	0.2	7/09/21				X		X								
30	TP12	0.5	0.6	7/09/21					X		X							
31	TP13	0.1	0.2	7/09/21									X					
32	TP13	0.4	0.5	7/09/21									X					

277541
08/09 CH

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	207450.01	**Suburb:** Kemps Creek	**To:** *Envirolab Services*
Project Manager:	96 Hermitage Road, West Ryde NSW		**Dispatch date:**

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes											Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil W - water	G - glass P - plastic	Combo 8a	Combo 8	Combo 3	NEPM 500ml (AF/FA)	pH and CEC	BTEX	On Hold					
33	BH14	0.1	0.2	7/09/21				X		X								
34	BH14	0.4	0.5	7/09/21					X		X							
35	TP15	0.1	0.2	7/09/21									X					
36	TP15	0.5	0.6	7/09/21									X					
37	TP16	0.1	0.2	7/09/21									X					
38	TP16	0.5	0.6	7/09/21									X					
39	TP17	0.1	0.2	7/09/21									X					
40	TP17	0.5	0.6	7/09/21									X					
41	TP18	0.1	0.2	7/09/21				X		X								
42	TP18	0.5	0.6	7/09/21					X									
43	TP19	0.1	0.2	7/09/21				X		X								
44	TP19	0.5	0.6	7/09/21					X		X							
45	TP20	0.1	0.2	7/09/21				X		X								
46	TP20	0.5	0.6	7/09/21					X		X							
47	BH21	0	0.1	7/09/21									X					
48	BH21	0.3	0.4	7/09/21									X					
49	BD1/20210907			7/09/21									X					
50	BD2/20210907			7/09/21					X									
51	BD3/20210907			7/09/21									X					

#277541
08/09 CH

Douglas Partners
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CHAIN OF CUSTODY DESPATCH SHEET

Project No:	207450.01	**Suburb:** Kemps Creek	**To:** *Envirolab Services*
Project Manager:			**Dispatch date:**

Lab ID	Sample ID: Location / Other ID	Sample ID: Depth From	Sample ID: Depth To	Date Sampled	Sample Type: S - soil W - water	Container Type: G - glass P - plastic	Analytes: Combo 8a	Combo 8	Combo 3	NEPM 500ml (AF/FA)	pH and CEC	BTEX	On Hold					Notes/ Preservation/ Additional Requirements
52	BD4/20210907			7/09/21									X					
53	BD5/20210907			7/09/21					X									
54	SS1			6/09/21						X								
55	SS2			6/09/21						X								
56	SS3			6/09/21						X								
57	SS4			6/09/21									X					
58	SS5			6/09/21									X					
59	SS6			6/09/21									X					
60	SS7			6/09/21									X					
61	SS8			6/09/21						X								
62	SS9			6/09/21									X					
63	SS10			7/09/21									X					
64	SS11			7/09/21									X					
65	TS1											X						
66	TB1											X						
67	TP8	1.0	1.1															
68	06092021/DP1																	
69	06/092021/DP2	QA																
70	SS12																	

#27575-41
08/09 CH

Envirolab Services Pty Ltd
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CERTIFICATE OF ANALYSIS 277541-A

Client Details

Client	Douglas Partners Pty Ltd
Attention	Jack Hinchliffe
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**207450.01, Kemps Creek**
Number of Samples	additional analysis
Date samples received	14/09/2021
Date completed instructions received	14/09/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	21/09/2021
Date of Issue	21/09/2021

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Asbestos Approved By
Analysed by Asbestos Approved Analyst: Nyovan Moonean
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Dragana Tomas, Senior Chemist
Hannah Nguyen, Metals Supervisor
Lucy Zhu, Asbestos Supervisor
Priya Samarawickrama, Senior Chemist
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date extracted	-	15/09/2021	15/09/2021
Date analysed	-	17/09/2021	17/09/2021
TRH C_6 - C_9	mg/kg	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25
Benzene	mg/kg	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1
m+p-xylene	mg/kg	<2	<2
o-Xylene	mg/kg	<1	<1
naphthalene	mg/kg	<1	<1
Total +ve Xylenes	mg/kg	<3	<3
Surrogate aaa-Trifluorotoluene	%	107	92

svTRH (C10-C40) in Soil			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date extracted	-	15/09/2021	15/09/2021
Date analysed	-	17/09/2021	17/09/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50
Surrogate o-Terphenyl	%	84	84

PAHs in Soil			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date extracted	-	15/09/2021	15/09/2021
Date analysed	-	17/09/2021	17/09/2021
Naphthalene	mg/kg	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1
Fluoranthene	mg/kg	0.2	0.2
Pyrene	mg/kg	0.2	0.2
Benzo(a)anthracene	mg/kg	0.2	0.2
Chrysene	mg/kg	0.2	0.2
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.2	0.2
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.2	0.2
Total +ve PAH's	mg/kg	1.3	1.2
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	100	95

Organochlorine Pesticides in soil			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date extracted	-	15/09/2021	15/09/2021
Date analysed	-	17/09/2021	17/09/2021
alpha-BHC	mg/kg	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1
Surrogate TCMX	%	120	119

Organophosphorus Pesticides in Soil			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date extracted	-	15/09/2021	15/09/2021
Date analysed	-	17/09/2021	17/09/2021
Dichlorvos	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	120	119

PCBs in Soil			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date extracted	-	15/09/2021	15/09/2021
Date analysed	-	17/09/2021	17/09/2021
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	120	119

Acid Extractable metals in soil			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date prepared	-	16/09/2021	16/09/2021
Date analysed	-	16/09/2021	16/09/2021
Arsenic	mg/kg	<4	<4
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	10	8
Copper	mg/kg	9	12
Lead	mg/kg	120	180
Mercury	mg/kg	0.1	0.1
Nickel	mg/kg	2	1
Zinc	mg/kg	46	62

Misc Soil - Inorg			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date prepared	-	16/09/2021	16/09/2021
Date analysed	-	16/09/2021	16/09/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5

Moisture			
Our Reference		277541-A-61	277541-A-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date prepared	-	15/09/2021	15/09/2021
Date analysed	-	16/09/2021	16/09/2021
Moisture	%	12	12

Asbestos ID - soils NEPM				
Our Reference		277541-A-62	277541-A-63	277541-A-64
Your Reference	UNITS	SS9	SS10	SS11
Depth		-	-	-
Date Sampled		6/09/2021	7/09/2021	7/09/2021
Type of sample		Soil	Soil	Soil
Date analysed	-	21/09/2021	21/09/2021	21/09/2021
Sample mass tested	g	729.38	929.5	858.91
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Misc Inorg - Soil			
Our Reference		277541-A-29	277541-A-45
Your Reference	UNITS	TP12	TP20
Depth		0.1-0.2	0.1-0.2
Date Sampled		7/09/2021	7/09/2021
Type of sample		Soil	Soil
Date prepared	-	20/09/2021	20/09/2021
Date analysed	-	20/09/2021	20/09/2021
pH 1:5 soil:water	pH Units	6.5	6.7

CEC			
Our Reference		277541-A-29	277541-A-45
Your Reference	UNITS	TP12	TP20
Depth		0.1-0.2	0.1-0.2
Date Sampled		7/09/2021	7/09/2021
Type of sample		Soil	Soil
Date prepared	-	21/09/2021	21/09/2021
Date analysed	-	21/09/2021	21/09/2021
Exchangeable Ca	meq/100g	6.3	2.7
Exchangeable K	meq/100g	0.3	0.2
Exchangeable Mg	meq/100g	3.8	6.7
Exchangeable Na	meq/100g	0.1	0.6
Cation Exchange Capacity	meq/100g	10	10

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-AES analytical finish.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	[NT]
Date extracted	-			15/09/2021	[NT]	[NT]	[NT]	[NT]	15/09/2021	[NT]
Date analysed	-			17/09/2021	[NT]	[NT]	[NT]	[NT]	17/09/2021	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	103	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	103	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	117	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	108	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	96	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	101	[NT]
naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	113	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	[NT]
Date extracted	-			15/09/2021	[NT]	[NT]	[NT]	[NT]	15/09/2021	[NT]
Date analysed	-			17/09/2021	[NT]	[NT]	[NT]	[NT]	17/09/2021	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	92	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	75	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	89	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	92	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	75	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	89	[NT]
Surrogate o-Terphenyl	%		Org-020	88	[NT]	[NT]	[NT]	[NT]	115	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	[NT]
Date extracted	-			15/09/2021	[NT]	[NT]	[NT]	[NT]	15/09/2021	[NT]
Date analysed	-			17/09/2021	[NT]	[NT]	[NT]	[NT]	17/09/2021	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	115	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	102	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	101	[NT]	[NT]	[NT]	[NT]	83	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	[NT]
Date extracted	-			15/09/2021	[NT]	[NT]	[NT]	[NT]	15/09/2021	[NT]
Date analysed	-			17/09/2021	[NT]	[NT]	[NT]	[NT]	17/09/2021	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	82	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	126	[NT]	[NT]	[NT]	[NT]	80	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	[NT]
Date extracted	-			15/09/2021	[NT]	[NT]	[NT]	[NT]	15/09/2021	[NT]
Date analysed	-			17/09/2021	[NT]	[NT]	[NT]	[NT]	17/09/2021	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	83	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	74	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	126	[NT]	[NT]	[NT]	[NT]	80	[NT]

QUALITY CONTROL: PCBs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	[NT]
Date extracted	-			15/09/2021	[NT]	[NT]	[NT]	[NT]	15/09/2021	[NT]
Date analysed	-			17/09/2021	[NT]	[NT]	[NT]	[NT]	17/09/2021	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-021	126	[NT]	[NT]	[NT]	[NT]	80	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-10	[NT]
Date prepared	-			16/09/2021	[NT]	[NT]	[NT]	[NT]	16/09/2021	[NT]
Date analysed	-			16/09/2021	[NT]	[NT]	[NT]	[NT]	16/09/2021	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	92	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	91	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]

QUALITY CONTROL: Misc Soil - Inorg					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			16/09/2021	[NT]	[NT]	[NT]	[NT]	16/09/2021	[NT]
Date analysed	-			16/09/2021	[NT]	[NT]	[NT]	[NT]	16/09/2021	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	[NT]	[NT]	[NT]	[NT]	99	[NT]

QUALITY CONTROL: Misc Inorg - Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			20/09/2021	[NT]	[NT]	[NT]	[NT]	20/09/2021	[NT]
Date analysed	-			20/09/2021	[NT]	[NT]	[NT]	[NT]	20/09/2021	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	[NT]	[NT]	[NT]	[NT]	103	[NT]

QUALITY CONTROL: CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			21/09/2021	[NT]	[NT]	[NT]	[NT]	21/09/2021	[NT]
Date analysed	-			21/09/2021	[NT]	[NT]	[NT]	[NT]	21/09/2021	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

pH
Samples were out of the recommended holding time for this analysis.

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

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SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	Jack Hinchliffe, David Holden

Sample Login Details

Your reference	207450.01, Kemps Creek
Envirolab Reference	277541
Date Sample Received	08/09/2021
Date Instructions Received	08/09/2021
Date Results Expected to be Reported	15/09/2021

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	70 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	4
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

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Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBsin Soil	Acid Extractable metalsin soil	Misc Soil - Inorg	Asbestos ID - soils	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	On Hold
TP1-0.1-0.2													✓
TP1-0.4-0.5													✓
TP1-1-1.1													✓
TP2-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP2-0.5-0.6													✓
TP2-1-1.1													✓
TP3-0.1-0.2													✓
TP3-0.5-0.6													✓
TP3-1-1.1													✓
TP4-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP4-0.5-0.6													✓
TP4-1-1.1													✓
TP5-0.1-0.2													✓
TP5-0.5-0.6													✓
TP5-1-1.1													✓
TP6-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP6-0.5-0.6	✓	✓	✓				✓						
TP6-1-1.1													✓
TP7-0.1-0.2													✓
TP7-0.5-0.6													✓
TP8-0.1-0.2	✓	✓	✓				✓						
TP8-0.5-0.6	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP9-0.1-0.2													✓
TP9-0.5-0.6	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP10-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓			
TP10-0.5-0.6	✓	✓	✓				✓				✓	✓	
TP11-0.1-0.2													✓
TP11-0.5-0.6													✓
TP12-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓			
TP12-0.5-0.6	✓	✓	✓				✓				✓	✓	
TP13-0.1-0.2													✓
TP13-0.4-0.5													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBsin Soil	Acid Extractable metalsin soil	Misc Soil - Inorg	Asbestos ID - soils	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	On Hold
BH14-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓			
BH14-0.4-0.5	✓	✓	✓				✓				✓	✓	
TP15-0.1-0.2													✓
TP15-0.5-0.6													✓
TP16-0.1-0.2													✓
TP16-0.5-0.6													✓
TP17-0.1-0.2													✓
TP17-0.5-0.6													✓
TP18-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓			
TP18-0.5-0.6	✓	✓	✓				✓						
TP19-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓			
TP19-0.5-0.6	✓	✓	✓				✓				✓	✓	
TP20-0.1-0.2	✓	✓	✓	✓	✓	✓	✓	✓		✓			
TP20-0.5-0.6	✓	✓	✓				✓				✓	✓	
BH21-0-0.1													✓
BH21-0.3-0.4													✓
BD1													✓
BD2	✓	✓	✓				✓						
BD3													✓
BD4													✓
BD5	✓	✓	✓				✓						
SS1										✓			
SS2										✓			
SS3										✓			
SS4													✓
SS5													✓
SS6													✓
SS7													✓
SS8										✓			
SS9													✓
SS10													✓
SS11													✓

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBsin Soil	Acid Extractable metalsin soil	Misc Soil - Inorg	Asbestos ID - soils	Asbestos ID - soils NEPM	Misc Inorg - Soil	CEC	On Hold
TS1	✓												
TB1	✓												
TP8-1.0-1.1													✓
06092021/DP1													✓
06092021/DP2													✓
SS12													✓

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

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 277541-B

Client Details

Client	Douglas Partners Pty Ltd
Attention	Jack Hinchliffe
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**207450.01, Kemps Creek**
Number of Samples	additional analysis
Date samples received	14/09/2021
Date completed instructions received	22/09/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

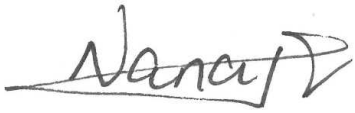
Date results requested by	27/09/2021
Date of Issue	27/09/2021

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Results Approved By
Hannah Nguyen, Metals Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

Metals from Leaching Fluid pH 2.9 or 5			
Our Reference		277541-B-61	277541-B-62
Your Reference	UNITS	SS8	SS9
Depth		-	-
Date Sampled		6/09/2021	6/09/2021
Type of sample		Soil	Soil
Date extracted	-	24/09/2021	24/09/2021
Date analysed	-	24/09/2021	24/09/2021
pH of soil for fluid# determ.	pH units	6.8	7.3
pH of soil TCLP (after HCl)	pH units	1.7	1.7
Extraction fluid used	-	1	1
pH of final Leachate	pH units	5.0	5.0
Lead	mg/L	0.2	0.2

Method ID	Methodology Summary
INORG-004	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using AS 4439 and USEPA 1311. Please note that the mass used may be scaled down from default based on sample mass available. Samples are stored at 2-6oC before and after leachate preparation.
Metals-020	Determination of various metals by ICP-AES following buffer determination as per USEPA 1311 and hence AS 4439.3. Extraction Fluid 1 refers to the pH 5.0 buffer and Extraction Fluid 2 is the pH 2.9 buffer.

QUALITY CONTROL: Metals from Leaching Fluid pH 2.9 or 5					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			24/09/2021	61	24/09/2021	24/09/2021		24/09/2021	[NT]
Date analysed	-			24/09/2021	61	24/09/2021	24/09/2021		24/09/2021	[NT]
Lead	mg/L	0.03	Metals-020	<0.03	61	0.2	0.2	0	85	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

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CERTIFICATE OF ANALYSIS 277862

Client Details

Client	Douglas Partners Pty Ltd
Attention	Ray Blinman
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**207450.00, Kemps Creek**
Number of Samples	11 soil
Date samples received	13/09/2021
Date completed instructions received	13/09/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

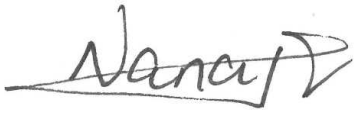
Date results requested by	20/09/2021
Date of Issue	20/09/2021

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Results Approved By
Diego Bigolin, Inorganics Supervisor
Hannah Nguyen, Metals Supervisor
Priya Samarawickrama, Senior Chemist

Authorised By



Nancy Zhang, Laboratory Manager

Soil Aggressivity						
Our Reference		277862-1	277862-2	277862-3	277862-4	277862-5
Your Reference	UNITS	TP1 0.5-0.6m	TP3 0.5-0.6m	TP5 0.5-0.6m	TP8 1-1.1m	TP2 0.5-0.6m
Date Sampled		06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
Type of sample		soil	soil	soil	soil	soil
pH 1:5 soil:water	pH Units	7.9	6.8	5.4	8.4	7.4
Electrical Conductivity 1:5 soil:water	µS/cm	190	51	160	250	[NA]
Chloride, Cl 1:5 soil:water	mg/kg	180	10	130	230	28
Sulphate, SO4 1:5 soil:water	mg/kg	46	20	110	60	20

Soil Aggressivity						
Our Reference		277862-6	277862-7	277862-8	277862-9	277862-10
Your Reference	UNITS	TP2 1.0-1.1m	TP2 1.5-1.6m	TP2 2.0-2.1m	TP7 0.5-0.6m	TP7 1.0-1.1m
Date Sampled		06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
Type of sample		soil	soil	soil	soil	soil
pH 1:5 soil:water	pH Units	7.0	7.1	7.3	7.4	6.3
Chloride, Cl 1:5 soil:water	mg/kg	790	1,300	1,200	23	180
Sulphate, SO4 1:5 soil:water	mg/kg	91	91	66	23	76

Soil Aggressivity		
Our Reference		277862-11
Your Reference	UNITS	TP7 1.4-1.5m
Date Sampled		06/09/2021
Type of sample		soil
pH 1:5 soil:water	pH Units	5.4
Chloride, Cl 1:5 soil:water	mg/kg	580
Sulphate, SO4 1:5 soil:water	mg/kg	20

ESP/CEC						
Our Reference		277862-5	277862-6	277862-7	277862-8	277862-9
Your Reference	UNITS	TP2 0.5-0.6m	TP2 1.0-1.1m	TP2 1.5-1.6m	TP2 2.0-2.1m	TP7 0.5-0.6m
Date Sampled		06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
Type of sample		soil	soil	soil	soil	soil
Date prepared	-	20/09/2021	20/09/2021	20/09/2021	20/09/2021	20/09/2021
Date analysed	-	20/09/2021	20/09/2021	20/09/2021	20/09/2021	20/09/2021
Exchangeable Ca	meq/100g	3.8	1.7	1.1	1.2	7.5
Exchangeable K	meq/100g	0.1	<0.1	0.1	<0.1	0.2
Exchangeable Mg	meq/100g	12	9.2	7.4	7.7	11
Exchangeable Na	meq/100g	2.1	4.3	3.5	3.5	1.1
Cation Exchange Capacity	meq/100g	18	15	12	12	20
ESP	%	12	28	29	28	5

ESP/CEC			
Our Reference		277862-10	277862-11
Your Reference	UNITS	TP7 1.0-1.1m	TP7 1.4-1.5m
Date Sampled		06/09/2021	06/09/2021
Type of sample		soil	soil
Date prepared	-	20/09/2021	20/09/2021
Date analysed	-	20/09/2021	20/09/2021
Exchangeable Ca	meq/100g	5.5	1.6
Exchangeable K	meq/100g	0.2	0.2
Exchangeable Mg	meq/100g	14	9.8
Exchangeable Na	meq/100g	2.7	3.7
Cation Exchange Capacity	meq/100g	22	15
ESP	%	12	24

Texture and Salinity*						
Our Reference		277862-5	277862-6	277862-7	277862-8	277862-9
Your Reference	UNITS	TP2 0.5-0.6m	TP2 1.0-1.1m	TP2 1.5-1.6m	TP2 2.0-2.1m	TP7 0.5-0.6m
Date Sampled		06/09/2021	06/09/2021	06/09/2021	06/09/2021	06/09/2021
Type of sample		soil	soil	soil	soil	soil
Date prepared	-	15/09/2021	15/09/2021	15/09/2021	15/09/2021	15/09/2021
Date analysed	-	15/09/2021	15/09/2021	15/09/2021	15/09/2021	15/09/2021
Electrical Conductivity 1:5 soil:water	µS/cm	60	560	940	850	52
Texture Value	-	7.0	7.0	7.0	7.0	7.0
Texture	-	MEDIUM CLAY	MEDIUM CLAY	MEDIUM CLAY	MEDIUM CLAY	MEDIUM CLAY
ECe	dS/m	<2	3.9	6.6	6.0	<2
Class	-	NON SALINE	SLIGHTLY SALINE	MODERATELY SALINE	MODERATELY SALINE	NON SALINE

Texture and Salinity*			
Our Reference		277862-10	277862-11
Your Reference	UNITS	TP7 1.0-1.1m	TP7 1.4-1.5m
Date Sampled		06/09/2021	06/09/2021
Type of sample		soil	soil
Date prepared	-	15/09/2021	15/09/2021
Date analysed	-	15/09/2021	15/09/2021
Electrical Conductivity 1:5 soil:water	µS/cm	180	410
Texture Value	-	7.0	6.0
Texture	-	MEDIUM CLAY	HEAVY CLAY
ECe	dS/m	<2	2.4
Class	-	NON SALINE	SLIGHTLY SALINE

Method ID	Methodology Summary
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-002	Conductivity and Salinity - measured using a conductivity cell at 25°C in accordance with APHA latest edition 2510 and Rayment & Lyons.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B. Waters samples are filtered on receipt prior to analysis. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
INORG-123	Determined using a "Texture by Feel" method.
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-AES analytical finish.

QUALITY CONTROL: Soil Aggressivity						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	277862-2
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	1	7.9	7.9	0	101	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	<1	1	190	180	5	97	[NT]
Chloride, Cl 1:5 soil:water	mg/kg	10	Inorg-081	<10	1	180	170	6	100	97
Sulphate, SO4 1:5 soil:water	mg/kg	10	Inorg-081	<10	1	46	44	4	100	98

QUALITY CONTROL: Soil Aggressivity						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	11	5.4	5.3	2	[NT]	[NT]
Chloride, Cl 1:5 soil:water	mg/kg	10	Inorg-081	[NT]	11	580	630	8	[NT]	[NT]
Sulphate, SO4 1:5 soil:water	mg/kg	10	Inorg-081	[NT]	11	20	20	0	[NT]	[NT]

QUALITY CONTROL: ESP/CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	277862-6
Date prepared	-			20/09/2021	5	20/09/2021	20/09/2021		20/09/2021	20/09/2021
Date analysed	-			20/09/2021	5	20/09/2021	20/09/2021		20/09/2021	20/09/2021
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	5	3.8	3.5	8	87	82
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	5	0.1	0.1	0	90	83
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	5	12	11	9	87	#
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	5	2.1	1.7	21	101	#
ESP	%	1	Metals-020	[NT]	5	12	11	9	[NT]	[NT]

QUALITY CONTROL: Texture and Salinity*						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			16/09/2021	11	15/09/2021	15/09/2021		16/09/2021	[NT]
Date analysed	-			16/09/2021	11	15/09/2021	15/09/2021		16/09/2021	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	<1	11	410	450	9	97	[NT]
Texture Value	-		INORG-123	[NT]	11	6.0	6.0	0	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

pH/EC Samples were out of the recommended holding time for this analysis.

ESP/CEC - # Low spike recovery was obtained for this sample. The sample was re-digested and re-spiked and the low recovery was confirmed. This is suspected to be from matrix interferences. However, an acceptable recovery was obtained for the LCS.

Douglas Partners
Geotechnics / Environment / Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	207450.00	**Suburb:**	Kemps Creek	**To:**	Envirolab
Project Name:	Proposed Industrial Development	**Order Number**			
Project Manager:	Ray Blinman	**Sampler:**	NB	**Attn:**	Simon Song
Emails:	Ray.Blinman@douglaspartners.com.au			**Phone:**	
Date Required:	Same day ☐ 24 hours ☐ 48 hours ☐ 72 hours ☐ Standard X			**Email:**	SSong@envirolab.com.au
Prior Storage:	☐ Esky ☐ Fridge ☐X	Do samples contain 'potential' HBM?	Yes ☐ No ☐	(If YES, then handle, transport and store in accordance with FPM HA	

Sample ID	Lab ID	Date Sampled	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Aggresivity CL, SO4, pH, EC	Exchangeable Sodium % ESP/CEC	Textural Class							Notes/preservatio
TP1 0.5-0.6m	1	6.9.21	s	p	x									1:5 Soil:Water Ratio
TP3 0.5-0.6m	2	6.9.21	s	p	x									1:5 Soil:Water Ratio
TP5 0.5-0.6m	3	6.9.21	s	p	x									1:5 Soil:Water Ratio
TP8 1-1.1m	4	6.9.21	s	p	x									1:5 Soil:Water Ratio
TP2 0.5-0.6m	5	6.9.21	s	p	x	x	x							Includes CEC
TP2 1.0-1.1m	6	6.9.21	s	p	x	x	x							Includes CEC
TP2 1.5-1.6m	7	6.9.21	s	p	x	x	x							Includes CEC
TP2 2.0-2.1m	8	6.9.21	s	p	x	x	x							Includes CEC
TP7 0.5-0.6m	9	6.9.21	s	p	x	x	x							Includes CEC
TP7 1.0-1.1m	10	6.9.21	s	p	x	x	x							Includes CEC
TP7 1.4-1.5m	11	6.9.21	s	p	x	x	x							Includes CEC
PQL (S) mg/kg														**ANZECC PQLs req'd for all water analyt**

ENVIROLAB
12 Ashley
Chatswood NSW 2
Ph: (02) 9910 6
Job No: 277862
Date Received: 13/08/21
Time Received: 1145
Received By: CH
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/F

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container:	**Relinquished by:**	**Transported to laboratory by:**	
Send Results to: Douglas Partners Pty Ltd	**Address:**	**Phone:**	**Fax:**
Signed:	**Received by:** Christina	**Date & Time:** 13/08/21 1145	

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	Ray Blinman

Sample Login Details

Your reference	207450.00, Kemps Creek
Envirolab Reference	277862
Date Sample Received	13/09/2021
Date Instructions Received	13/09/2021
Date Results Expected to be Reported	20/09/2021

Sample Condition

Samples received in appropriate condition for analysis	
No. of Samples Provided	11 soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	18
Cooling Method	None
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	Soil Aggressivity	ESP/CEC	Texture and Salinity*
TP1 0.5-0.6m	✓		
TP3 0.5-0.6m	✓		
TP5 0.5-0.6m	✓		
TP8 1-1.1m	✓		
TP2 0.5-0.6m	✓	✓	✓
TP2 1.0-1.1m	✓	✓	✓
TP2 1.5-1.6m	✓	✓	✓
TP2 2.0-2.1m	✓	✓	✓
TP7 0.5-0.6m	✓	✓	✓
TP7 1.0-1.1m	✓	✓	✓
TP7 1.4-1.5m	✓	✓	✓

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

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

Appendix J3

DP (2022)

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 285493

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.01, Kemps Creek**
Number of Samples	56 Soil
Date samples received	15/12/2021
Date completed instructions received	15/12/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	20/12/2021
Date of Issue	21/12/2021
Reissue Details	This report replaces R00 created on 20/12/2021 due to: revised report with additional results.

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Asbestos Approved By
Analysed by Asbestos Approved Analyst: Panika Wongchanda
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Diego Bigolin, Inorganics Supervisor
Dragana Tomas, Senior Chemist
Hannah Nguyen, Metals Supervisor
Jeremy Faircloth, Operations Manager, Sydney
Liam Timmins, Chemist
Lucy Zhu, Asbestos Supervisor
Manju Dewendrage, Prep Team Leader
Steven Luong, Organics Supervisor

Authorised By

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-1	285493-2	285493-3	285493-5	285493-6
Your Reference	UNITS	TP2	TP2	TP3	TP4	TP4
Depth		0-0.2	0.4-0.5	0-0.2	0-0.2	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	13/12/2021	13/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	85	96	96	91	90

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-7	285493-8	285493-9	285493-11	285493-12
Your Reference	UNITS	TP5	TP5	TP6	TP7	TP7
Depth		0-0.2	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	82	80	80	96	88

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-13	285493-14	285493-15	285493-16	285493-17
Your Reference	UNITS	TP8	TP8	TP9	TP10	TP10
Depth		0-0.2	0.4-0.5	0-0.1	0-0.2	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	80	80	90	84	93

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-18	285493-21	285493-22	285493-25	285493-26
Your Reference	UNITS	TP11	TP12	TP13	TP14	TP14
Depth		0-0.1	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	88	90	81	79	90

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-27	285493-28	285493-29	285493-31	285493-33
Your Reference	UNITS	TP15	TP15	TP16	TP16	TP17
Depth		0-0.1	0.4-0.5	0-0.2	0.7-0.9	0.8-1.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	94	84	87	84	87

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-35	285493-36	285493-39	285493-40	285493-43
Your Reference	UNITS	TP17	TP18	TP18	TP19	TP19
Depth		2.2-2.4	0-0.2	2-2.2	0-0.2	2-2.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	91	82	88	87	86

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-44	285493-45	285493-47	285493-49	285493-50
Your Reference	UNITS	TP20	TP20	TP21	SS1	SS2
Depth		0-0.2	1-1.2	0-0.2	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	82	89	89	86	89

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		285493-51	285493-53	285493-54	285493-55	285493-56
Your Reference	UNITS	SS3	BD3/20211214	BD5/20211214	Trip Spike	Trip Blank
Depth		-	-	-	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	<25	<25	<25	[NA]	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	[NA]	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	[NA]	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	93%	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	93%	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	94%	<1
m+p-xylene	mg/kg	<2	<2	<2	94%	<2
o-Xylene	mg/kg	<1	<1	<1	94%	<1
Naphthalene	mg/kg	<1	<1	<1	[NA]	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	[NA]	<3
Surrogate aaa-Trifluorotoluene	%	86	92	90	72	95

svTRH (C10-C40) in Soil						
Our Reference		285493-1	285493-2	285493-3	285493-5	285493-6
Your Reference	UNITS	TP2	TP2	TP3	TP4	TP4
Depth		0-0.2	0.4-0.5	0-0.2	0-0.2	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	13/12/2021	13/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	88	88	85	89	91

svTRH (C10-C40) in Soil						
Our Reference		285493-7	285493-8	285493-9	285493-11	285493-12
Your Reference	UNITS	TP5	TP5	TP6	TP7	TP7
Depth		0-0.2	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	88	90	90	86	84

svTRH (C10-C40) in Soil						
Our Reference		285493-13	285493-14	285493-15	285493-16	285493-17
Your Reference	UNITS	TP8	TP8	TP9	TP10	TP10
Depth		0-0.2	0.4-0.5	0-0.1	0-0.2	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	89	87	90	89	90

svTRH (C10-C40) in Soil						
Our Reference		285493-18	285493-21	285493-22	285493-25	285493-26
Your Reference	UNITS	TP11	TP12	TP13	TP14	TP14
Depth		0-0.1	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	17/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	89	85	87	89	84

svTRH (C10-C40) in Soil						
Our Reference		285493-27	285493-28	285493-29	285493-31	285493-33
Your Reference	UNITS	TP15	TP15	TP16	TP16	TP17
Depth		0-0.1	0.4-0.5	0-0.2	0.7-0.9	0.8-1.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	90	85	88	86	85

svTRH (C10-C40) in Soil						
Our Reference		285493-35	285493-36	285493-39	285493-40	285493-43
Your Reference	UNITS	TP17	TP18	TP18	TP19	TP19
Depth		2.2-2.4	0-0.2	2-2.2	0-0.2	2-2.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	82	86	84	84	86

svTRH (C10-C40) in Soil						
Our Reference		285493-44	285493-45	285493-47	285493-49	285493-50
Your Reference	UNITS	TP20	TP20	TP21	SS1	SS2
Depth		0-0.2	1-1.2	0-0.2	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	85	82	86	82	84

svTRH (C10-C40) in Soil				
Our Reference		285493-51	285493-53	285493-54
Your Reference	UNITS	SS3	BD3/20211214	BD5/20211214
Depth		-	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	82	83	85

PAHs in Soil						
Our Reference		285493-1	285493-2	285493-3	285493-5	285493-6
Your Reference	UNITS	TP2	TP2	TP3	TP4	TP4
Depth		0-0.2	0.4-0.5	0-0.2	0-0.2	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	13/12/2021	13/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	20/12/2021	20/12/2021	16/12/2021	20/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	112	76	74	108	78

PAHs in Soil						
Our Reference		285493-7	285493-8	285493-9	285493-11	285493-12
Your Reference	UNITS	TP5	TP5	TP6	TP7	TP7
Depth		0-0.2	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	20/12/2021	20/12/2021	16/12/2021	20/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	102	77	77	97	77

PAHs in Soil						
Our Reference		285493-13	285493-14	285493-15	285493-16	285493-17
Your Reference	UNITS	TP8	TP8	TP9	TP10	TP10
Depth		0-0.2	0.4-0.5	0-0.1	0-0.2	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	20/12/2021	20/12/2021	16/12/2021	20/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	108	75	72	106	84

PAHs in Soil						
Our Reference		285493-18	285493-21	285493-22	285493-25	285493-26
Your Reference	UNITS	TP11	TP12	TP13	TP14	TP14
Depth		0-0.1	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	20/12/2021	16/12/2021	20/12/2021	16/12/2021	20/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	70	103	75	107	68

PAHs in Soil						
Our Reference		285493-27	285493-28	285493-29	285493-31	285493-33
Your Reference	UNITS	TP15	TP15	TP16	TP16	TP17
Depth		0-0.1	0.4-0.5	0-0.2	0.7-0.9	0.8-1.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	20/12/2021	20/12/2021	16/12/2021	16/12/2021	16/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.2	0.2	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.2	0.3	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	0.2	0.3	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.2	0.2	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	1.2	1.6	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	71	71	100	100	100

PAHs in Soil						
Our Reference		285493-35	285493-36	285493-39	285493-40	285493-43
Your Reference	UNITS	TP17	TP18	TP18	TP19	TP19
Depth		2.2-2.4	0-0.2	2-2.2	0-0.2	2-2.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	20/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	98	105	94	93	73

PAHs in Soil						
Our Reference		285493-44	285493-45	285493-47	285493-49	285493-50
Your Reference	UNITS	TP20	TP20	TP21	SS1	SS2
Depth		0-0.2	1-1.2	0-0.2	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	20/12/2021	20/12/2021	16/12/2021	20/12/2021	20/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	71	68	97	70	69

PAHs in Soil				
Our Reference		285493-51	285493-53	285493-54
Your Reference	UNITS	SS3	BD3/20211214	BD5/20211214
Depth		-	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	20/12/2021	20/12/2021
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.3	<0.1
Pyrene	mg/kg	<0.1	0.3	<0.1
Benzo(a)anthracene	mg/kg	<0.1	0.2	<0.1
Chrysene	mg/kg	<0.1	0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	0.3	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.2	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	1.6	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	103	71	71

Organochlorine Pesticides in soil						
Our Reference		285493-1	285493-5	285493-7	285493-11	285493-13
Your Reference	UNITS	TP2	TP4	TP5	TP7	TP8
Depth		0-0.2	0-0.2	0-0.2	0-0.1	0-0.2
Date Sampled		13/12/2021	13/12/2021	13/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	97	99	93	87	92

Organochlorine Pesticides in soil						
Our Reference		285493-16	285493-21	285493-25	285493-29	285493-33
Your Reference	UNITS	TP10	TP12	TP14	TP16	TP17
Depth		0-0.2	0.4-0.5	0-0.1	0-0.2	0.8-1.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	97	92	92	92

Organochlorine Pesticides in soil						
Our Reference		285493-36	285493-39	285493-40	285493-47	285493-50
Your Reference	UNITS	TP18	TP18	TP19	TP21	SS2
Depth		0-0.2	2-2.2	0-0.2	0-0.2	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	17/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	20/12/2021
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	89	91	99	93	70

Organophosphorus Pesticides in Soil						
Our Reference		285493-1	285493-5	285493-7	285493-11	285493-13
Your Reference	UNITS	TP2	TP4	TP5	TP7	TP8
Depth		0-0.2	0-0.2	0-0.2	0-0.1	0-0.2
Date Sampled		13/12/2021	13/12/2021	13/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	97	99	93	87	92

Organophosphorus Pesticides in Soil						
Our Reference		285493-16	285493-21	285493-25	285493-29	285493-33
Your Reference	UNITS	TP10	TP12	TP14	TP16	TP17
Depth		0-0.2	0.4-0.5	0-0.1	0-0.2	0.8-1.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	97	92	92	92

Organophosphorus Pesticides in Soil						
Our Reference		285493-36	285493-39	285493-40	285493-47	285493-50
Your Reference	UNITS	TP18	TP18	TP19	TP21	SS2
Depth		0-0.2	2-2.2	0-0.2	0-0.2	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	17/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	20/12/2021
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	89	91	99	93	70

PCBs in Soil						
Our Reference		285493-1	285493-5	285493-7	285493-11	285493-13
Your Reference	UNITS	TP2	TP4	TP5	TP7	TP8
Depth		0-0.2	0-0.2	0-0.2	0-0.1	0-0.2
Date Sampled		13/12/2021	13/12/2021	13/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	97	99	93	87	92

PCBs in Soil						
Our Reference		285493-16	285493-21	285493-25	285493-29	285493-33
Your Reference	UNITS	TP10	TP12	TP14	TP16	TP17
Depth		0-0.2	0.4-0.5	0-0.1	0-0.2	0.8-1.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	93	97	92	92	92

PCBs in Soil						
Our Reference		285493-36	285493-39	285493-40	285493-47	285493-50
Your Reference	UNITS	TP18	TP18	TP19	TP21	SS2
Depth		0-0.2	2-2.2	0-0.2	0-0.2	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	17/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	20/12/2021
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	89	91	99	93	70

Acid Extractable metals in soil						
Our Reference		285493-1	285493-2	285493-3	285493-5	285493-6
Your Reference	UNITS	TP2	TP2	TP3	TP4	TP4
Depth		0-0.2	0.4-0.5	0-0.2	0-0.2	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	13/12/2021	13/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	8	11	10	6	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	18	23	21	21	14
Copper	mg/kg	19	22	21	30	35
Lead	mg/kg	16	17	12	15	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	7	7	14	15
Zinc	mg/kg	24	26	16	26	53

Acid Extractable metals in soil						
Our Reference		285493-7	285493-8	285493-9	285493-11	285493-12
Your Reference	UNITS	TP5	TP5	TP6	TP7	TP7
Depth		0-0.2	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		13/12/2021	13/12/2021	13/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	6	6	6	10	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	20	14	18	16
Copper	mg/kg	11	27	21	11	27
Lead	mg/kg	18	16	12	24	19
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	11	8	7	14
Zinc	mg/kg	14	25	26	15	36

Acid Extractable metals in soil						
Our Reference		285493-13	285493-14	285493-15	285493-16	285493-17
Your Reference	UNITS	TP8	TP8	TP9	TP10	TP10
Depth		0-0.2	0.4-0.5	0-0.1	0-0.2	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	6	5	7	6	13
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	12	17	16	16	20
Copper	mg/kg	16	28	15	21	33
Lead	mg/kg	21	13	20	14	34
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	10	9	12	8	18
Zinc	mg/kg	33	34	26	22	47

Acid Extractable metals in soil						
Our Reference		285493-18	285493-21	285493-22	285493-25	285493-26
Your Reference	UNITS	TP11	TP12	TP13	TP14	TP14
Depth		0-0.1	0.4-0.5	0-0.1	0-0.1	0.4-0.5
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	5	7	8	9	8
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	15	15	17	17	15
Copper	mg/kg	17	15	16	14	17
Lead	mg/kg	14	18	20	18	19
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	6	7	6	8
Zinc	mg/kg	18	21	34	21	29

Acid Extractable metals in soil						
Our Reference		285493-27	285493-28	285493-29	285493-31	285493-33
Your Reference	UNITS	TP15	TP15	TP16	TP16	TP17
Depth		0-0.1	0.4-0.5	0-0.2	0.7-0.9	0.8-1.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	6	7	6	9	9
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	36	40	4	16	19
Copper	mg/kg	28	27	18	24	11
Lead	mg/kg	40	42	7	22	24
Mercury	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	7	3	12	7
Zinc	mg/kg	170	170	23	35	20

Acid Extractable metals in soil						
Our Reference		285493-35	285493-36	285493-39	285493-40	285493-43
Your Reference	UNITS	TP17	TP18	TP18	TP19	TP19
Depth		2.2-2.4	0-0.2	2-2.2	0-0.2	2-2.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	8	9	9	8	7
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	16	19	17	19	18
Copper	mg/kg	14	13	12	12	18
Lead	mg/kg	23	21	20	20	18
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	7	7	8	8
Zinc	mg/kg	21	22	23	20	21

Acid Extractable metals in soil						
Our Reference		285493-44	285493-45	285493-47	285493-49	285493-50
Your Reference	UNITS	TP20	TP20	TP21	SS1	SS2
Depth		0-0.2	1-1.2	0-0.2	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	9	9	10	5	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	19	18	19	16	17
Copper	mg/kg	14	12	18	15	20
Lead	mg/kg	25	22	21	16	15
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	8	7	8	10	15
Zinc	mg/kg	31	23	29	33	39

Acid Extractable metals in soil				
Our Reference		285493-51	285493-53	285493-54
Your Reference	UNITS	SS3	BD3/20211214	BD5/20211214
Depth		-	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021
Arsenic	mg/kg	<4	6	10
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	7	33	19
Copper	mg/kg	22	19	14
Lead	mg/kg	6	29	24
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	6	6	7
Zinc	mg/kg	29	91	26

Misc Soil - Inorg						
Our Reference		285493-1	285493-5	285493-6	285493-7	285493-11
Your Reference	UNITS	TP2	TP4	TP4	TP5	TP7
Depth		0-0.2	0-0.2	0.4-0.5	0-0.2	0-0.1
Date Sampled		13/12/2021	13/12/2021	13/12/2021	13/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		285493-13	285493-16	285493-21	285493-25	285493-29
Your Reference	UNITS	TP8	TP10	TP12	TP14	TP16
Depth		0-0.2	0-0.2	0.4-0.5	0-0.1	0-0.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		285493-33	285493-36	285493-39	285493-40	285493-47
Your Reference	UNITS	TP17	TP18	TP18	TP19	TP21
Depth		0.8-1.0	0-0.2	2-2.2	0-0.2	0-0.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg		
Our Reference		285493-50
Your Reference	UNITS	SS2
Depth		-
Date Sampled		14/12/2021
Type of sample		Soil
Date prepared	-	17/12/2021
Date analysed	-	17/12/2021
Total Phenolics (as Phenol)	mg/kg	<5

Moisture						
Our Reference		285493-1	285493-2	285493-3	285493-5	285493-7
Your Reference	UNITS	TP2	TP2	TP3	TP4	TP5
Depth		0-0.2	0.4-0.5	0-0.2	0-0.2	0-0.2
Date Sampled		13/12/2021	13/12/2021	13/12/2021	13/12/2021	13/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Moisture	%	18	15	17	16	16

Moisture						
Our Reference		285493-8	285493-9	285493-11	285493-12	285493-13
Your Reference	UNITS	TP5	TP6	TP7	TP7	TP8
Depth		0.4-0.5	0-0.1	0-0.1	0.4-0.5	0-0.2
Date Sampled		13/12/2021	13/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Moisture	%	18	13	16	13	18

Moisture						
Our Reference		285493-14	285493-15	285493-16	285493-17	285493-18
Your Reference	UNITS	TP8	TP9	TP10	TP10	TP11
Depth		0.4-0.5	0-0.1	0-0.2	0.4-0.5	0-0.1
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Moisture	%	17	20	13	13	18

Moisture						
Our Reference		285493-21	285493-22	285493-25	285493-26	285493-27
Your Reference	UNITS	TP12	TP13	TP14	TP14	TP15
Depth		0.4-0.5	0-0.1	0-0.1	0.4-0.5	0-0.1
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Moisture	%	12	12	14	14	14

Moisture						
Our Reference		285493-28	285493-29	285493-31	285493-33	285493-35
Your Reference	UNITS	TP15	TP16	TP16	TP17	TP17
Depth		0.4-0.5	0-0.2	0.7-0.9	0.8-1.0	2.2-2.4
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Moisture	%	14	4.8	16	15	13

Moisture						
Our Reference		285493-36	285493-39	285493-40	285493-43	285493-44
Your Reference	UNITS	TP18	TP18	TP19	TP19	TP20
Depth		0-0.2	2-2.2	0-0.2	2-2.2	0-0.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Moisture	%	16	14	18	17	19

Moisture						
Our Reference		285493-45	285493-47	285493-49	285493-50	285493-51
Your Reference	UNITS	TP20	TP21	SS1	SS2	SS3
Depth		1-1.2	0-0.2	-	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Moisture	%	17	22	9.4	12	6.5

Moisture			
Our Reference		285493-53	285493-54
Your Reference	UNITS	BD3/20211214	BD5/20211214
Depth		-	-
Date Sampled		14/12/2021	14/12/2021
Type of sample		Soil	Soil
Date prepared	-	16/12/2021	16/12/2021
Date analysed	-	17/12/2021	17/12/2021
Moisture	%	13	17

Asbestos ID - soils NEPM						
Our Reference		285493-1	285493-3	285493-5	285493-7	285493-9
Your Reference	UNITS	TP2	TP3	TP4	TP5	TP6
Depth		0-0.2	0-0.2	0-0.2	0-0.2	0-0.1
Date Sampled		13/12/2021	13/12/2021	13/12/2021	13/12/2021	13/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	21/12/2021	21/12/2021	21/12/2021	21/12/2021	21/12/2021
Sample mass tested	g	940.08	967.05	921.98	886.99	700.03
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		285493-11	285493-13	285493-15	285493-16	285493-18
Your Reference	UNITS	TP7	TP8	TP9	TP10	TP11
Depth		0-0.1	0-0.2	0-0.1	0-0.2	0-0.1
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	21/12/2021	21/12/2021	21/12/2021	21/12/2021	21/12/2021
Sample mass tested	g	1,033.97	959.63	792.9	729.73	925.67
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		285493-20	285493-21	285493-22	285493-23	285493-24
Your Reference	UNITS	TP12	TP12	TP13	TP13	TP13
Depth		0-0.1	0.4-0.5	0-0.1	0.4-0.5	1-1.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	20/12/2021	21/12/2021	21/12/2021	20/12/2021	20/12/2021
Sample mass tested	g	1,031.44	1,004.97	909.25	1,005.55	1,007.87
Sample Description	-	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		285493-25	285493-26	285493-27	285493-29	285493-32
Your Reference	UNITS	TP14	TP14	TP15	TP16	TP17
Depth		0-0.1	0.4-0.5	0-0.1	0-0.2	0-0.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	21/12/2021	21/12/2021	21/12/2021	21/12/2021	20/12/2021
Sample mass tested	g	933.35	1,138.92	938.87	1,170.67	1,000.75
Sample Description	-	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Beige coarse-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		285493-33	285493-34	285493-35	285493-36	285493-37
Your Reference	UNITS	TP17	TP17	TP17	TP18	TP18
Depth		0.8-1.0	1.6-1.8	2.2-2.4	0-0.2	0.7-0.9
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	21/12/2021	20/12/2021	21/12/2021	21/12/2021	20/12/2021
Sample mass tested	g	1,064.33	1,210.86	1,020.81	928.56	1,196.15
Sample Description	-	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown coarse-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		285493-38	285493-39	285493-40	285493-41	285493-42
Your Reference	UNITS	TP18	TP18	TP19	TP19	TP19
Depth		1.5-1.7	2-2.2	0-0.2	0.7-0.9	1.7-1.9
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	20/12/2021	21/12/2021	21/12/2021	20/12/2021	20/12/2021
Sample mass tested	g	1,284.81	1,110.8	1,072.55	1,094.44	1,049.94
Sample Description	-	Brown fine-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM						
Our Reference		285493-44	285493-47	285493-49	285493-50	285493-51
Your Reference	UNITS	TP20	TP21	SS1	SS2	SS3
Depth		0-0.2	0-0.2	-	-	-
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	21/12/2021	21/12/2021	21/12/2021	21/12/2021	21/12/2021
Sample mass tested	g	982.99	869.61	1,413.96	1,258.57	1,342.79
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Grey coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	Chrysotile Amosite	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	0.0412	–
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	0.0033	<0.001

Triazine Herbicides in Soil					
Our Reference		285493-11	285493-21	285493-33	285493-39
Your Reference	UNITS	TP7	TP12	TP17	TP18
Depth		0-0.1	0.4-0.5	0.8-1.0	2-2.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Date analysed	-	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Simazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Atrazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Propazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Terbuthylazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Metribuzin	mg/kg	<0.5	<0.5	<0.5	<0.5
Ametryn	mg/kg	<0.5	<0.5	<0.5	<0.5
Prometryn	mg/kg	<0.5	<0.5	<0.5	<0.5
Terbutryn	mg/kg	<0.5	<0.5	<0.5	<0.5
Cyanazine	mg/kg	<0.5	<0.5	<0.5	<0.5
Irgarol	mg/kg	<0.5	<0.5	<0.5	<0.5
Hexazinone	mg/kg	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	130	128	125	123

Herbicides in Soil					
Our Reference		285493-11	285493-21	285493-33	285493-39
Your Reference	UNITS	TP7	TP12	TP17	TP18
Depth		0-0.1	0.4-0.5	0.8-1.0	2-2.2
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Date analysed	-	20/12/2021	20/12/2021	20/12/2021	20/12/2021

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date extracted	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	25	Org-023	<25	1	<25	<25	0	72	71
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	1	<25	<25	0	72	71
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	77	80
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	79	84
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	89	91
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	84	86
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	79	83
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	84	1	85	86	1	88	89

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-29
Date extracted	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	13	<25	<25	0	72	70
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	13	<25	<25	0	72	70
Benzene	mg/kg	0.2	Org-023	[NT]	13	<0.2	<0.2	0	86	82
Toluene	mg/kg	0.5	Org-023	[NT]	13	<0.5	<0.5	0	88	85
Ethylbenzene	mg/kg	1	Org-023	[NT]	13	<1	<1	0	96	94
m+p-xylene	mg/kg	2	Org-023	[NT]	13	<2	<2	0	90	90
o-Xylene	mg/kg	1	Org-023	[NT]	13	<1	<1	0	86	85
Naphthalene	mg/kg	1	Org-023	[NT]	13	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	13	80	84	5	99	97

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	25	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	25	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	25	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	25	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	25	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	25	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	25	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	25	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	25	79	86	8	[NT]	[NT]

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	[NT]	47	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	[NT]	47	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	47	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	47	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	47	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	47	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	47	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	47	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	47	89	85	5	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date extracted	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	1	<50	<50	0	88	98
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	1	<100	<100	0	89	107
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	1	<100	<100	0	91	123
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	1	<50	<50	0	88	98
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	1	<100	<100	0	89	107
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	1	<100	<100	0	91	123
Surrogate o-Terphenyl	%		Org-020	85	1	88	91	3	111	80

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-29
Date extracted	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	17/12/2021
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	13	<50	<50	0	95	92
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	13	<100	<100	0	91	97
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	13	<100	<100	0	91	90
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	13	<50	<50	0	95	92
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	13	<100	<100	0	91	97
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	13	<100	<100	0	91	90
Surrogate o-Terphenyl	%		Org-020	[NT]	13	89	88	1	117	79

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	25	16/12/2021	17/12/2021		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	25	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	25	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	25	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	25	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	25	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	25	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	25	89	85	5	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	17/12/2021	17/12/2021		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	[NT]	47	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	[NT]	47	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	[NT]	47	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	[NT]	47	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	[NT]	47	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	[NT]	47	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	47	86	85	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date extracted	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	92
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	97	89
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	99	93
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	98	100
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	90	90
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	95
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	71	64
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	94	90
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	120	1	112	113	1	97	102

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-29
Date extracted	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	95	88
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	99	83
Fluorene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	99	90
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	112	104
Anthracene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	119	92
Pyrene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	123	77
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	73	73
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	13	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	13	<0.05	<0.05	0	100	82
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	13	108	101	7	134	87

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	25	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	25	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	25	107	98	9	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	47	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	47	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	47	97	98	1	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date extracted	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	88
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	103
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	85	87
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	87	91
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	126	80
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	92
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	96
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	82
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	76	86
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	84
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	122	1	97	97	0	103	102

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-29
Date extracted	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	94	84
HCB	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	117	103
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	109	87
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	120	90
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	66	72
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	123	76
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	118	81
Endrin	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	113	85
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	108	84
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	110	78
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	13	92	99	7	102	95

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	25	92	90	2	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	47	93	90	3	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date extracted	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	72	72
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	79	81
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	87	77
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	70	75
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	90
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	78
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	82	68
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	122	1	97	97	0	103	102

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-29
Date extracted	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	72	67
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	108	83
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	111	73
Malathion	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	93	60
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	112	74
Parathion	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	101	93
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	78	71
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	13	92	99	7	102	95

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	25	92	90	2	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	47	93	90	3	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date extracted	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	91	110
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	122	1	97	97	0	103	102

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-29
Date extracted	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	13	<0.1	<0.1	0	109	116
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	13	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	13	92	99	7	102	95

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	25	92	90	2	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	47	93	90	3	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date prepared	-			16/12/2021	1	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			17/12/2021	1	17/12/2021	17/12/2021		17/12/2021	17/12/2021
Arsenic	mg/kg	4	Metals-020	<4	1	8	9	12	107	86
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	104	86
Chromium	mg/kg	1	Metals-020	<1	1	18	19	5	110	95
Copper	mg/kg	1	Metals-020	<1	1	19	17	11	109	115
Lead	mg/kg	1	Metals-020	<1	1	16	19	17	108	95
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	106	112
Nickel	mg/kg	1	Metals-020	<1	1	7	7	0	105	90
Zinc	mg/kg	1	Metals-020	<1	1	24	24	0	107	88

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-29
Date prepared	-			[NT]	13	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			[NT]	13	17/12/2021	17/12/2021		17/12/2021	17/12/2021
Arsenic	mg/kg	4	Metals-020	[NT]	13	6	6	0	116	105
Cadmium	mg/kg	0.4	Metals-020	[NT]	13	<0.4	<0.4	0	114	101
Chromium	mg/kg	1	Metals-020	[NT]	13	12	14	15	120	108
Copper	mg/kg	1	Metals-020	[NT]	13	16	22	32	117	121
Lead	mg/kg	1	Metals-020	[NT]	13	21	20	5	119	116
Mercury	mg/kg	0.1	Metals-021	[NT]	13	<0.1	<0.1	0	103	117
Nickel	mg/kg	1	Metals-020	[NT]	13	10	11	10	115	104
Zinc	mg/kg	1	Metals-020	[NT]	13	33	36	9	123	102

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	25	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	25	17/12/2021	17/12/2021		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	25	9	8	12	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	25	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	25	17	16	6	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	25	14	15	7	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	25	18	19	5	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	25	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	25	6	7	15	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	25	21	24	13	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	47	16/12/2021	16/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	17/12/2021	17/12/2021		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	47	10	9	11	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	47	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	47	19	20	5	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	47	18	15	18	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	47	21	18	15	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	47	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	47	8	7	13	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	47	29	24	19	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	285493-5
Date prepared	-			17/12/2021	1	17/12/2021	17/12/2021		17/12/2021	17/12/2021
Date analysed	-			17/12/2021	1	17/12/2021	17/12/2021		17/12/2021	17/12/2021
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	101	98

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	47	17/12/2021	17/12/2021		[NT]	[NT]
Date analysed	-			[NT]	47	17/12/2021	17/12/2021		[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	47	<5	<5	0	[NT]	[NT]

QUALITY CONTROL: Triazine Herbicides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	285493-21
Date extracted	-			16/12/2021	11	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Date analysed	-			16/12/2021	11	16/12/2021	16/12/2021		16/12/2021	16/12/2021
Simazine	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Atrazine	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	130	126
Propazine	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	128	110
Terbuthylazine	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Metribuzin	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Ametryn	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Prometryn	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	122	104
Terbutryn	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Cyanazine	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Irgarol	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Hexazinone	mg/kg	0.5	Org-022/025	<0.5	11	<0.5	<0.5	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	130	11	130	130	0	90	126

QUALITY CONTROL: Herbicides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			17/12/2021	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Date analysed	-			20/12/2021	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Samples received in good order: Y3

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Factual description of asbestos identified in the soil samples: NEPM
Sample 285493-50; Chrysotile and Amosite asbestos identified in 0.0589g of fibrous matted material

Herbicides - see attached report. Analysed by MPL 274214

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.01	**Suburb:**	Kemps Creek	**To:**	Enviorlab
Project Name:	Due Diligence	**Order Number**			
Project Manager:	DIH	**Sampler:**	VV/DIH	**Attn:**	Aileen Hie
Emails:	david.holden@douglaspartners.com.au			**Phone:**	99106200
Date Required:	72 hrs			**Email:**	Ahie@envirolab.com.au
Prior Storage:	Esky/Fridge/Shelf	Do samples contain 'potential' HBM?	Yes ☐	No ☐	(If YES, then handle, transport and store in accordance with FPM HAZID)

Sample ID	Lab ID	Date Sampled	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Combo 8a	Combo 3a	Combo 3	Hebiscides	TRH/BTEX	hold	Asbestos			Notes/preservation
TP2/0-0.2	1	13-12-21	s	G/P	x									Asbestos = AF/FA Herbisicdes = carbanmates, tricarbamates, phenyl ures, triazine 285493 15/12/21
TP2/0.4-0.5	2	13-12-21	s	G/P			x							
TP3/0-0.2	3	13-12-21	s	G/P		x								
TP3/0.4-0.5	4	13-12-21	s	G/P						x				
TP4/0-0.2	5	13-12-21	s	G/P	x									
TP4/0.4-0.5	6	13-12-21	s	G/P			x							
TP5/0-0.2	7	13-12-21	s	G/P	x									
TP5/0.4-0.5	8	13-12-21	s	G/P			x							
TP6/0-0.1	9	13-12-21	s	G/P		x								
TP6/0.4-0.5	10	13-12-21	s	G/P						x				
TP7/0-0.1	11	14-12-21	s	G/P	x			x						
TP7/0.4-0.5	12	14-12-21	s	G/P			x							
TP8/0-0.2	13	14-12-21	s	G/P	x									
TP8/0.4-0.5	14	14-12-21	s	G/P			x							
TP9/0-0.1	15	14-12-21	s	G/P		x								
PQL (S) mg/kg													**ANZECC PQLs req'd for all water analytes** ☐	

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container:	58	**Relinquished by:**	DIH	**Transported to laboratory by:**	BONDS
Send Results to:	Douglas Partners Pty Ltd	**Address:**		**Phone:**	**Fax:**
Signed:	15/12/21, 12:50pm	**Received by:**		**Date & Time:**	

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.01	**Suburb:**	Kemps Creek	**To:**	Enviorlab
Project Name:	Due Diligence	**Order Number**			
Project Manager:	DIH	**Sampler:**	VV/DIH	**Attn:**	Aileen Hie
Emails:	david.holden@douglaspartners.com.au			**Phone:**	99106200
Date Required:	72 hrs			**Email:**	Ahie@envirolab.com.au
Prior Storage:	Esky/Fridge/Shelf	Do samples contain 'potential' HBM?	Yes ☐	No ☐	(If YES, then handle, transport and store in accordance with FPM HAZID)

Sample ID	Lab ID	Sampling Date	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Combo 8a	Combo 3a	Combo 3	Hebiscides	TRH/BTEX	hold	Asbestos			Notes/preservation
TP10/0-0.2	16	14-12-21	s	G/P	x									
TP10/0.4-0.5	17	14-12-21	s	G/P			x							
TP11/0-0.1	18	14-12-21	s	G/P		x								
TP11/0.4-0.5	19	14-12-21	s	G/P						x				
TP12/0-0.1	20	14-12-21	s	G/P							x			
TP12/0.4-0.5	21	14-12-21	s	G/P	x			x						
TP13/0-0.1	22	14-12-21	s	G/P		x								
TP13/0.4-0.5	23	14-12-21	s	G/P							x			
TP13/1-1.2	24	14-12-21	s	G/P							x			
TP14/0-0.1	25	14-12-21	s	G/P	x									
TP14/0.4-0.5	26	14-12-21	s	G/P		x								
TP15/0-0.1	27	14-12-21	s	G/P		x								
TP15/0.4-0.5	28	14-12-21	s	G/P			x							
TP16/0-0.2	29	14-12-21	s	G/P	x									
TP16/0.4-0.5	30	14-12-21	s	G/P						x				
PQL (S) mg/kg														**ANZECC PQLs req'd for all water analytes** ☐

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Lab Report/Reference No:

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Signed: 15/12/21, 12:50pm **Received by:** **Date & Time:**

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Sample ID	Lab ID	Sampling Date	Sample Type (S - soil W - water)	Container Type (G - glass P - plastic)	Analytes: Combo 8a	Combo 3a	Combo 3	Hebiscides	TRH/BTEX	hold	Asbestos			Notes/preservation
TP16/0.7-0.9	31	14-12-21	s	G/P			x							
TP17/0-0.2	32	14-12-21	s	G/P							x			
TP17/0.8-1.0	33	14-12-21	s	G/P	x			x						
TP17/1.6-1.8	34	14-12-21	s	G/P							x			
TP17/2.2-2.4	35	14-12-21	s	G/P		x								
TP18/0-0.2	36	14-12-21	s	G/P	x									
TP18/0.7-0.9	37	14-12-21	s	G/P							x			
TP18/1.5-1.7	38	14-12-21	s	G/P							x			
TP18/2-2.2	39	14-12-21	s	G/P	x			x						
TP19/0-0.2	40	14-12-21	s	G/P	x									
TP19/0.7-0.9	41	14-12-21	s	G/P							x			
TP19/1.7-1.9	42	14-12-21	s	G/P							x			
TP19/2-2.2	43	14-12-21	s	G/P			x							
TP20/0-0.2	44	14-12-21	s	G/P		x								
TP20/1-1.2	45	14-12-21	s	G/P			x							
PQL (S) mg/kg														**ANZECC PQLs req'd for all water analytes** ☐

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Lab Report/Reference No:

Metals to Analyse: 8HM unless specified here:

Total number of samples in container: 58 **Relinquished by:** DIH **Transported to laboratory by:** BONDS

Send Results to: Douglas Partners Pty Ltd **Address:** **Phone:** **Fax:**

Signed: 15/12/21, 12:50pm **Received by:** **Date & Time:**

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Project No:	211619.01	**Suburb:**	Kemps Creek	**To:**	Enviorlab
Project Name:	Due Diligence	**Order Number**			
Project Manager:	DIH	**Sampler:**	VV/DIH	**Attn:**	Aileen Hie
Emails:	david.holden@douglaspartners.com.au			**Phone:**	99106200
Date Required:	72 hrs			**Email:**	Ahie@envirolab.com.au
Prior Storage:	Esky/Fridge/Shelf	Do samples contain 'potential' HBM?	Yes ☐	No ☐	(If YES, then handle, transport and store in accordance with FPM HAZID)

Sample ID	Lab ID	Sampling Date	Sample Type (S - soil W - water)	Container Type (G - glass P - plastic)	Analytes: Combo 8a	Combo 3a	Combo 3	Hebiscides	TRH/BTEX	hold	Asbestos			Notes/preservation
TP20/1.7-1.9	46	14-12-21	s	G/P						x				
TP21/0-0.2	47	14-12-21	s	G/P	x									
TP21/1-1.2	48	14-12-21	s	G/P						x				
SS1	49	14-12-21	s	G/P		x								
SS2	50	14-12-21	s	G/P	x									
SS3	51	14-12-21	s	G/P		x								
BD1/20211213		13-12-21	s	G/P						x				ALS
BD2/20211214	52	14-12-21	s	G/P						x				
BD3/20211214	53	14-12-21	s	G/P			x							
BD4/20211214		14-12-21	s	G/P			x							Please forward for interlab
BD5/20211214	54	14-12-21	s	G/P			x							
Trip Spike	55	14-12-21	s	G					x					
Trip Blank	56	14-12-21	s	G					x					
PQL (S) mg/kg														**ANZECC PQLs req'd for all water analytes** ☐

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container:	58	**Relinquished by:**	DIH	**Transported to laboratory by:**	BONDS
Send Results to:	Douglas Partners Pty Ltd	**Address:**		**Phone:**	**Fax:**
Signed:	15/12/21, 12:50pm	**Received by:**		**Date & Time:**	

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	David Holden

Sample Login Details

Your reference	211619.01, Kemps Creek
Envirolab Reference	285493
Date Sample Received	15/12/2021
Date Instructions Received	15/12/2021
Date Results Expected to be Reported	21/12/2021

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	56 Soil
Turnaround Time Requested	3 days
Temperature on Receipt (°C)	15
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBsin Soil	Acid Extractable metalsin soil	Misc Soil - Inorg	Asbestos ID - soils	Asbestos ID - soils NEPM	Triazine Herbicides in Soil	Herbicidesin Soil	On Hold
TP2-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP2-0.4-0.5	✓	✓	✓				✓						
TP3-0-0.2	✓	✓	✓				✓		✓				
TP3-0.4-0.5													✓
TP4-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP4-0.4-0.5	✓	✓	✓				✓	✓					
TP5-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP5-0.4-0.5	✓	✓	✓				✓						
TP6-0-0.1	✓	✓	✓				✓		✓				
TP6-0.4-0.5													✓
TP7-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	
TP7-0.4-0.5	✓	✓	✓				✓						
TP8-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP8-0.4-0.5	✓	✓	✓				✓						
TP9-0-0.1	✓	✓	✓				✓		✓				
TP10-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP10-0.4-0.5	✓	✓	✓				✓						
TP11-0-0.1	✓	✓	✓				✓		✓				
TP11-0.4-0.5													✓
TP12-0-0.1										✓			
TP12-0.4-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	
TP13-0-0.1	✓	✓	✓				✓		✓				
TP13-0.4-0.5										✓			
TP13-1-1.2										✓			
TP14-0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP14-0.4-0.5	✓	✓	✓				✓		✓				
TP15-0-0.1	✓	✓	✓				✓		✓				
TP15-0.4-0.5	✓	✓	✓				✓						
TP16-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP16-0.4-0.5													✓
TP16-0.7-0.9	✓	✓	✓				✓						
TP17-0-0.2										✓			

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBsin Soil	Acid Extractable metalsin soil	Misc Soil - Inorg	Asbestos ID - soils	Asbestos ID - soils NEPM	Triazine Herbicides in Soil	Herbicidesin Soil	On Hold
TP17-0.8-1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	
TP17-1.6-1.8										✓			
TP17-2.2-2.4	✓	✓	✓				✓		✓				
TP18-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP18-0.7-0.9										✓			
TP18-1.5-1.7										✓			
TP18-2-2.2	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	
TP19-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP19-0.7-0.9										✓			
TP19-1.7-1.9										✓			
TP19-2-2.2	✓	✓	✓				✓						
TP20-0-0.2	✓	✓	✓				✓		✓				
TP20-1-1.2	✓	✓	✓				✓						
TP20-1.7-1.9													✓
TP21-0-0.2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
TP21-1-1.2													✓
SS1	✓	✓	✓				✓		✓				
SS2	✓	✓	✓	✓	✓	✓	✓	✓	✓				
SS3	✓	✓	✓				✓		✓				
BD2/20211214													✓
BD3/20211214	✓	✓	✓				✓						
BD5/20211214	✓	✓	✓				✓						
Trip Spike	✓												
Trip Blank	✓												

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

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 274214

Client Details

Client	Envirolab Services - Sydney
Attention	Aileen Hie
Address	12 Ashley St, CHATSWOOD, NSW, 2057

Sample Details

Your Reference	**285493**
Number of Samples	4 Soil
Date samples received	17/12/2021
Date completed instructions received	17/12/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	20/12/2021
Date of Issue	20/12/2021

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Travis Carey, Organics - Team Leader

Authorised By

Michael Kubiak, Laboratory Manager

Herbicides - Full Suite - Soil					
Our Reference		274214-1	274214-2	274214-3	274214-4
Your Reference	UNITS	285493-11	285493-21	285493-33	285493-39
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Date analysed	-	20/12/2021	20/12/2021	20/12/2021	20/12/2021
Aldicarb*	mg/kg	<5	<5	<5	<5
Carbaryl	mg/kg	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	<0.5	<0.5	<0.5	<0.5
Chlorpropham*	mg/kg	<5	<5	<5	<5
Diuron*	mg/kg	<5	<5	<5	<5
Fenuron*	mg/kg	<5	<5	<5	<5
Fluometuron*	mg/kg	<5	<5	<5	<5
Isoproturon*	mg/kg	<5	<5	<5	<5
Linuron*	mg/kg	<5	<5	<5	<5
Methiocarb*	mg/kg	<5	<5	<5	<5
Methomyl*	mg/kg	<5	<5	<5	<5
Mexacarbate*	mg/kg	<5	<5	<5	<5
Molinate	mg/kg	<0.5	<0.5	<0.5	<0.5
Monuron*	mg/kg	<5	<5	<5	<5
Neburon*	mg/kg	<5	<5	<5	<5
Oxamyl*	mg/kg	<5	<5	<5	<5
Pebulate*	mg/kg	<5	<5	<5	<5
Propham*	mg/kg	<5	<5	<5	<5
Propoxur*	mg/kg	<5	<5	<5	<5
Siduron*	mg/kg	<5	<5	<5	<5
SWEP*	mg/kg	<5	<5	<5	<5
Tebuthiuron*	mg/kg	<5	<5	<5	<5
Thiobencarb*	mg/kg	<5	<5	<5	<5
Vernolate*	mg/kg	<5	<5	<5	<5
Surrogate: 2,4-DCPA	%	82	85	81	78

Moisture					
Our Reference		274214-1	274214-2	274214-3	274214-4
Your Reference	UNITS	285493-11	285493-21	285493-33	285493-39
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	17/12/2021	17/12/2021	17/12/2021	17/12/2021
Date analysed	-	20/12/2021	20/12/2021	20/12/2021	20/12/2021
Moisture	%	20	14	16	17

Method ID	Methodology Summary
INORG-008	Moisture content determined by heating at 105 deg C for a minimum of 12 hours.
Org-021/022/025	Acid herbicides and speciated phenols in soil by DCM:Acetone extraction with derivatisation and determination by GC-MS/GC-MSMS. Haloacetic acids in waters are derivatised and analysed by GC-ECD. Acid herbicides, speciated phenols, carbamates and ureas in water by DCM extraction with derivatisation and determination by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.

QUALITY CONTROL: Herbicides - Full Suite - Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	274214-2
Date extracted	-			17/12/2021	1	17/12/2021	17/12/2021		17/12/2021	17/12/2021
Date analysed	-			20/12/2021	1	20/12/2021	20/12/2021		20/12/2021	20/12/2021
Aldicarb*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Carbaryl	mg/kg	0.5	Org-022/025	<0.5	1	<0.5	<0.5	0	[NT]	[NT]
Carbofuran	mg/kg	0.5	Org-022/025	<0.5	1	<0.5	<0.5	0	85	79
Chlorpropham*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Diuron*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	80	65
Fenuron*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	[NT]	[NT]
Fluometuron*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	77	65
Isoproturon*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	[NT]	[NT]
Linuron*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	[NT]	[NT]
Methiocarb*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	86	88
Methomyl*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Mexacarbate*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Molinate	mg/kg	0.5	Org-022/025	<0.5	1	<0.5	<0.5	0	[NT]	[NT]
Monuron*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	[NT]	[NT]
Neburon*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	[NT]	[NT]
Oxamyl*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Pebulate*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	95	96
Propham*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Propoxur*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Siduron*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	[NT]	[NT]
SWEP*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Tebuthiuron*	mg/kg	5	Org-021/022/025	<5	1	<5	<5	0	[NT]	[NT]
Thiobencarb*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	[NT]	[NT]
Vernolate*	mg/kg	5	Org-022/025	<5	1	<5	<5	0	95	96
Surrogate: 2,4-DCPA	%		Org-021/022/025	91	1	82	81	1	91	94

QUALITY CONTROL: Moisture					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			17/12/2021	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Date analysed	-			20/12/2021	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Moisture	%	0.1	INORG-008	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

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CERTIFICATE OF ANALYSIS 285880

Client Details

Client	Douglas Partners Pty Ltd
Attention	Ray Blinman
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	**211619.00, Proposed Industrial Develop Kemps Creek**
Number of Samples	8 Soil
Date samples received	21/12/2021
Date completed instructions received	21/12/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	23/12/2021
Date of Issue	23/12/2021

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Results Approved By
Hannah Nguyen, Metals Supervisor
Priya Samarawickrama, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

Soil Aggressivity						
Our Reference		285880-1	285880-2	285880-3	285880-4	285880-5
Your Reference	UNITS	TP2	TP2	TP2	TP2	TP9
Depth		0.0-0.2	0.4-0.5	0.9-1.0	1.4-1.5	0.0-0.1
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
pH 1:5 soil:water	pH Units	6.9	6.4	5.1	5.0	6.2
Chloride, Cl 1:5 soil:water	mg/kg	<10	20	450	580	<10
Sulphate, SO4 1:5 soil:water	mg/kg	<10	20	83	78	<10

Soil Aggressivity				
Our Reference		285880-6	285880-7	285880-8
Your Reference	UNITS	TP9	TP9	TP9
Depth		0.4-0.5	0.9-1.0	1.9-2.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil
pH 1:5 soil:water	pH Units	5.7	5.5	7.1
Chloride, Cl 1:5 soil:water	mg/kg	320	710	900
Sulphate, SO4 1:5 soil:water	mg/kg	38	36	25

ESP/CEC						
Our Reference		285880-1	285880-2	285880-3	285880-4	285880-5
Your Reference	UNITS	TP2	TP2	TP2	TP2	TP9
Depth		0.0-0.2	0.4-0.5	0.9-1.0	1.4-1.5	0.0-0.1
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	23/12/2021	23/12/2021	23/12/2021	23/12/2021	23/12/2021
Date analysed	-	23/12/2021	23/12/2021	23/12/2021	23/12/2021	23/12/2021
Exchangeable Ca	meq/100g	4.2	2.8	0.4	0.3	5.4
Exchangeable K	meq/100g	0.3	0.1	<0.1	0.1	0.8
Exchangeable Mg	meq/100g	8.2	8.7	8.6	7.0	4.5
Exchangeable Na	meq/100g	0.5	0.9	2.9	2.3	0.2
Cation Exchange Capacity	meq/100g	13	13	12	9.8	11
ESP	%	4	7	24	24	1

ESP/CEC				
Our Reference		285880-6	285880-7	285880-8
Your Reference	UNITS	TP9	TP9	TP9
Depth		0.4-0.5	0.9-1.0	1.9-2.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	23/12/2021	23/12/2021	23/12/2021
Date analysed	-	23/12/2021	23/12/2021	23/12/2021
Exchangeable Ca	meq/100g	3.0	1.3	0.99
Exchangeable K	meq/100g	0.1	0.1	<0.1
Exchangeable Mg	meq/100g	9.4	7.5	6.0
Exchangeable Na	meq/100g	2.9	3.2	2.8
Cation Exchange Capacity	meq/100g	15	12	9.9
ESP	%	19	26	28

Texture and Salinity*						
Our Reference		285880-1	285880-2	285880-3	285880-4	285880-5
Your Reference	UNITS	TP2	TP2	TP2	TP2	TP9
Depth		0.0-0.2	0.4-0.5	0.9-1.0	1.4-1.5	0.0-0.1
Date Sampled		14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	22/12/2021	22/12/2021	22/12/2021	22/12/2021	22/12/2021
Date analysed	-	22/12/2021	22/12/2021	22/12/2021	22/12/2021	22/12/2021
Electrical Conductivity 1:5 soil:water	µS/cm	19	42	460	560	30
Texture Value	-	8.0	8.0	7.0	8.0	8.5
Texture	-	LIGHT MEDIUM CLAY	LIGHT MEDIUM CLAY	MEDIUM CLAY	LIGHT MEDIUM CLAY	LIGHT CLAY
ECe	dS/m	<2	<2	3.2	4.4	<2
Class	-	NON SALINE	NON SALINE	SLIGHTLY SALINE	MODERATELY SALINE	NON SALINE

Texture and Salinity*				
Our Reference		285880-6	285880-7	285880-8
Your Reference	UNITS	TP9	TP9	TP9
Depth		0.4-0.5	0.9-1.0	1.9-2.0
Date Sampled		14/12/2021	14/12/2021	14/12/2021
Type of sample		Soil	Soil	Soil
Date prepared	-	22/12/2021	22/12/2021	22/12/2021
Date analysed	-	22/12/2021	22/12/2021	22/12/2021
Electrical Conductivity 1:5 soil:water	µS/cm	300	630	800
Texture Value	-	7.0	7.0	7.0
Texture	-	MEDIUM CLAY	MEDIUM CLAY	MEDIUM CLAY
ECe	dS/m	2.1	4.4	5.6
Class	-	SLIGHTLY SALINE	MODERATELY SALINE	MODERATELY SALINE

Method ID	Methodology Summary
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-002	Conductivity and Salinity - measured using a conductivity cell at 25°C in accordance with APHA latest edition 2510 and Rayment & Lyons.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B. Waters samples are filtered on receipt prior to analysis. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
INORG-123	Determined using a "Texture by Feel" method.
Metals-020	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-OES analytical finish.

QUALITY CONTROL: Soil Aggressivity						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	285880-2
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	1	6.9	6.8	1	100	[NT]
Chloride, Cl 1:5 soil:water	mg/kg	10	Inorg-081	<10	1	<10	<10	0	93	76
Sulphate, SO4 1:5 soil:water	mg/kg	10	Inorg-081	<10	1	<10	<10	0	90	89

QUALITY CONTROL: ESP/CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	285880-2
Date prepared	-			23/12/2021	1	23/12/2021	23/12/2021		23/12/2021	23/12/2021
Date analysed	-			23/12/2021	1	23/12/2021	23/12/2021		23/12/2021	23/12/2021
Exchangeable Ca	meq/100g	0.1	Metals-020	<0.1	1	4.2	4.3	2	111	102
Exchangeable K	meq/100g	0.1	Metals-020	<0.1	1	0.3	0.3	0	116	102
Exchangeable Mg	meq/100g	0.1	Metals-020	<0.1	1	8.2	8.5	4	111	100
Exchangeable Na	meq/100g	0.1	Metals-020	<0.1	1	0.5	0.5	0	124	106
ESP	%	1	Metals-020	[NT]	1	4	4	0	[NT]	[NT]

QUALITY CONTROL: Texture and Salinity*					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			22/12/2021	1	22/12/2021	22/12/2021		22/12/2021	[NT]
Date analysed	-			22/12/2021	1	22/12/2021	22/12/2021		22/12/2021	[NT]
Electrical Conductivity 1:5 soil:water	µS/cm	1	Inorg-002	<1	1	19	17	11	102	[NT]
Texture Value	-		INORG-123	[NT]	1	8.0	[NT]		[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

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Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

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For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

pH/ec Samples were out of the recommended holding time for this analysis.

Douglas Partners
Geotechnics | Environment | Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.00	**Suburb:**	Kemps Creek	**To:**	Envirolab
Project Name:	Proposed Industrial Development	**Order Number**			
Project Manager:	Ray Blinman	**Sampler:**	SI	**Attn:**	Simon Song
Emails:	Ray.Blinman@douglaspartners.com.au			**Phone:**	
Date Required:	~~Same day ☐~~ ~~24 hours X~~ 48 hours ☐	~~72 hours ☐~~	Standard X	**Email:**	SSong@envirolab.com.au
Prior Storage:	☐ Esky ☐ Fridge ☐X	Do samples contain 'potential' HBM?	Yes ☐ No ☐	(If YES, then handle, transport and store in accordance with FPM HAZID	

Sample ID	Lab ID	Date Sampled	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Aggresivity CL, SO4, pH, EC	Exchangeable Sodium % ESP/CEC	Textural Class						Notes/preservation
TP2 0.0-0.2m	1	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
TP2 0.4-0.5m	2	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
TP2 0.9-1.0m	3	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
TP2 1.4-1.5m	4	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
TP9 0.0-0.1m	5	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
TP9 0.4-0.5m	6	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
TP9 0.9-1.0m	7	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
TP9 1.9-2.0m	8	14.2.21	s	p	x	x	x						1:5 Soil:Water Ratio, includes CEC
PQL (S) mg/kg													**ANZECC PQLs req'd for all water analytes** ☐

Environment Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 285880
Date Received: 21/12/21
Time Received: 1230
Received by: AB
Temp: Cool/Ambient 20°C
Cooling: Ice/Icepack
Security: Intact/Broken/None

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Metals to Analyse: 8HM unless specified here:

Lab Report/Referenc

Total number of samples in container:	**Relinquished by:**	**Transported to laboratory by**
Send Results to: Douglas Partners Pty Ltd	**Address:**	**Phor** **Fax:**
Signed:	**Received by:** A-BM1, ELS SMD	**Date & Tim** 21/12/21 1230

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	Ray Blinman

Sample Login Details

Your reference	211619.00, Proposed Ind'l Dev't-Kemps Creek
Envirolab Reference	285880
Date Sample Received	21/12/2021
Date Instructions Received	21/12/2021
Date Results Expected to be Reported	23/12/2021

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	8 Soil
Turnaround Time Requested	2 days
Temperature on Receipt (°C)	20
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	Soil Aggressivity	ESP/CEC	Texture and Salinity*
TP2-0.0-0.2	✓	✓	✓
TP2-0.4-0.5	✓	✓	✓
TP2-0.9-1.0	✓	✓	✓
TP2-1.4-1.5	✓	✓	✓
TP9-0.0-0.1	✓	✓	✓
TP9-0.4-0.5	✓	✓	✓
TP9-0.9-1.0	✓	✓	✓
TP9-1.9-2.0	✓	✓	✓

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

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

Douglas Partners
Geotechnics / Environment / Groundwater

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.01	**Suburb:**	Kemps Creek	**To:**	Enviorlab
Project Name:	Due Diligence	**Order Number**			
Project Manager:	DIH	**Sampler:**	VV/DIH	**Attn:**	Aileen Hie
Emails:	david.holden@douglaspartners.com.au			**Phone:**	99106200
Date Required:	std			**Email:**	Ahie@envirolab.com.au
Prior Storage:	Esky/Fridge	Do samples contain 'potential' HBM?	Yes ☐	No ☐	(If YES, then handle, transport and store in accordance with FPM HAZID)

Sample ID	Lab ID	Date Sampled	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes									Notes/preservation
					Combo 3									
BD1/20211213		13-12-21	s	G	x									Please forward both samples for interlab analysis. Combo 3= metals, TRH, BTEX, PAH
BD4/20211214		14-12-21	s	G	x									
PQL (S) mg/kg													**ANZECC PQLs req'd for all water analytes** ☐	

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container:	2	**Relinquished by:**	DIH	**Transported to laboratory by:**	BONDS
Send Results to:	Douglas Partners Pty Ltd	**Address:**		**Phone:**	**Fax:**
Signed:	15/12/21, 12:50pm	**Received by:**		**Date & Time:**	

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2146223**	Page	: 1 of 5
Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Contact	: Sepan Mahamad
Address	: 96 HERMITAGE ROAD WEST RYDE NSW, AUSTRALIA 2114	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9809 0666	Telephone	: +61 2 8784 8555
Project	: 211619.01	Date Samples Received	: 16-Dec-2021 17:15
Order number	: ----	Date Analysis Commenced	: 22-Dec-2021
C-O-C number	: ----	Issue Date	: 29-Dec-2021 15:42
Sampler	: VV/DIH		
Site	: Kemps Creek		
Quote number	: EN/222		
No. of samples received	: 2		
No. of samples analysed	: 2		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS 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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	BD1/20211213	BD4/20211214	----	----	----
			Sampling date / time	13-Dec-2021 00:00	14-Dec-2021 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2146223-001	ES2146223-002	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**16.5**	**17.1**	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BD1/20211213	BD4/20211214	----	----	----
				Sampling date / time	13-Dec-2021 00:00	14-Dec-2021 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2146223-001	ES2146223-002	--------	--------	--------
					Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**85.8**	**90.9**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**92.6**	**98.1**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**84.3**	**81.1**	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**113**	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**98.4**	**101**	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**102**	**104**	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**73.3**	**76.0**	----	----	----
Toluene-D8	2037-26-5	0.2	%		**79.4**	**79.6**	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**75.0**	**74.7**	----	----	----

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2146223**	Page	: 1 of 6
Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Contact	: Sepan Mahamad
Address	: 96 HERMITAGE ROAD WEST RYDE NSW, AUSTRALIA 2114	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9809 0666	Telephone	: +61 2 8784 8555
Project	: 211619.01	Date Samples Received	: 16-Dec-2021
Order number	: ----	Date Analysis Commenced	: 22-Dec-2021
C-O-C number	: ----	Issue Date	: 29-Dec-2021
Sampler	: VV/DIH		
Site	: Kemps Creek		
Quote number	: EN/222		
No. of samples received	: 2		
No. of samples analysed	: 2		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4094789)									
ES2145964-005	Anonymous	EA055: Moisture Content	----	0.1	%	10.7	11.0	2.9	0% - 20%
ES2145964-035	Anonymous	EA055: Moisture Content	----	0.1	%	3.7	3.6	0.0	0% - 20%
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4087186)									
ES2145925-001	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2145925-035	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4087186) - continued									
ES2145925-035	Anonymous	EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4087187)									
ES2145925-001	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2145925-035	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4092999)									
ES2145964-002	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2146223-002	BD4/20211214	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4087187)									
ES2145925-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2145925-035	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4092999)									
ES2145964-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2146223-002	BD4/20211214	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4092999)									
ES2145964-002	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2146223-002	BD4/20211214	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4087186)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	103	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	105	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	99.0	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	109	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	104	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	95.4	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	111	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	106	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	108	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	104	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	103	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	107	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	89.5	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	94.2	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	91.4	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	94.9	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4087187)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	109	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	104	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	107	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4092999)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	78.9	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4087187)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	104	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	106	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	112	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4092999)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	75.9	68.4	128
EP080: BTEXN (QCLot: 4092999)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	85.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	82.8	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	81.8	65.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080: BTEXN (QCLot: 4092999) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	83.1	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	82.0	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	82.0	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**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4087186)							
ES2145925-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	97.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	110	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4087187)							
ES2145925-001	Anonymous	EP071: C10 - C14 Fraction	----	480 mg/kg	88.1	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	102	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	107	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4092999)							
ES2145964-002	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	78.7	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4087187)							
ES2145925-001	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	95.7	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	106	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	96.5	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4092999)							
ES2145964-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	75.3	70.0	130
EP080: BTEXN (QCLot: 4092999)							
ES2145964-002	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	75.3	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	76.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	78.5	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	76.8	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	77.5	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	76.6	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2146223**	Page	: 1 of 4
Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Telephone	: +61 2 8784 8555
Project	: 211619.01	Date Samples Received	: 16-Dec-2021
Site	: Kemps Creek	Issue Date	: 29-Dec-2021
Sampler	: VV/DIH	No. of samples received	: 2
Order number	: ----	No. of samples analysed	: 2

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) BD1/20211213	**13-Dec-2021**	**----**	----	----	**22-Dec-2021**	27-Dec-2021	✓
Soil Glass Jar - Unpreserved (EA055) BD4/20211214	**14-Dec-2021**	**----**	----	----	**22-Dec-2021**	28-Dec-2021	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM)) BD1/20211213	**13-Dec-2021**	**22-Dec-2021**	27-Dec-2021	✓	**23-Dec-2021**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) BD4/20211214	**14-Dec-2021**	**22-Dec-2021**	28-Dec-2021	✓	**23-Dec-2021**	31-Jan-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071) BD1/20211213	**13-Dec-2021**	**22-Dec-2021**	27-Dec-2021	✓	**23-Dec-2021**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD1/20211213	**13-Dec-2021**	**22-Dec-2021**	27-Dec-2021	✓	**24-Dec-2021**	27-Dec-2021	✓
Soil Glass Jar - Unpreserved (EP071) BD4/20211214	**14-Dec-2021**	**22-Dec-2021**	28-Dec-2021	✓	**23-Dec-2021**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD4/20211214	**14-Dec-2021**	**22-Dec-2021**	28-Dec-2021	✓	**24-Dec-2021**	28-Dec-2021	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071) BD1/20211213	**13-Dec-2021**	**22-Dec-2021**	27-Dec-2021	✓	**23-Dec-2021**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD1/20211213	**13-Dec-2021**	**22-Dec-2021**	27-Dec-2021	✓	**24-Dec-2021**	27-Dec-2021	✓
Soil Glass Jar - Unpreserved (EP071) BD4/20211214	**14-Dec-2021**	**22-Dec-2021**	28-Dec-2021	✓	**23-Dec-2021**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) BD4/20211214	**14-Dec-2021**	**22-Dec-2021**	28-Dec-2021	✓	**24-Dec-2021**	28-Dec-2021	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080) BD1/20211213	**13-Dec-2021**	**22-Dec-2021**	27-Dec-2021	✓	**24-Dec-2021**	27-Dec-2021	✓
Soil Glass Jar - Unpreserved (EP080) BD4/20211214	**14-Dec-2021**	**22-Dec-2021**	28-Dec-2021	✓	**24-Dec-2021**	28-Dec-2021	✓

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	9	**22.22**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	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	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	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	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 Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Preparation Methods	Method	Matrix	Method Descriptions
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.

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2146223**

Client	: **DOUGLAS PARTNERS PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MR DAVID HOLDEN	Contact	: Sepan Mahamad
Address	: 96 HERMITAGE ROAD WEST RYDE NSW, AUSTRALIA 2114	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: david.holden@douglaspartners.com.au	E-mail	: Sepan.Mahamad@ALSGlobal.com
Telephone	: +61 02 9809 0666	Telephone	: +61 2 8784 8555
Facsimile	: +61 02 9809 4095	Facsimile	: +61-2-8784 8500
Project	: 211619.01	Page	: 1 of 2
Order number	: ----	Quote number	: EM2017DOUPAR0002 (EN/222)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: Kemps Creek		
Sampler	: VV/DIH		

Dates

Date Samples Received	: 16-Dec-2021 17:15	Issue Date	: 17-Dec-2021
Client Requested Due Date	: 29-Dec-2021	Scheduled Reporting Date	: **29-Dec-2021**

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 12.6'C - Ice Bricks present
Receipt Detail	:	No. of samples received / analysed	: 2 / 2

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 laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **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	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - S-07 TRH/BTEXN/PAH (SIM)
ES2146223-001	13-Dec-2021 00:00	BD1/20211213	✓	✓
ES2146223-002	14-Dec-2021 00:00	BD4/20211214	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE INVOICES

- A4 - AU Tax Invoice (INV)	Email	apinvoices@douglaspartners.com.au

DAVID HOLDEN

- *AU Certificate of Analysis - NATA (COA)	Email	david.holden@douglaspartners.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	david.holden@douglaspartners.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	david.holden@douglaspartners.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	david.holden@douglaspartners.com.au
- Chain of Custody (CoC) (COC)	Email	david.holden@douglaspartners.com.au
- EDI Format - ESDAT (ESDAT)	Email	david.holden@douglaspartners.com.au
- EDI Format - XTab (XTAB)	Email	david.holden@douglaspartners.com.au

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#285493
CH

CHAIN OF CUSTODY DESPATCH SHEET

Project No:	211619.01	**Suburb:**	Kemps Creek	**To:**	Enviorlab
Project Name:	Due Diligence	**Order Number**			
Project Manager:	DIH	**Sampler:**	VV/DIH	**Attn:**	Aileen Hie
Emails:	david.holden@douglaspartners.com.au			**Phone:**	99106200
Date Required:	std			**Email:**	Ahie@envirolab.com.au
Prior Storage:	Esky/Fridge	Do samples contain 'potential' HBM?	Yes ☐	No ☐	(If YES, then handle, transport and store in accordance with FPM HAZID)

Sample ID	Lab ID	Date Sampled	Sample Type (S - soil, W - water)	Container Type (G - glass, P - plastic)	Analytes: Combo 3									Notes/preservation
BD1/20211213		13-12-21	s	G	x									Please forward both samples for interlab analysis. Combo 3= metals, TRH, BTEX, PAH relinquished by christine 16/12/21 1105 ELS 540
BD4/20211214		14-12-21	s	G	x									
PQL (S) mg/kg														ANZECC PQLs req'd for all water analytes

Environmental Division
Sydney
Work Order Reference
ES2146223

Telephone : +61-2-8784 8555

PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit

Metals to Analyse: 8HM unless specified here:

Lab Report/Reference No:

Total number of samples in container: 2 **Relinquished by:** DIH **Transported to laboratory by:** BONDS

Send Results to: Douglas Partners Pty Ltd **Address**

Phone: **Fax:**

Signed: 15/12/21, 12:50pm **Received by:** **Date & Time:** 16/12/21 1715 12.6

Appendix K

Data Quality Assessment

Table QA1: Relative Percentage Difference Results – Intra-laboratory Replicates

Table QA2: Relative Percentage Difference Results – Inter-laboratory Replicates

Table QA3: Trip Blank Results

Table QA4: Trip Spike Results

Appendix K
Data Quality Assessment
Westlink Stage 2, 1030-1064 Mamre Road, Kemps Creek

K1.0 Field and Laboratory Data Quality Assurance and Quality Control

The field and laboratory data quality assurance and quality control (QA / QC) procedures and results are summarised in the following Table 1. Reference should be made to the field work methodology and the laboratory results / certificates of analysis for further details. The relative percentage difference (RPD) results, along with the other field QC samples are included in at the end of this appendix.

Table 1: Field and Laboratory Quality Control

Item	Evaluation / Acceptance Criteria	Compliance
Analytical laboratories used	NATA accreditation	C
Holding times	Various based on type of analysis	C
Intra-laboratory replicates	5% of primary samples; <30% RPD	C
Inter-laboratory replicates	5% of primary samples; <30% RPD	C
Trip Spikes	1 per sampling event; 60-140% recovery	C
Trip Blanks	1 per sampling event; <PQL	C
Laboratory / Reagent Blanks	1 per batch; <PQL	C
Laboratory Duplicate	1 per lab batch; As laboratory certificate	C
Matrix Spikes	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Surrogate Spikes	All organics analysis; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Control Samples	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Standard Operating Procedures (SOP)	Adopting SOP for all aspects of the sampling field work	C

Notes:
C = compliance; PC = partial compliance; NC = non-compliance

The RPD results were all within the acceptable range, with the exception of those indicated in Tables QA1 and QA2. The exceedances are not, however, considered to be of concern given that:

- The typically low actual differences in the concentrations of the replicate pairs where some RPD exceedances occurred;
- A number of replicate pairs were collected from fill soils which by its nature is heterogeneous;
- Replicates, rather than homogenised duplicates, were used to minimise risk of volatile loss, hence greater variability can be expected;
- A number of the recorded concentrations being relatively close to the PQL, noting that laboratory does not consider RPD exceedances to be significant where the concentrations recorded are less than five times the PQL;
- The majority of RPDs within a replicate pair being within the acceptable limits; and
- Other QA / QC parameters meeting the DQIs.

Boreholes BH167 to BH169 were registered in the COC and corresponding lab report 301228 as TP167 to TP169. This was a labelling error and is not considered to have affected the data.

In summary, the QC data is determined to be of sufficient quality to be considered acceptable for the assessment.

K2.0 Data Quality Indicators

The reliability of field procedures and analytical results was assessed against the following data quality indicators (DQIs) as outlined in NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013):

- Completeness: a measure of the amount of usable data from a data collection activity;
- Comparability: the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness: the confidence (qualitative) of data representativeness of media present on-site;
- Precision: a measure of variability or reproducibility of data; and
- Accuracy: a measure of closeness of the data to the 'true' value.

Table 2: Data Quality Indicators

Data Quality Indicator	Method(s) of Achievement
Completeness	Systematic and selected target locations sampled.
	Preparation of borehole and test pit logs, sample location plan and chain of custody records.
	Laboratory sample receipt information received confirming receipt of samples intact and appropriateness of the chain of custody.
	Samples analysed for contaminants of potential concern (COPC) identified in the Conceptual Site Model (CSM).
	Completion of chain of custody (COC) documentation.
	NATA accredited laboratory results certificates provided by the laboratory (where NATA accredited analysis was requested).
	Satisfactory frequency and results for field and laboratory quality control (QC) samples as discussed in Section 1.
Comparability	Using appropriate techniques for sample recovery, storage and transportation, which were the same for the duration of the project.
	Appropriately experienced samplers used.
	Use of NATA registered laboratories, with test methods the same or similar between laboratories.
	Satisfactory results for field and laboratory QC samples.
Representativeness	Target media sampled.
	Sample numbers recovered and analysed are considered to be representative of the target media and complying with DQOs.
	Samples were extracted and analysed within holding times.
	Samples were analysed in accordance with the COC.
Precision	Field staff followed standard operating procedures.
	Acceptable RPD between original samples and replicates.
	Satisfactory results for all other field and laboratory QC samples.
Accuracy	Field staff followed standard operating procedures.
	Satisfactory results for all field and laboratory QC samples.

Based on the above, it is considered that the DQIs have been complied with.

K3.0 Conclusion

Based on the results of the field QA and field and laboratory QC, and evaluation against the DQIs it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

K4.0 References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM].* Australian Government Publishing Services Canberra: National Environment Protection Council.

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Table QA1: Relative Percentage Difference Results – Intra-laboratory Replicates (ELS)

				Metals								TRH						BTEX				PAH			
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	F1 ((C6-C10)-BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F4 (>C34-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs
Sample ID	Depth	Lab Report	Sample Date	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
BD2/20210907	0.5 - 0.6 m	277541	7/09/2021	6	<0.4	13	34	15	<0.1	15	45	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05
TP12	0.5 - 0.6 m	277541	7/09/2021	6	<0.4	14	38	16	<0.1	17	51	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05
			Difference	0	0	1	4	1	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	0%	0%	7%	11%	6%	0%	13%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD5/20210907	0.5 - 0.6 m	277541	7/09/2021	9	<0.4	15	17	11	<0.1	4	16	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05
TP19	0.5 - 0.6 m	277541	7/09/2021	9	<0.4	18	23	15	<0.1	5	21	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<1	<0.05	<0.5	<0.05
			Difference	0	0	3	6	4	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	0%	0%	18%	30%	**31%**	0%	22%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD5/20211214	1 - 1.2 m	285493	14/12/2021	10	<0.4	19	14	24	<0.1	7	26	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP20	1 - 1.2 m	285493	14/12/2021	9	<0.4	18	12	22	<0.1	7	23	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	1	0	1	2	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	11%	0%	5%	15%	9%	0%	0%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD3/20211214	0.4 - 0.5 m	285493	14/12/2021	6	<0.4	33	19	29	<0.1	6	91	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	0.2	<0.5	1.6
TP15	0.4 - 0.5 m	285493	14/12/2021	7	<0.4	40	27	42	<0.1	7	170	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	0.2	<0.5	1.6
			Difference	1	0	7	8	13	0	1	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	15%	0%	19%	**35%**	**37%**	0%	15%	**61%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD2/20220718	0 - 0.2 m	301228	18/07/2022	6	<0.4	18	17	14	<0.1	8	17	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP119	0 - 0.2 m	301228	18/07/2022	6	<0.4	15	24	29	<0.1	7	76	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	0	0	3	7	15	0	1	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	0%	0%	18%	**34%**	**70%**	0%	13%	**127%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD2/20220719	0.3 - 0.4 m	301228	19/07/2022	5	<0.4	16	20	13	<0.1	8	16	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP122	0.3 - 0.4 m	301228	19/07/2022	4	<0.4	16	21	11	<0.1	7	21	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	1	0	0	1	2	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	22%	0%	0%	5%	17%	0%	13%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD4/20220719	1 - 1.1 m	301228	19/07/2022	5	<0.4	15	20	11	<0.1	9	17	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP126	1 - 1.1 m	301228	19/07/2022	<4	<0.4	15	21	10	<0.1	8	19	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	1	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	22%	0%	0%	5%	10%	0%	12%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD1/20220720	1.4 - 1.5 m	301228	20/07/2022	6	<0.4	12	23	12	<0.1	6	27	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP139	1.4 - 1.5 m	301228	20/07/2022	7	<0.4	11	27	13	<0.1	14	67	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	1	0	1	4	1	0	8	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	15%	0%	9%	16%	8%	0%	**80%**	**85%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD1/20220727	1.3 - 1.4 m	301228	27/07/2022	6	<0.4	17	27	18	<0.1	13	34	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP170	1.3 - 1.4 m	301228	27/07/2022	5	<0.4	17	25	14	<0.1	13	28	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	1	0	0	2	4	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	18%	0%	0%	8%	25%	0%	0%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD2/20220727	0.6 - 0.7 m	301228	27/07/2022	10	<0.4	18	28	30	<0.1	14	36	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP174	0.6 - 0.7 m	301228	27/07/2022	5	<0.4	22	34	16	<0.1	15	57	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	5	0	4	6	14	0	1	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	**67%**	0%	20%	19%	**61%**	0%	7%	**45%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
BD3/20220727	1.1 - 1.2 m	301228	27/07/2022	6	<0.4	14	25	14	<0.1	10	30	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
TP176	1.1 - 1.2 m	301228	27/07/2022	6	<0.4	16	27	15	<0.1	11	29	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	0	0	2	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			RPD	0%	0%	13%	8%	7%	0%	10%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table QA2: Relative Percentage Difference Results – Inter-laboratory Replicates (ALS)

				Metals								TRH						BTEX				PAH			
				Arsenic	Cadmium	Total Chromium	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	TRH C6 - C10	TRH >C10-C16	F1 ((C6-C10)-BTEX)	F2 (>C10-C16 less Naphthalene)	F3 (>C16-C34)	F4 (>C34-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene [b]	Benzo(a)pyrene (BaP)	Benzo(a)pyrene TEQ	Total PAHs
Sample ID	Depth	Lab Report	Sample Date	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
BD1/20211213	0 - 0.1 m	ES2146223	13/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP6	0 - 0.1 m	285493	13/12/2021	6	<0.4	14	21	12	<0.1	8	26	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	-	-	-	-	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD4/20211214	0 - 0.2 m	ES2146223	14/12/2021	NT	NT	NT	NT	NT	NT	NT	NT	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP18	0 - 0.2 m	285493	14/12/2021	9	<0.4	19	13	21	<0.1	7	22	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	-	-	-	-	-	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD1/20220718	0.8 - 1 m	301228	18/07/2022	10	<1	17	31	15	<0.1	11	43	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP114	0.8 - 1 m	ES2226356	18/07/2022	7	<0.4	11	23	16	<0.1	11	44	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	3	0	6	8	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	**35%**	0%	**41%**	29%	6%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD1/20220719	0.3 - 0.4 m	301228	19/07/2022	8	<1	23	26	19	<0.1	13	30	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP120	0.3 - 0.4 m	ES2226356	19/07/2022	5	<0.4	17	20	17	<0.1	10	20	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	3	0	6	6	2	0	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	**46%**	0%	30%	26%	11%	0%	26%	**40%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD3/20220719	1.8 - 1.9 m	301228	19/07/2022	7	<1	23	26	12	<0.1	11	25	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP124	1.8 - 1.9 m	ES2226356	19/07/2022	4	<0.4	14	20	14	<0.1	7	22	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	3	0	9	6	2	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	**54%**	0%	**48%**	26%	15%	0%	**44%**	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD5/20220719	1.5 - 1.6 m	301228	19/07/2022	7	<1	23	26	14	<0.1	13	28	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP129	1.5 - 1.6 m	ES2226356	19/07/2022	5	<0.4	16	22	14	<0.1	11	22	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	2	0	7	4	0	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	**33%**	0%	**35%**	16%	0%	0%	16%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD5/20220719	3 - 3.1 m	301228	19/07/2022	8	<1	22	26	18	<0.1	14	31	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP131	3 - 3.1 m	ES2226356	19/07/2022	8	<0.4	16	29	23	<0.1	12	40	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	0	0	6	3	5	0	2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	0%	0%	**31%**	10%	24%	0%	15%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD7/20220719	1.5 - 1.6 m	301228	19/07/2022	8	<1	14	16	21	<0.1	9	34	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP135	1.5 - 1.6 m	ES2226356	19/07/2022	6	<0.4	12	9	17	<0.1	5	16	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	2	0	2	7	4	0	4	18	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	28%	0%	28%	**56%**	21%	0%	**57%**	**72%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-
BD2/20220720	0.3 - 0.4 m	301228	20/07/2022	9	<1	17	24	15	<0.1	9	34	<10	<50	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	-
TP144	0.3 - 0.4 m	ES2226356	20/07/2022	5	<0.4	22	17	12	<0.1	6	21	<25	<50	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.1	<0.05	<0.5	<0.05
			Difference	4	0	5	7	3	0	3	13	0	0	0	0	0	0	0	0	0	0	0	0	0	-
			RPD	**57%**	0%	25%	**34%**	22%	0%	**40%**	**47%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-

Table QA3: Trip Blank Results - Soils (mg/kg)

Sample ID	Lab Report	Benzene	Toluene	Ethylbenzene	o-Xylene	m+p-Xylene
TB1	277541	<0.2	<0.5	<1	<1	<2
Trip Blank	285493	<0.2	<0.5	<1	<1	<2
Trip Blank	301228	<0.2	<0.5	<1	<1	<2
Trip Blank	301718	<0.2	<0.5	<1	<1	<2

Table QA4: Trip Spike Results – Soils (% Recovery)

Sample ID	Lab Report	Benzene	Toluene	Ethylbenzene	o-Xylene	m+p-Xylene
TS1	277541	100	99	99	99	99
Trip Spike	285493	93	93	94	94	94
Trip Spike	301228	97	97	97	96	97
Trip Spike	301718	98	97	96	99	98