

Detailed Site Investigation

6 Honeman Close, Huntingwood, NSW

Final Report

P1907521JR03V02 July 2023 Prepared For LCI Consultants

environmental science & engineering



Project Details

Report Title	Detailed Site Investigation: 6 Honeman Close, Huntingwood, NSW		
Client	LCI Consultants		
Document	P1907521JR03V02		
Director	Andrew Norris		
Manager	Surendran Karasu		
Principal Author	Dean Shi		

Document History

Issue	Issue Date	Status	Description / Comment	Author	Reviewer	Approved
1	4/07/2023	Draft	Client review	DS	BM	BM/SK
1	6/12/2022	Draft	Client review	DS	BM	BM/SK
2	28/04/2022	Final	Final	DS	BM	BM
2	06/07/2023	Final	Final	DS	BM	BM

© Copyright Martens & Associates Pty Ltd Suite 201, 20 George St, Hornsby, NSW 2077, Australia ACN 070 240 890 ABN 85 070 240 890 P +61-2-9476-9999 | mail@martens.com.au | www.martens.com.au

Copyright Statement

Martens & Associates Pty Ltd (Publisher) is the owner of the copyright subsisting in this publication. Other than as permitted by the Copyright Act and as outlined in the Terms of Engagement, no part of this report may be reprinted or reproduced or used in any form, copied or transmitted, by any electronic, mechanical, or by other means, now known or hereafter invented (including microcopying, photocopying, recording, recording tape or through electronic information storage and retrieval systems or otherwise), without the prior written permission of Martens & Associates Pty Ltd. Legal action will be taken against any breach of its copyright. This report is available only as book form unless specifically distributed by Martens & Associates in electronic form. No part of it is authorised to be copied, sold, distributed or offered in any other form.

Contents

1	Introdu	uction	7	
	1.1	Purpose of this report	7	
	1.2	Secretary's Environmental Assessment Requirements (SEARS)	8	
	1.3	Background	8	
	1.4	Scope of Works	9	
2	Site De	escription	10	
	2.1	Site Details	10	
	2.2	Hydrogeology	10	
3	Previo	us Site Investigations	12	
	3.1	Stage 1 and 2 Preliminary Contamination Assessment (Meinhar	dt, 2017)	12
	3.2	Photographic Archival Report of Former Service Station (EMM, 2	017)13	
	3.3	Preliminary Review of Site Contamination (MA, 2020a)	14	
	3.4	Preliminary Intrusive Investigation (MA, 2020b)	15	
4	Concep	otual Site Model	17	
	4.1	Potential Sources of Contamination	17	
	4.2	Potential Exposure Pathways and Receptors	17	
5	Sampli	ng Analytical and Quality Plan	19	
	5.1	Data Quality Objectives	19	
	5.2	Data Quality Indicators	20	
	5.3	Investigation and Sampling Methodology	21	
	5.4	Laboratory Analytical Suite	22	
6	Site As	sessment Criteria	24	
7	Results	S	25	
	7.1	Site Conditions	25	
	7.1.1	General Subsurface Conditions	25	
	7.1.2	Stockpile Conditions		
	7.2	Groundwater Field Parameters	25	
	7.3	Analytical Results	26	
	7.4	Data QA / QC	27	
8	Discus	sion	28	
	8.1	Discussion of Results	28	
	8.2	Updated Conceptual Site Model	29	
9	Conclu	sion and Recommendations	30	
10) Limitations Statement			

11 References	32
Appendix A – Site Maps	33
Appendix B – Proposed Development Plans	35
Appendix C – Plates	37
Appendix D – Test Pit Logs	41
Appendix E – EIL Calculation Sheets	44
Appendix F – Laboratory Summary Tables	45
Appendix G – Data Validation Report	46
Appendix H – Laboratory Documentation	48
Appendix I – Groundwater Sampling Field Sheets	49
Appendix J – Calibration Certificates	50
Appendix K – Survey of Stockpiles	51

Tables

8
. 10
.11
. 15
. 17
. 17
. 19
. 20
.21
. 22
.23
.24
. 26
. 26
. 27



Glossary of Terms

ACM	Asbestos containing material
ASC NEPM	National Environmental Protection (Assessment of Site Contamination)
	Measure (2013)
BTEXN	Benzene, toluene, ethylbenzene, xylene, naphthalene
COPC	Contaminants of potential concern
DA	Development application
DSI	Detailed site investigation
ESA	Environmental site assessment
IA	Investigation area
MA	Martens & Associates Pty Ltd
mAHD	Metres, Australian Height Datum
mBGL	Meters below ground level
NSW EPA	NSW Environmental Protection Authority
NSW HAPE	NSW Historical Air Photo Enhancement program
OCP	Organochlorine pesticides
OPP	Organophosphorus pesticides
PACM	Potential asbestos containing material
PAH	Polycyclic aromatic hydrocarbons
РСВ	Polychlorinated biphenyls
PSI	Preliminary Site Investigation
SAC	Site acceptance criteria
ТОС	Table of contents
TRH	Total recoverable hydrocarbons

1 Introduction

1.1 Purpose of this report

This Detailed Site Investigation (DSI) report has been prepared on behalf of Lehr Consultants International (Australia) Pty Ltd (LCI) in support of a State Significant Development Application SSD-19729084 (SSDA) submitted to the Department of Planning and Environment (DPE) under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act 1979).

The SSDA relates to a proposal at the site known as 6 Honeman Close, Huntingwood, legally referred to as Lot 5 DP1238405. The site is within the Blacktown City Council local government area (LGA) and is bound by the Great Western Highway to the north, a slither of land fronting Reservoir Road to the west, and Honeman Close to the south/west. The subject site is approximately 5.04 hectares in size and irregularly shaped.



Figure 1: Subject site context

The subject proposal relates to a new 5 storey 96MW data centre facility which will operate 24 hours a day, 7 days a week. In summary, approval for the following is sought:

- Partial clearing of the site of vegetation not already approved under DA-17-01780;
- Site preparation works and earthworks and installation of services to enable the construction of the data centre;
- Construction of a 5 storey 96MW data centre facility including associated mechanical, electrical and water infrastructure, along with 46 diesel generators required in order to ensure the proper and safe functioning of the facility;

- Construction of a vehicular access from Reservoir Road, internal roads, loading areas and on-site car parking; and
- Landscaping works, including the establishment of conservation area located to the west of the site.



Figure 2: Data centre site plan

1.2 Secretary's Environmental Assessment Requirements (SEARS)

This report provides an assessment of site contamination risk and responds to the Secretary's Environmental Assessment Requirements (SEARs) issued by DPE on 2 June 2023. An outline of the SEARs relevant to this DSO assessment, and how they have been responded to, is summarised in the table below.

Table 1: SEARS requirement.

Issue and Assessment Requirements	Where addressed
Soils and Water – characterisation of the nature and extent of any contamination on the site and surrounding area	DSI Report – Section 7 – Section 9

1.3 Background

MA has previously completed a review (MA, 2020a, ref. P1907521JC01V01) of past contamination investigations undertaken at the site, including a Stage 1 / 2 Preliminary Contamination Investigation completed by Meinhardt (2017, ref. 116786), and a



photographic archival report of a former heritage listed service station at the site completed by EMM Consulting (2017, ref. J17099RP1).

Subsequently, MA completed a limited preliminary intrusive investigation of the former service station (MA, 2020b, ref. P1907521JS03V01), which did not identify any significant contamination impact to the site from former service station operation.

A detailed review of existing site investigations is provided in Section 3.

The objective of this DSI is to identify and address remaining data gaps at the site, in order to provide a full characterisation of site contamination and assess suitability for the proposed development.

1.4 Scope of Works

The following scope of works was completed as part of this DSI:

- Review of existing site information to identify remaining contamination data gaps.
- Completion of a soil and groundwater sampling programme targeting identified data gaps and providing additional density for the site complying with NSW EPA (2022) sampling density guidelines.
- Laboratory testing of representative samples for contaminants of potential concern (COPC), and assessment against ASC NEPM (2013) (for soil) and ANZG (2018) (for groundwater).
- Preparation of a DSI report in accordance with the relevant sections of ASC NEPM (2013), NSW EPA (2017) and NSW EPA (2020), commenting on the suitability of the IA for the proposed development, and where required, providing recommendations for additional investigations.

2 Site Description

2.1 Site Details

Site information is summarised in Table 2, and site location and general surrounds are shown in Map 01 in Appendix A.

Table 2: Site details.

ltem	Description / Comment
Site address	6 Honeman Close, Huntingwood, NSW
Legal identifiers	Lot 5 in DP 1238405 (previously Lot 2 in DP 229466)
Surveyed site area	5.541 ha (SDS, 2016)
Local Government Area	Blacktown City Council
Current zoning	Zoned IN1 – General Industrial.
Site description	At the time of this DSI, the site was vacant, largely containing mature trees, grass and shrubbery. A dilapidated service station building and a demolished residential building were located in the south eastern corner, and a small shed in the central portion.
	A number of soil stockpiles were observed in the western and central north eastern portions of the site.
Surrounding land description	The site is bounded by Honeman Close to the south west, Great Western Highway to the north and Reservoir Road to the east.
	Surrounding land generally consisted of commercial buildings to the north and the east, and bushland to the west and the south.
Topography	The site is mildly sloped with a north westerly aspect, and grades generally between 5 – 10%. Site elevation ranges between approximately 76.0 mAHD in south east, and 60.0 mAHD in the north west (SDS, 2016).
Expected geology	The site is mapped within the Bringelly Shale outcrop zone, comprising shale, claystone, laminite, fine to medium grained lithic sandstone, and rare coal and tuff (Clark & Jones, 1991).
Acid Sulfate Soils	Available acid sulfate soils (ASS) risk maps indicates that site is located within an area mapped as 'no known occurrence' of ASS.
Surface hydrology	The site appeared to drain via overland flow, following site contours towards the Great Western Highway and Bungarribee Creek in the north west. A north west to south east aligned drainage channel is located in the northern portion of the site, with a small dam located along the channel alignment.

2.2 Hydrogeology

Review of WaterNSW Real-time Water Database, identified three groundwater bores were located within 500 m of the site. Available information for each bore is summarised in Table 3



Groundwater Bore Identification	Direction (and Distance)	Depth to Groundwater (mBGL)	Bore Use	Water-bearing Zone Strata
GW113284	North (130 m)	Not recorded	Monitoring	Not recorded
GW113285	North (140 m)	Not recorded	Monitoring	Not recorded
GW113286	North (165 m)	Not recorded	Monitoring	Not recorded

Table 3: Summary of Groundwater Bore Records

As part of previous geotechnical and contamination investigations, six monitoring bores have been installed at the site.

Groundwater quality sampling has been completed as part of this DSI and is reported in Section 7 of this report. Groundwater levels were measured during sampling works and reported a variable depth between 0.89mBGL – 3.88 mBGL.

Based on the topography surrounding the site, groundwater is inferred to flow in north western direction.



3 Previous Site Investigations

The following sections provide a summary of the findings of previous site investigations which have either been provided to MA or have been undertaken by MA. The summaries are provided in chronological order based on the date of investigation. Reports reviewed for this DSI include the following:

- Meinhardt (2017) *Stage 1 and 2 Preliminary Contamination Assessment: 6 Honeman Close, Huntingwood, NSW*
- EMM Consulting (2017) *Photographic archival record report of former service station:* 6 Honeman Close, Huntingwood, NSW
- Martens and Associates (2020a) *Preliminary Review of Site Contamination for Due Diligence Assessment: 6 Honeman Close, Huntingwood NSW*
- Martens and Associates (2020b) *Preliminary Intrusive Investigation of Former Service Station for Due Diligence Assessment: 6 Honeman Close, Huntingwood NSW.*

3.1 Stage 1 and 2 Preliminary Contamination Assessment (Meinhardt, 2017)

The Meinhardt (2017) scope of works included a site history / background assessment (including aerial photo interpretation, assessment of various databases and dangerous goods search), and an intrusive subsurface investigation including soil and groundwater sampling.

Meinhardt (2017) identified the following onsite features as potential contamination risks based on the site information review:

- Building in southeast corner of the property (formerly used as a service station).
- Former shed / building which had been demolished in southeast portion of the site.
- Soil stockpiles along the drainage depression in the northeast of the site and also along the south western boundary.

A programme of testing was undertaken to assess potential soil and groundwater contamination. A variety of chemicals of potential concern (COPC) were analysed in consideration of the potential contamination risks identified. Testing methodology included 10 boreholes, 7 test pits, surface sampling of identified stockpiles and the development of 4 bores into groundwater monitoring wells. It is worth noting that Meinhardt did not specifically target the former service station in the southeast of the property.



Soil and groundwater samples were compared to relevant NSW EPA endorsed guidelines for commercial / industrial land use to assess the suitability of the proposed service station development.

Results from the Meinhardt (2017) investigation indicated the following:

- No fill material was recorded during borehole investigations (noting that Meinhardt did not provide any logs for test pits). Encountered soils are recorded as topsoils overlying residual clays and weathered rock.
- Potential asbestos containing material (PACM) was not observed during subsurface investigation. Preliminary laboratory testing for asbestos fines (presence / absence) also reported no observation of asbestos. Meinhardt noted that asbestos sampling was not completed in accordance with NEPM (2013) methodology but rather as a preliminary screening assessment.
- All soil sample results were below the (NEPM 2013) Health Investigation Levels (HILs) for commercial industrial (HILS D). A single sample collected from an existing soil stockpile exceeded ecological criteria adopted for the assessment.
- Concentrations of copper, manganese, nickel and zinc were reported in groundwater exceeding the adopted groundwater assessment criteria. Meinhardt attributed elevated metal concentrations to the site being located in an urban environment and results were indicative of the regional aquifer rather than any potential onsite sources of metal contamination.
- No beneficial uses of groundwater were identified onsite or down gradient of the site and the elevated metal concentrations were considered to be a low risk to future site users or down gradient sensitive receptors.
- Abandoned buildings in the southeast corner of the site were assessed by Meinhardt as most probably containing asbestos. Meinhardt concluded that further assessment of the site and remediation was not required, however, soils excavated during construction would need to be addressed in a waste management plan.

3.2 Photographic Archival Report of Former Service Station (EMM, 2017)

EMM (2017) prepared the above report as part of the heritage component of the statement of environmental effects (SEE) for the service station development proposal. The report was prepared to provide a photographic archival record of the existing structures which formed part of the former service station in the south eastern part of the site. The former services station has been identified as a heritage item within the Huntingwood Precinct DCP (adopted by Blacktown City Council in 2011).

The following points documented in EMM (2017) are considered relevant to potential contamination risk at the site:

- The service station was initially, before 1939, a roadside dinner and rest stop.
- From 1939, the site was upgraded to include bowser facilities and fuel storage tanks. No information is provided on fuel storage size or location.
- The site continued operating as a service station until the 1970s.

3.3 Preliminary Review of Site Contamination (MA, 2020a)

MA completed a preliminary review of site contamination information in June 2020 as part of a due diligence exercise. The scope of work included a review of the Meinhardt (2017) and EMM (2017) reports and a site walkover to assess the status of the site.

A site walkover was undertaken by an MA Senior Engineer on 1 July, 2020. Observations during the site walkover inspection significant to site contamination risk were noted as follows:

- A dilapidated service station building with canopy was observed in the south eastern portion of the site. Broken pieces of potential asbestos containing material (PACM) were observed on the ground surrounding the building.
- A demolished building was observed to the north of the dilapidated building, with residual piles of builders rubble including timber, steel and other building materials. Thick grass had grown through the demolished materials which hampered the visual assessment of this location.
- A fenced off area containing bee hives was observed in the central southern portion of the site. A small dilapidated shed constructed of PACM was observed to the north west of the fenced off area.
- A row of stockpiles, predominantly consisting of soil with trace anthropogenic material (including bricks, tile, concrete, steel drums and some plastics) was observed along the north east boundary of the site in the vicinity of identified stockpiles (SP02 04) identified by Meinhardt (2017).
- The majority of the site at the time of inspection contained mature trees with a thick understorey consisting of grass and small shrubs / saplings.
- A headwall discharged from the Reservoir Road onto the site at the eastern boundary. Stormwater appeared to drain through the site to the west, discharging to the Great Western Highway in the north west corner of the site.
- Access to the drainage depression in the north east and central north portions of the site was restricted at the time of inspection due to significant vegetation growth.
- Stockpiles of soil material were observed to along the western / south western boundary. The material appeared recently placed.

Based on the findings of document review and the site walkover, MA concluded that the following data gaps remain on site:

- A. Former service station: Former service station operation in the south eastern site portion may have introduced heavy metal and / or hydrocarbon contamination to site soils and groundwater. An underground petroleum storage system (UPSS) may be located in or around the service station building or canopy area, which if present would require full decommissioning, removal and validation.
- B. Former / existing buildings and sheds: Pesticides and heavy metals may have been used underneath buildings / sheds for pest control. Building construction is likely to include asbestos, zinc treated (galvanised) metals and lead based paints. Sheds may have previously been used to store fuels, oils and chemicals.
- C. Fill material: Stockpiles of fill material observed along the south western site boundary and fill material in the southern portion of the site has not been appropriately characterised in Meinhardt (2017). Fill material has the potential to contain a wide range of contaminants including hydrocarbons, heavy metals, pesticides, PCBs and asbestos.

3.4 **Preliminary Intrusive Investigation (MA, 2020b)**

Findings of the preliminary intrusive investigation of the former service station completed by MA (2020a) are summarised in Table 4

ltem	Description / Comment		
Overview and objectives	Investigation completed following identification of a former service station at the site in MA (2020a), to assess potential contamination risks associated with former service station operations.		
	The following scope of works was completed by MA on 2 September 2020:		
	• A single pass across the investigation area (being the location of the former service station) using a ferromagnetic locating device to screen for any potential UPSS.		
	• Excavation of three boreholes using a truck mounted hydraulic drill rig, to a maximum depth of 2.6 mbgl.		
	• Field screening of soil samples for volatile organic compounds (VOC) using a photo ionisation detector (PID), and collection of soil samples for laboratory testing.		
	• Collection of one material sample from the ground surface adjacent to the former service station building.		
Field observations	• Ferromagnetic screening did not identify any buried ferromagnetic objects within the investigation area. Given the age of the former service station, it would be expected that nay UPSS would be constructed from ferromagnetic material.		
	• The encountered soil profile consisted of topsoil overlying residual clays. Weathered shale was encountered from 1.8 mbgl.		
	• All samples reported less than 0.5 ppm for potential VOCs.		

Table 4: Preliminary intrusive investigation (MA, 2020b) summary.

ltem	Description / Comment		
	• No odours or soil staining was observed during borehole excavation.		
Laboratory Results	 COPC concentrations of all tested soils samples were well below ASC NEI (2013) criteria for commercial land use. 		
	• Chrysotile asbestos was reported within the collected material sample.		
Conclusions	Based on results of field observations and laboratory testing, the former service station has caused only minor environmental impact, and it is unlikely that any site wide contamination from former service station operation is present.		
	Positive identification of asbestos in the collected material sample indicates that the former service station building was constructed of ACM, which may be readily managed through standard demolition and construction practices.		

4 Conceptual Site Model

4.1 **Potential Sources of Contamination**

The following potential sources of contamination and associated COPC have been identified based on the findings of MA (2020a and 2020b) and targeted as part of this DSI.

Table 5: Potential contamination sources and associated COPC.

Source	Potential for Contamination	СОРС
Fill material	Soil stockpiles imported from unknown origins have been observed at the site which have the potential to introduce contamination to the site.	HM, TRH, BTEXN, PAH, OCP/OPP and asbestos
	Previous site intrusive investigation have generally targeted the eastern portion of the site and further sampling is required to confirm that no historical filling has occurred in currently untested areas of the site.	
Buildings and sheds	Given the time of construction, site buildings and sheds may have been constructed using potentially contaminating materials, and pesticides may have been used underneath building footprints.	HM, OCP/OPP and asbestos
Asbestos	PACM fragments were observed at the ground surface adjacent to existing site structures and at the surface of identified soil stockpiles.	Asbestos

4.2 **Potential Exposure Pathways and Receptors**

Table 6: Potential exposure pathways and receptors.

ltem	Description / Comment	
Affected Media and	Site soil is considered to be the most likely affected media within the IA.	
Mechanism of Contamination	Contamination risk to site groundwater may also exist due to historical land use as a service station noting that MA (2020b) preliminary investigations (limited to soil sapling only) concluded that potential impacts from former service station use appear to be limited.	
	Potential mechanisms for contamination include both 'top-down impacts' (such as use of pesticides and impacts to near surface soils from fill placement and hazardous building materials) and deeper subsurface releases from deep fill material if present.	
	Migration of contaminated groundwater from historical service station use may also be considered to be a potential mechanism of contamination.	
Potential Receptors	Potential on site human receptors include current and future site users and visitors, as well as future site workers involved in the removal of existing structures and construction of the proposed development.	
	Potential off site human receptors include current and future users of adjacent land.	
	Potential ecological receptors include flora and fauna that may inhabit or migrate through the site and adjacent land. Bungarribee Creek to the north west of the	

ltem	Description / Comment	
	site is the nearest ecological receptor which may be impacted by potential groundwater contamination.	
Potential Exposure Pathways	 Potential exposure pathways include: Direct contact with and / or ingestion of contaminated soil / groundwater. Ingestion or inhalation of dust during construction works or during future use of the site. 	
	• Vapour intrusion into the proposed building from soil contaminated with volatile and semi volatile contaminants.	



5 Sampling Analytical and Quality Plan

A Sampling Analytical and Quality Plan (SAQP) was developed to ensure that data collected for this DSI is representative and provides a robust basis for site assessment decisions. Preparation of the SAQP was completed in general accordance with ASC NEPM (2013) methodology and includes:

- Data quality objectives (DQO).
- Data quality indicators (DQI).
- Sampling methodologies and storage procedures.
- QA / QC.

The SAQP is summarised in the following sections.

5.1 Data Quality Objectives

DQO were prepared as statements specifying qualitative and quantitative data required to support project decisions. DQO were prepared in general accordance with ASC NEPM (2013), NSW EPA (2017) and NSW EPA (2020) guidelines, and are presented in Table 7.

ltem	Description		
Step 1 Stating the problem	This DSI has been conducted to provide a characterisation of potential contamination within the site that may be accessible to sensitive receptors, prior to construction of the proposed data centre development. The DSI has targeted identified data gaps based on review of existing site contamination investigation data.		
Step 2 Identifying the decision(s)	To assess the contamination risk of the site, decisions are to be made based on the following questions: What is the contaminant exposure pathway? Has previous or current site use impacted the site that may pose a risk to humans or the environment for future land use? Does the IA require remediation or management measures to be undertaken?		
Step 3 Identifying inputs to the decision	 The inputs to the assessment include: Soil and groundwater sampling at nominated locations across the site. Laboratory analytical results for relevant COPC. Assessment of analytical results against site suitable guidelines.		
Step 4 Defining study boundaries	 Study boundaries are as follows: Lateral - Lateral boundary of the assessment is defined by the site boundary. Vertical - Vertical boundary is governed by the maximum depth reached during subsurface investigations. 		

Item	Description	
	 Temporal – This DSI is the third round of soil sampling and second round of groundwater sampling completed at the site. 	
Step 5	The decision rule for this investigation is as follows:	
Developing decision rules	If the concentration of contaminants exceeds the adopted assessment criteria, a risk assessment will be required.	
	If the risk is deemed unacceptable, further investigations to remediate and / or manage onsite impacts will be undertaken.	
Step 6 Specifying limits on decision errors	Guidance found in ASC NEPM (2013) Schedule B2 regarding 95% upper confidence limit (UCL) states that the 95% UCL of the arithmetic mean provides a 95% confidence level that the true population mean will be less than or equal to this value. Therefore a decision can be made based on a probability that 95% of the data collected will satisfy assessment criteria. A limit on decision error will be 5% that a conclusive statement may be incorrect.	
Step 7 Optimising sampling design	Sampling locations shall provide even coverage across the site, aiming to target identified potential contaminant sources. Sampling shall attempt to ensure that critical locations are assessed, sampled, and analysed for appropriate contaminants of concern.	
	Sampling locations were set subject to site access and selected using a combination judgemental and systematic sampling across the site.	
	In combination with exiting site data, a sampling density generally meeting the NSW EPA (2022) Sampling Design Guidelines has been achieved based on the site area.	

5.2 Data Quality Indicators

In accordance with NSW EPA (2017), the investigation data set has been compared with DQI outlined in Table 8 to ensure that collected data meets the project needs and that DQO have been met.

Assessment Measure (DQI)	Comment	
Precision – A measure of the variability (or reproducibility) of data.	Precision was assessed by reviewing a blind field duplicated sample set through the calculation of the relative percent difference (RPD).	
	Data precision was deemed acceptable where results are 0 - 10 x EQL or where RPD was <50% (for 10 - 30 x EQL) or <30% (for >30 x EQL).	
	Exceedance of this range may still be considered acceptable where heterogeneous materials were sampled.	
Accuracy – A measure of the closeness of reported data to the "true value".	 Data accuracy was assessed by: Field spikes and blanks. Laboratory duplicate samples. 	
Representativeness – Confidence that data is representative of each media present on the	To ensure data representativeness the following field and laboratory procedures were followed:	
site.	 Design and implementation of the sampling program completed in accordance with MA standard operating procedures (SOP). 	

Table 8: Data quality indicators.

Assessment Measure (DQI)	Comment	
	 Trip blank and trip spike samples used for volatiles during field sampling to ensure no cross contamination or laboratory artefacts. 	
	 Laboratory hold times met, and sample handling and transportation completed in accordance with MA SOP. 	
Completeness – A measure of the amount of usable data from a data collection activity.	To ensure data set completeness, the following is required:	
	 Confirmation that all sampling methodology was completed in general accordance with the MA SOP. 	
	• Provision of COC and receipt forms.	
	 Provision of results from all laboratory QA/QC samples (lab blanks, trip blank and trip spike, lab duplicates). 	
	 NATA accreditation stamp on all laboratory reports. 	
Comparability - Confidence that data may be	Data comparability was maintained by ensuring that:	
considered to be equivalent for each sampling and analytical event.	 All site sampling events undertaken following methodologies outlined in MA SOP and published guidelines. 	
	 NATA accredited laboratory methodologies followed for all laboratory analysis. 	

5.3 Investigation and Sampling Methodology

Site investigation and soil sampling was completed to meet the project DQO, and is summarised in Table 9.

ltem	Description		
Fieldwork summary	Soil investigations were completed on 4 October 2022, and involved:		
	 Excavation of thirty test pits (TP101 – TP130) using a combination of an excavator and a hand spade. The maximum depth of investigation was generally 1.0 mBGL. 		
	• Eight of the thirty test pits (TP109 – TP111 and TP118 – TP122) were excavated directly into soil stockpiles identified by MA in previous site walkovers along the western / southwestern site boundary.		
	• Collection of representative soil samples for laboratory analysis.		
Collect	• Collection of duplicate soil sample for QA / QC purposes.		
	Groundwater sampling works were completed on 12 October 2022, and involved:		
	 Purging of groundwater wells at the site (MW01 – MW03 and MW05 – MW06) using a peristaltic low flow pump. MW04 was not samples during this DSI. 		
	• Collection of groundwater samples in laboratory supplied bottles.		

 Table 9: Investigation and sampling methodology.

ltem	Description			
	Collection of one duplicate groundwater sample for QA / QC purposes.			
	 Assessment of water quality parameters using a flow through cell and water quality meter. 			
Soil sampling	Soil logging and sampling was completed by an experienced MA environmental consultant using a clean pair of nitrile gloves for each sample. Samples were collected directly from the centre of the excavator bucket, or for shallow samples, directly from test pit walls.			
	Each sample was placed into a laboratory supplied, 250 mL glass jar with no headspace to limit volatile loss and labelled with a unique identification number.			
	Sample locations are provided in Map 04 in Appendix A and test pot logs are provided in Appendix D.			
Groundwater sampling	Groundwater sampling was completed by the MA environmental consultant using a clean pair of nitrile gloves or each sample.			
	Wells were purged using a peristaltic low flow pump, with water quality parameters assessed through a flow cell until pH, EC and temperature measurements stabilised.			
	Samples were collected in laboratory supplied bottles with appropriate preservations. Samples for metal analysis were laboratory filtered.			
	Field sampling sheets are provided in Appendix I. Equipment calibration records are provided in Appendix J.			
QA / QC sampling	QA / QC samples were collected for the initial investigation as follows:			
	 Three duplicate samples for soil and one for groundwater were collected for intra-laboratory analysis during investigations. 			
	 Trip blank and trip spikes samples were used during sampling. 			
Sample handling and	Sample collection, storage and transport was conducted according to MA SOP.			
transport	Collected soil samples were placed immediately into an ice chilled cooler-box.			
	Samples were dispatched to a NATA accredited laboratory (Envirolab Pty Ltd) under chain of custody documentation within holding times.			
	Asbestos in material samples were completed by Australian Safer Environment and Technology (ASET) a NATA accredited laboratory.			

5.4 Laboratory Analytical Suite

A summary of soil laboratory analyses completed as part of this DSI is provided in Table 10.

COPC	Primary Samples Analysed	QA/QC Samples Analysed
BTEXN	30	1 trip spike, 1 trip blank
TRH	30	1 trip blank
РАН	30	-
Heavy metals ¹	30	3 duplicate samples
OCP	30	-
OPP	30	

Table 10: Summary of soil laboratory analyses.

СОРС	Primary Samples Analysed	QA/QC Samples Analysed
РСВ	30	-
Asbestos in soil ²	30	-
Asbestos in material	3	-

¹ Arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.

² Asbestos in soil sampling was completed using Australian Standard (AS) 4964 -2004: Method for the qualitative identification of asbestos in bulk samples.

A summary of groundwater laboratory analyses completed as part of this DSI is provided in Table 10.

Table 11: Summary of groundwater laboratory analyses.

СОРС	Primary Samples Analysed	Duplicate Samples Analysed
BTEXN	5	-
TRH	5	-
РАН	5	-
Heavy metals ^	5	1 duplicate

[^] Arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.

6 Site Assessment Criteria

SAC derived from ASC NEPM (2013) were adopted for this DSI and are summarised in Table 12.

Media	Adopted Guidelines	Applicability
Soil	ASC NEPM	Health investigation levels (HIL)
	(2013)	HIL D – Commercial / industrial.
		Health screening levels (HSL)
		HSL D – Comme r cial / industrial (clay).
		Ecological Investigation Levels (EIL) and Ecological Screening Levels
		EILs and ESLs for commercial / industrial land use have been adopted. Site specific EILs for selected metals were derived using methodology from ASC NEPM (2013) for the protection of terrestrial ecosystems for commercial / industrial land use.
		The following conservative physiochemical properties and considerations were applied based on site observations and local background values provided by the NSW eSPADE website:
		o pH: 6
		 CEC: 15 cmolc/kg
		 Contamination considered as 'aged' (>2 years)
		 Site considered to be an area of 'high' traffic volumes
		The ESL for benzo(a)pyrene has been increased form the value present in in NEPM (2013) based on updated CRC Care (2017) guidelines.
		Ecological Screening Levels (ESL)
		Commercial / industrial (fine soils)
		Management Limits
		Commercial / industrial (fine soils).
		Asbestos
		Assessed on a detect / non-detect basis in accordance with AS4964.
		No visible asbestos in surface soil.
Groundwater	AZNG	Default guideline values (DGV) for 95% species protection in fresh water.
	(2018) ASC NEPM (2013)	NEPM (2013) groundwater HSLs for vapour intrusion were also used to assess potential human health impacts from residual vapours resulting from petroleum, BTEX and naphthalene impacts. HSL D for commercial / industrial land use were applied.

Table 12: Site assessment criteria.

7 **Results**

7.1 Site Conditions

7.1.1 General Subsurface Conditions

The following subsurface conditions were encountered at a majority of the test pit locations during soil investigations:

- Unit A: Topsoil comprising silty clays encountered up to an approximate depth of 0.3 mBGL.
- Unit B: Residual soils comprising clay up to the maximum investigation depth of 1.0m mBGL.

Outside of testing within site stockpiles (as summarised below) no visual or olfactory indications of potential contamination (such as deep fill, anthropogenic inclusions or soil staining) was identified during test pitting works.

7.1.2 Stockpile Conditions

Two separate stockpiles were identified during previous site investigation as outlined in Map 03 in Appendix A.

'Stockpile 1' was estimated to have an approximate volume of 180 – 200 m³. A visual assessment of the surface of Stockpile 1 found evidence of building waste (brick, concrete and glass). A cement fibre sheeting fragment was also observed at the surface and collected for laboratory assessment for asbestos (sample id AMC01). Test pitting within the stockpile found silty sandy clay fill material with building waste inclusions including cement fibre sheeting fragments. Two material samples (ACM 02 and ACM 03) were collected from TP120 and TP121 for laboratory assessment.

'Stockpile 2' was estimated to have an approximate volume of 50 -70 m³. A visual inspection of the surface of the stockpile found it to be free of visual evidence of contamination. Test pitting within the stockpile identified ripped shale and sandy clay material. No anthropogenic inclusions or other visual signs of potential contamination were identified withing stockpile test pits.

Test pit locations are shown in Map 04 in Appendix A, and detailed test pit logs are provided in Appendix D.

7.2 Groundwater Field Parameters

A single GME was conducted on five of the existing onsite wells on 12 October 2022. Standing water levels (SWLs) were measured within each well prior to well purging, the results of which were recorded with well purge volumes and field-based water parameters. A summary of the recorded field data is presented in Table 13.

Well ID	SWL (mBTOC)	DO (mg/L)	Field pH	Field EC (µS/cm)	Temp. (°C)	Redox (mV)	Odour / Turbidity
MW01	3.88	2.24	6.35	491	17.7	141.2	No odour / sheen, slightly turbid
MW02	3.44	0.15	6.63	961	16.8	190.2	No odour / sheen, slightly turbid
MW03	1.78	0.11	6.64	1906	16.3	190.4	No odour / sheen, slightly turbid
MW05	0.89	0.24	6.42	675	16.8	71.3	No odour / sheen, slightly turbid
MW06	1.89	0.20	6.79	1917	16.4	192.7	No odour / sheen, slightly turbid

 Table 13:
 Summary of groundwater field parameters

7.3 Analytical Results

Laboratory analytical results (Envirolab report no. 304876) for soil and groundwater samples collected as part of this DSI are summarised in Table 14 and Table 15, and laboratory documentation is provided in Appendix H.

 Table 14: Soil analytical results.

Analyte	Category
Heavy metals	НЦ
	All results below SAC.
	EIL
	All results below SAC.
TRH / BTEXN	HSL
	All results below SAC.
	ESL
	All results below SAC.
	Management Limits
	All results below SAC.
OCP / OPP	НЦ
	All results below SAC.
	EIL
	All results below SAC.

Analyte	Category
РАН	HL
	All results below SAC.
	HSL
	All results below SAC.
	EIL
	All results below SAC.
	ESL
	All results below SAC.
РСВ	HIL
	All results below SAC.
Asbestos in soil	No asbestos detected.
Asbestos in material	Material samples ACM01, AMC02 and ACM 03 reported positive for the presence of asbestos.

Table 15: Groundwater analytical results.

Analyte	Category	
Heavy metals	Laboratory analytical results for metals were reported below laboratory detection limits (<lor) adopted="" and="" at="" each="" except="" following:<="" for="" location,="" monitoring="" sac="" td="" the="" well=""></lor)>	
	 ANZG (2018) cadmium criteria (2 μg/L) was exceeded at MW03 (4 μg/L) 	
	 ANZG (2018) copper criteria (1.4 μg/L) was exceeded at MW01 (9 μg/L), MW02 (3 μg/L) and MW05 (2 μg/L). 	
	 ANZG (2018) nickel criteria (11 μg/L) was exceeded at MW06 (16 μg/L). 	
	 ANZG (2018) zinc criteria (8 μg/L) was exceeded at MW01 (110 μg/L), MW02 (13 μg/L), MW05 (1,300 μg/L) and MW06 (12 μg/L). 	
TRH / BTEXN	ANZG 95% Freshwater	
	All results below SAC.	
	HSL	
	All results below SAC.	
РАН	ANZG 95% Freshwater	
	All results below SAC.	
	HSL	
	All results below SAC.	

7.4 Data QA / QC

Field QA / QC data was collected as per the SAQP. A review of QA / QC procedure has been completed and is presented in the data validation report in Appendix G.

The report concludes that data collected is suitable for the purposes of this assessment.



8 **Discussion**

8.1 Discussion of Results

This DSI has been completed by MA to evaluate potential land contamination at 6 Honeman Close, Huntingwood that may pose a risk to future site receptors associated with commercial / industrial land use following a proposed data centre development.

Several potential sources of contamination, as outlined in Section 4, were identified by review of previous environmental investigations (by MA and others) which were the primary focused of this DSI. Potential contamination sources identified included the presence of asbestos (associated with the existing site structures and soil stockpiles), potential application of chemicals for pest control beneath existing site structures, former use of part of the site as a service station, presence of soil stockpiles from unknown origins and the potential for additional areas of site filling to be present.

To assess potential contamination risks, a soil and groundwater sampling program was undertaken which included the excavation of 30 test pits, soil sampling and laboratory analysis and the completion of a GME to assess site groundwater quality.

Soil sampling locations were selected based on a combination of judgmental sampling (i.e. targeting soil stockpiles) and systematic sampling to ensure appropriate site coverage.

Test pits across the site (excluding test pits targeting existing stockpiles) encountered natural soils with no visual or olfactory evidence of contamination. No areas of *insitu* fill material were identified during test pitting works. Representative soil samples collected from these test pits reported contaminant concentrations generally below the laboratory detection limit and below the adopted human health and ecological criteria for commercial / industrial land use.

Eight test pits were excavated within the two stockpiles identified onsite. TP09 – TP11 were excavated within 'stockpile 2' and TP118 – TP122 were excavated within 'stockpile 1' as shown in Map 04 in Appendix A.

Stockpile 2 was found to consist of natural ripped shale material with no evidence of anthropogenic inclusion or other potential signs of contamination. Soil samples collected from Stockpile 2 reported contaminant concentrations generally below the laboratory detection limit and below the adopted human health and ecological criteria for commercial / industrial land use.

Stockpile 1 was found to consist of silty sandy clay fill material with building waste inclusions including cement fibre sheeting fragments both within the stockpile material and at the surface of the stockpile. All soil samples collected from Stockpile 01 reported contaminant concentrations bellow the adopted human health and ecological criteria for commercial / industrial land use. All three material (cement fibre sheeting) samples



collected from the stockpile (including the stockpile surface) reported a positive detection of asbestos. Asbestos in soil sampling did not identify asbestos fines within stockpile 1.

A survey of both stockpile extents is provided in Appendix K.

Laboratory results from the GME did not identify mobile organic contaminants in groundwater at the site that could pose a risk to future users associated with the proposed site development. Heavy metals were generally at low concentrations in groundwater, except for cadmium, copper, nickel and zinc, which exceeded adopted ecological groundwater criteria at some locations. It is noted that heavy metal results obtained as part of this DSI are similar to those reported by Meinhardt in 2017. Generally, exceedances of adopted criteria were minor and elevated metals are ubiquitous in groundwater within long-standing urban areas of Sydney. We considered that the reported levels are likely consistent with regional groundwater quality. As no beneficial reuse of groundwater receiving environments have been identified, there is a low risk to future site users and no further assessment or management of groundwater is considered to be necessary to assess the suitability of the site from a contamination risk perspective.

8.2 Updated Conceptual Site Model

Due to the positive detection of asbestos containing material both at the surface and within soil stockpile 01 and the presence of confirmed ACM fragments at the soil surface adjacent to existing site structures (as documented in MA, 2020b), a source – pathway – receptor linkage is currently present which will require management prior to the site being considered suitable for the proposed future land use. It is expected that management of the asbestos impacted stockpile and surficial ACM fragments associated with dilapidated site structures can be achieved through appropriate waste classification (of the soil stockpile) and offsite disposal during site demolition and clearing works.

We note that intrusive investigations were limited to areas of accessible soil, and data gaps are present within existing building footprints. Additional assessment of these areas will be required following site demolition and clearing works.



9 **Conclusion and Recommendations**

Based on the findings of this investigation and subject to the limitations in Section 10, we consider that the site can be made suitable for the proposed development subject to the management of ACM impacts identified within stockpile 1 and at the surface of the site adjacent to existing dilapidated structures.

The following recommendations are made regarding site management requirements:

- Prior to the demolition of existing site structures, a hazardous materials survey should be completed to ensure that all hazardous materials are identified and appropriately managed during demolition works.
- Following demolition of existing site structures, an inspection of the building footprints should be undertaken by a suitably qualified environmental consultant. Additional soil sampling for COPC outlined in Section 4 should be undertaken to confirm that no hotspot contamination is present which requires further management.
- An asbestos management plan (or similar) should be prepared to manage the offsite disposal process of the asbestos impacted stockpile (stockpile 1) and surficial ACM fragments. A formal waste classification assessment in accordance with the NSW EPA (2014) *Waste Classification Guidelines* will be required prior to the removal any soil material from site. A survey of the extent of Stockpile 1 is provided in Appendix K.
- An asbestos clearance certificate / validation report is to be prepared by a suitably qualified consultant following the demolition and removal of site structures, surficial ACM fragments and ACM impacted soil stockpile (stockpile 1).

We consider that the site can be made suitable for the proposed development following completion of and pending the results of the above recommended additional site works.



10 Limitations Statement

This DSI was undertaken in line with current industry standards.

It is important, however, to note that no land contamination study can be considered to be a complete and exhaustive characterisation of a site nor can it be guaranteed that any assessment shall identify and characterise all areas of potential contamination or all past potentially contaminating land uses. Therefore, this report should not be read as a guarantee that no contamination shall be found on the site. Should material be exposed in future which appears to be contaminated or inconsistent with natural site soils, additional testing may be required to determine the implications for the site.

Martens & Associates Pty Ltd has undertaken this assessment for the purposes of the current development proposal. No reliance on this report should be made for any other investigation or proposal. Martens & Associates Pty Ltd accepts no responsibility and provides no guarantee regarding the characteristics of areas of the site not specifically studied in this investigation.



11 References

- Australian and New Zealand Governments and Australian State and Territory Governments (2018) *Australian and New Zealand Guidelines for Fresh and Marine Water Quality.* (ANZG, 2018).
- Australian and New Zealand Environment and Conservation Council & Agriculture and Resource Management Council of Australia and New Zealand (2000) *Australian and New Zealand Guidelines for Fresh and Marine Water Quality.* (ANZECC & ARMCANZ, 2000).
- Clark, N.R. and Jones, E.C. (1991) *Penrith 1:100,000 Geological Sheet 9030.* New South Wales Geological Survey, Sydney. (Clark & Jones, 1991).
- DEM (2021) Preliminary Architectural Plans: SYD01 DC, 6 Honeman Close, Huntingwood NSW. Ref. 4555-01, dated 5/03/2021. (DEM, 2021).
- EMM Consulting (2017) Photographic archival record report of former service station: 6 Honeman Close, Huntingwood NSW. Ref. J17099RP1, dated 21/08/2021. (EMM, 2017).
- Martens and Associates (2020a) *Preliminary Review of Site Contamination for Due Diligence Assessment: 6 Honeman Close, Huntingwood NSW.* Ref. P1907521JC01V01, dated 20/07/2020. (MA, 2020a).
- Martens and Associates (2020b) *Preliminary Intrusive Investigation of Former Service Station for Due Diligence Assessment:* 6 *Honeman Close, Huntingwood NSW.* Ref. P1907521JC03V01, dated 7/09/2020. (MA, 2020b).
- Meinhardt (2017) *Stage 1/2 Preliminary Contamination Investigation, 6 Honeman Close, Huntingwood, NSW.* Ref. 116786, dated March 2017. (Meinhardt, 2017).
- National Environment Protection Council (1999, amended 2013) *National Environmental Protection (Assessment of Site Contamination) Measure.* (ASC NEPM, 2013).
- NSW Department of Environment & Heritage (eSPADE, NSW soil and land information), www.environment.nsw.gov.au.
- NSW EPA (2014) Waste Classification Guidelines
- NSW EPA (2017) 3rd Ed. Contaminated Land Management: Guidelines for the NSW Site Auditor Scheme.
- NSW EPA (2020) Contaminated Land Guidelines: Consultants Reporting on Contaminated Land.
- NSW EPA (2022) Contaminated Land Guidelines: Sampling Design.



Appendix A – Site Maps



0 40 80 120 160 200 m

1:4000 @ A3

Viewport A

Source: Google Maps



Map Title / Figure: Site Overview

Map 01 6 Honeman Close, Huntingwood, NSW Data Centre Development Detailed Site Investigation LCI Consultants 06/12/2022

Map Site Project Sub-Project Client Date





1:2000 @ A3 Viewport B Source: Nearmap (2022)



Map Title / Figure: Site Location

6 Honeman Close, Huntingwood, NSW Data Centre Development Detailed Site Investigation LCI Consultants 06/12/2022

Map 02

Мар Site Project Sub-Project Client Date





1:2000 @ A3 Viewport B Source: Nearmap (2022)



Map Title / Figure: Identified Stockpiles

Map 03 6 Honeman Close, Huntingwood, NSW Data Centre Development Detailed Site Investigation LCI Consultants 06/12/2022

Map Site Project Sub-Project Client Date




1:2000 @ A3 Viewport B Source: Nearmap (2022)



Map Title / Figure: MA 2022 Test Pit Locations

Map 04

6 Honeman Close, Huntingwood, NSW Data Centre Development Detailed Site Investigation LCI Consultants 06/12/2022

Site Project Sub-Project Client Date

Мар





1:2000 @ A3 Viewport B Source: Nearmap (2022)



Map Title / Figure: Groundwater Monitoring Well Locations

Map 05

6 Honeman Close, Huntingwood, NSW Data Centre Development Detailed Site Investigation LCI Consultants 06/12/2022

Мар Site Project Sub-Project Client Date



60 80 100 m 0 20 40

1:2000 @ A3 Viewport B Source: Nearmap (2022)



Map Title / Figure: Previous Site Testing

6 Honeman Close, Huntingwood, NSW Data Centre Development Detailed Site Investigation LCI Consultants 06/12/2022

Map 06

Мар Site Project Sub-Project Client Date



Appendix B – Proposed Development Plans



4555-01 rev no. SSD-arsk0001 A02

drwg no.

planning, urban design, architecture, landscape architecture, interior design p: po box 5036 west chatswood nsw 1515 t: (02) 8966 6000 w:www.dem.com.au



Appendix C – Plates

martens



Plate 3: Dilapidated site shed with ACM fragments at the ground surface.



Plate 4: Surface view of part of Stockpile 1 showing building waste.

martens



Plate 5: Visible ACM at the surface of Stockpile 1.



Plate 6: ACM fragment identified during stockpile 1 test pitting works.





Plate 7: Indicate natural soil profile.



Appendix D – Test Pit Logs



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305227.3, 6258096.8 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations		
		7521/TP101/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions		
- 0.2 - - 0.3					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions		
0.4 		7521/TP101/0.4-0.5	Soil					
0.5 	Not Observed							
- 0.6 -								
0.7 								
- 0.8								
0.9 								
1				///	END OF TEST PIT			
 1.1 								
1.2								
_ 1.3 								
1.4 								



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305260.0, 6258078.2 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations	
		7521/TP102/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions	
- 0.2 - - - - - - 0.3 - -					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions	
- 0.4	Not Observed	7521/TP102/0.4-0.5	Soil				
- -							
0.8							
- - - - - - - - -							
- ' - - - 1.1 -					END OF TEST PIT		
- - - - -							
- 1.3 - - - - - - 1.4 - -							
_							



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305234.9, 6258064.5 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

сом	COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations		
- 0.1		7521/TP103/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions		
- 0.3					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions		
- 0.4	Not Observed	7521/TP103/0.4-0.5	Soil					
- 0.6								
_ 1				///	END OF TEST PIT			
- - 1.1								
1.2 								
- 1.3 - - - - 1.4								
1.4 - - -								



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305252.1, 6258042.5 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations	
		7521/TP104/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions	
- 0.2 - - - - - - 0.3					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions	
- 0.4	Not Observed	7521/TP104/0.4-0.5	Soil				
- 							
- - - - - - - - - -							
					END OF TEST PIT		
- 1.2 							
- 1.3 - - - - - 1.4 -							
_							



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305228.1, 6258041.7 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	COMMENTS								
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations			
		7521/TP105/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions			
- 0.2 					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions			
- 0.4	Not Observed	7521/TP105/0.4-0.5	Soil						
- 					END OF TEST PIT				
- - 1.1									
- 1.2 									
- 1.3 - -									
- 1.4 - -									



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305251.1, 6258093.5 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations	
_				$\left\{ \left\{ \right\} \right\}$	TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions	
- 0.1		7521/TP106/0.1-0.2	Soil				
- 0.2 - -					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions	
- 0.3 							
- 0.4		7521/TP106/0.4-0.5	Soil				
 0.5 	Not Observed						
 0.7 							
- 0.8 							
0.9 							
1 				<u>, ' /</u>	END OF TEST PIT		
- 1.1 							
1.2 							
_ 1.3 							
1.4 							



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305200.3, 6258123.9 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations	
- 0.1		7521/TP107/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions	
- 0.2					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions	
0.4 0.5 	Not Observed	7521/TP107/0.4-0.5	Soil				
- 0.6							
- 0.8 							
- - - - - - - -							
- 							
- 1.4							
L							



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305200.3, 6258123.9 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

сом	COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations		
- 0.1		7521/TP108/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions		
- 0.2 - - - 0.3 -					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions		
	Not	7521/TP108/0.4-0.5	Soil					
0.5 0.6	Observed							
- - - - - - 0.7								
- 0.8								
- 0.9 - - - - 1								
- 1 - -					END OF TEST PIT			
 1.1 								
- 1.2 								
_ 1.3 								
1.4 								



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	COMMENTS								
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations			
- 0.1		7521/TP109/0.2 - 0.3	Soil		FILL: Ripped Rock, sandstone gravels	No soil staining; no odors; no anthropogenic inclusions			
- 0.3 0.4					TOPSOIL · Silty Clay· medium plasticity brown trace	No soil staining: no odors: no			
- - - - - - - - - 0.6	Not Observed	7521/TP109/0.5-0.6	Soil		END OF TEST PIT	anthropogenic inclusions			
- 0.7									
- - - - - - - -									
- 1 - - - - 1.1 -									
- 1.2 									
- - 1.4 - -									



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305128.9, 6258168.1 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

сом	COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations		
- 0.1		7521/TP112/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions		
- 0.2 - - - 0.3 -					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions		
- 0.4	Not	7521/TP112/0.4-0.5	Soil					
 0.6	0.0001104							
- 0.7								
0.9								
_1				r.′.⁄	END OF TEST PIT			
 1.1 								
1.2 								
_ 1.3 								
- 1.4 - - -								



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305129.1, 6258130.8 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COMMENTS							
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations	
- 0.1		7521/TP113/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions	
- 0.2					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions	
0.4 	Not Observed	7521/TP113/0.4-0.5	Soil				
- 0.6							
- 1				///	END OF TEST PIT		
- - 1.1 - -							
- 1.2 							
- 1.3 - - - - 1.4							
- - -							



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM COORDINATES 305121.1, 6258198.3 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

сом	COMMENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.1 0.2		7521/TP114/0.1-0.2	Soil	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
 0.3					silty CLAY; high plasticity, red/brown	No soil staining; no odors; no
0.4		7521/TP114/0.4-0.5	Soil			anthropogenic inclusions
0.5 	Not Observed					
0.6						
0.7 						
0.8 						
0.9 						
1				Z	END OF TEST PIT	
- - 1.1 -						
 1.2 						
_ 1.3 _ _						
1.4 						



METHOD Spade TOTAL DEPTH 0.5 DATE 4/10/22 LOGGED BY BM COORDINATES 305121.1, 6258198.3 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.05		7521/TP115/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
- 0.2 - 0.2 - 0.3 - 0.3	Not Observed				silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
- 0.4					END OF TEST PIT	
0.55						
0.7						



METHOD Spade TOTAL DEPTH 0.5 DATE 4/10/22 LOGGED BY BM COORDINATES 305121.1, 6258198.3 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.05		7521/TP116/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
0.2	Not Observed				silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
- 0.4 - 0.4 - 0.5		7521/TP116/0.4-0.5	Soil		END OF TEST PIT	
- 0.5t - 0.6 - 0.6t						
- - - - - - - - - - - - - - - - - - -						
0.85						



METHOD Spade TOTAL DEPTH 0.5 DATE 4/10/22 LOGGED BY BM COORDINATES 305251.1, 6258093.5 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.05		7521/TP117/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
0.2	Not Observed				silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
- 0.4		7521/TP117/0.4-0.5	Soil		END OF TEST PIT	
0.5						
- 0.7 - 0.7 - 0.8						
0.8						



METHOD Excavator TOTAL DEPTH 1.0 DATE 4/10/22 LOGGED BY BM

COORDINATES COORD SYS SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
					FILL: sandy Clay, brown trace gravels, building waste inclusions (brick, concrete, title, glass, cement fibre sheeting fragments)	No soil staining; no odors
- 0.2 - - - - 0.3		7521/TP118/0.2-0.3	Soil			
0.5	Not Observed	7521/TP118/0.5-0.6	Soil		silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
- 0.6 						
- 0.8						
0.9 						
					END OF TEST PIT	
 1.2 						
 1.3 						
1.4 						



METHOD Spade TOTAL DEPTH 0.5 DATE 4/10/22 LOGGED BY BM COORDINATES 305030.3, 6258299.6 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COM	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.0		7521/TP123/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
0.2	Not Observed				silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
0.4		7521/TP123/0.4-0.5	Soil			
0.5					END OF TEST PIT	
0.7						
0.8						



METHOD Spade TOTAL DEPTH 0.5 DATE 4/10/22 LOGGED BY BM COORDINATES 305030.3, 6258299.6 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COM	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.05		7521/TP124/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
0.2	Not Observed				silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
- 0.4 - 0.45		7521/TP124/0.4-0.5	Soil		END OF TEST PIT	
- 0.5 - 0.6 - 0.6						
- 0.7 - 0.7 - 0.8						
0.85						



METHOD Spade TOTAL DEPTH 0.5 DATE 4/10/22 LOGGED BY BM COORDINATES 305146.6, 6258268.7 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

COM	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.0		7521/TP125/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
0.2	Not Observed				silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
- 0.3		7521/TP125/0.4-0.5	Soil			
0.5					END OF TEST PIT	
0.7						
0.8						



METHOD Spade TOTAL DEPTH 0.5 DATE 4/10/22 LOGGED BY BM COORDINATES 305242.2, 6258187.7 COORD SYS EPSG:28356 SURFACE ELEVATION ≈ 68.5 mAHD CHECKED BY BM

СОМ	MENTS					
Depth (m)	Water	Samples	Sample Type	Graphic Log	Material Description	Additional Observations
0.0		7521/TP126/0.1-0.2	Soil		TOPSOIL: Silty Clay; medium plasticity, brown trace sand and gravels	No soil staining; no odors; no anthropogenic inclusions
0.2	Not Observed				silty CLAY; high plasticity, red/brown	No soil staining; no odors; no anthropogenic inclusions
- 0.3 0.4 0.4 0.4		7521/TP126/0.4-0.5	Soil			
0.5					END OF TEST PIT	
0.7						
0.8						



Appendix E – EIL Calculation Sheets



Inputs
Select contaminant from list below
Zn
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
15
Enter soil pH (calcium chloride method) (values from 1 to 14)
6
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only
Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration
7
Enter State (or closest State)
NSW
Enter traffic volume (high or low)

high

Outputs					
Land use	Zn soil-sp	ecific EILs			
	(mg contaminant	/kg dry soil)			
	Fresh	Aged			
National parks and areas of high conservation value	75	210			
Urban residential and open public spaces	190	520			
Commercial and industrial	280	750			





Inputs
Select contaminant from list below
Cu
Below needed to calculate fresh and aged ACLs
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)
15
Enter soil pH (calcium chloride method) (values from 1 to 14)
6
Enter organic carbon content (%OC) (values from 0 to 50%)
1
Below needed to calculate fresh and aged ABCs
Measured background concentration (mg/kg). Leave blank if no measured value
or for fresh ABCs only Enter iron content (aqua regia method) (values from 0 to 50%) to obtain estimate of background concentration 7
or for aged ABCs only
Enter State (or closest State)
NSW
Enter traffic volume (high or low)

high

Outputs			
Land use	Cu soil-specific EILs		
	(mg contaminant/kg dry soil)		
	Fresh	Aged	
National parks and areas of high conservation value	70	90	
Urban residential and open public spaces	120	220	
Commercial and industrial	170	310	



Inputs			
Select contaminant from list below			
Ni			
Below needed to calculate fresh and aged ACLs			
Enter cation exchange capacity (silver thiourea method) (values from 0 to 100 cmolc/kg dwt)			
15			
Below needed to calculate fresh and aged ABCs			
Measured background concentration (mg/kg). Leave blank if no measured value			
or for fresh ABCs only			
Enter iron content (aqua regia method)			
(values from 0 to 50%) to obtain estimate of background concentration			
7			
or for aged ABCs only			
Enter State (or closest State)			
NSW			
Enter traffic volume (high or low)			

high

Outputs			
Land use	Ni soil-specific EILs		
	(mg contaminant/kg dry soil)		
	Fresh	Aged	
National parks and areas of high conservation value	35	40	
Urban residential and open public spaces	95	220	
Commercial and industrial	160	380	



Appendix F – Laboratory Summary Tables



Appendix G – Data Validation Report

Sample Handling

Lab Report	Sample Chain of Custody (COC) Procedures	Sample Preservation	Sample Receipt Notification Matches COC	Samples Analysed Within Holding Time
307469-S	Pass	Pass	Pass	Pass
308146 - GW	Pass	Pass	Pass	Pass
ASET106213 – Material	Pass	NA	NA	NA

Precision / Accuracy

Lab Report	Analysed by NATA Laboratory	Trip Spike and Blank Used	Adequate Duplicates Analysed	Field Rinsate Analysed
307469-S	Pass	Pass	Pass	NA
308146 - GW	Pass	Pass	Pass	NA
ASET106213 – Material	Pass	NA	NA	NA

Trip spike and blank were reported within the acceptable recovery range.

Trip blank reported less than LOR for volatile analysis.

All soil samples were collected form the centre of the excavator buck and or the site of the test pit using a clean pair of nitrile gloves. Therefore, no rinsate was required during the soil sampling program.

Groundwater sampling was completed using dedicated sampling equipment at each location. Therefore, no rinsate was required during the GME.

Duplicates and Laboratory QA / QC

Lab Report	Field RPD	Laboratory Surrogate Recovery	Laboratory Duplicate RPD	Lab Blank and Matrix Spike Recovery	Laboratory Control Sample
307469-S	Fail	Pass	Pass	Pass	Pass
308146 - GW	Pass	Pass	Pass	Pass	Pass

RPD control limits between primary sample were met for all heavy metals with the exception of TP105/0-0.1 and duplicate sample DUP02 which slightly exceeded RPD limits for Arsenic and Copper. The concentrations of arsenic and copper in both primary and


duplicate samples are well below the adopted SAC. As such, the RPD exceedance is not considered grounds for rejecting the data set.



Appendix H – Laboratory

Documentation



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 307469

Client Details	
Client	Martens & Associates Pty Ltd
Attention	Ben McGiffin
Address	Suite 201, 20 George St, Hornsby, NSW, 2077

Sample Details	
Your Reference	P1907521: 6 Honeman Close Huntingwood
Number of Samples	59 SOIL
Date samples received	06/10/2022
Date completed instructions received	06/10/2022

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 Date of Issue

13/10/2022 13/10/2022

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *

Asbestos Approved By

Analysed by Asbestos Approved Analyst: Lucy Zhu Authorised by Asbestos Approved Signatory: Lucy Zhu **Results Approved By** Hannah Nguyen, Metals Supervisor Kyle Gavrily, Senior Chemist Liam Timmins, Organic Instruments Team Leader Lucy Zhu, Asbestos Supervisor Steven Luong, Senior Chemist Authorised By

Nancy Zhang, Laboratory Manager



vTRH(C6-C10)/BTEXN in Soil						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
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	%	87	83	88	82	77

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	TP106/0.1-0.2	TP107/0.1-0.2	TP108/0.1-0.2	TP109/0.2-0.3	TP110/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
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	%	83	81	87	84	84

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
TRH C6 - C9	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	%	89	86	89	88	79

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
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	86	88	89	85

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
TRH C6 - C9	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	86	74	84	78

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
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	84	88	84	84

vTRH(C6-C10)/BTEXN in Soil			
Our Reference		307469-58	307469-59
Your Reference	UNITS	Trip Spike	Trip Blank
Date Sampled		04/10/2022	04/10/2022
Type of sample		SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022
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	104%	<0.2
Toluene	mg/kg	102%	<0.5
Ethylbenzene	mg/kg	104%	<1
m+p-xylene	mg/kg	105%	<2
o-Xylene	mg/kg	105%	<1
Naphthalene	mg/kg	[NT]	<1
Total +ve Xylenes	mg/kg	[NT]	<1
Surrogate aaa-Trifluorotoluene	%	104	90

svTRH (C10-C40) in Soil						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C15 - C28	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<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	89	82	82	81

svirkh (C10-C40) in Soil						
Our Reference		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	TP106/0.1-0.2	TP107/0.1-0.2	TP108/0.1-0.2	TP109/0.2-0.3	TP110/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
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
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C10 - C16 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	%	92	93	94	81	80

svTRH (C10-C40) in Soil						
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	10/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
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
TRH >C10 -C16	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C16 -C34	mg/kg	<100	<100	<100	<100	<100
TRH >C34 -C40	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	81	85	90	79	88

svTRH (C10-C40) in Soil						
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
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
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 >C16-C34	mg/kg	<100	<100	<100	<100	120
TRH >C34 -C40	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	120
Surrogate o-Terphenyl	%	84	82	82	80	80

svTRH (C10-C40) in Soil						
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
TRH C10 - C14	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C16-C34	mg/kg	110	<100	<100	<100	<100
TRH >C34 -C40	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	110	<50	<50	<50	<50
Surrogate o-Terphenyl	%	82	89	88	78	81

svTRH (C10-C40) in Soil						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
TRH C10 - C14	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C16 -C34	mg/kg	<100	110	<100	<100	<100
TRH >C34 -C40	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	110	<50	<50	<50
Surrogate o-Terphenyl	%	89	79	79	88	85

PAHs in Soil						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	93	92	85	80	91

PAHs in Soil						
Our Reference		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	TP106/0.1-0.2	TP107/0.1-0.2	TP108/0.1-0.2	TP109/0.2-0.3	TP110/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	0.2	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	0.4	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	0.1	<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	1.7	<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	89	98	97	94

PAHs in Soil						
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	89	98	88	85	78

PAHs in Soil						
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	0.1	0.2
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	0.2	0.6	1.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	0.5
Fluoranthene	mg/kg	<0.1	<0.1	0.5	1.5	3.0
Pyrene	mg/kg	<0.1	<0.1	0.5	1.4	3.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	0.2	0.8	2.0
Chrysene	mg/kg	<0.1	<0.1	0.2	0.5	1.2
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	0.4	1	2.7
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.2	0.77	1.7
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	0.1	0.4	0.9
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.4
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.2	0.6	1.2
Total +ve PAH's	mg/kg	<0.05	<0.05	2.4	8.2	18
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	1.0	2.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	1.1	2.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	1.1	2.6
Surrogate p-Terphenyl-d14	%	83	94	92	92	92

PAHs in Soil						
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	0.3	<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	0.2	<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	0.3	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	0.2	1.1	<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	87	81	94	93

PAHs in Soil						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	89	81	83	106	100

Organochlorine Pesticides in soil						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
НСВ	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	91	97	91	90

Organochlorine Pesticides in soil						
Our Reference		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	TP106/0.1-0.2	TP107/0.1-0.2	TP108/0.1-0.2	TP109/0.2-0.3	TP110/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
НСВ	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	%	95	97	88	95	91

Organochlorine Pesticides in soil						
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
НСВ	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	93	97	102	95

Organochlorine Pesticides in soil						
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
НСВ	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	%	104	97	95	87	89

Organochlorine Pesticides in soil						
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
НСВ	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	%	86	87	89	87	89

Organochlorine Pesticides in soil						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
НСВ	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	90	87	106	101

Organophosphorus Pesticides in Soil								
Our Reference		307469-17	307469-19	307469-21	307469-31	307469-33		
Your Reference	UNITS	TP109/0.2-0.3	TP110/0.2-0.3	TP111/0.2-0.3	TP118/0.2-0.3	TP119/0.2-0.3		
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022		
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL		
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022		
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022		
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	%	95	91	91	95	87		

Organophosphorus Pesticides in Soil					
Our Reference		307469-35	307469-37	307469-39	307469-41
Your Reference	UNITS	TP120/0.2-0.3	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	89	86	87	89

PCBs in Soil						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	93	91	97	91	90

PCBs in Soil						
Our Reference		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	TP106/0.1-0.2	TP107/0.1-0.2	TP108/0.1-0.2	TP109/0.2-0.3	TP110/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	95	97	88	95	91

PCBs in Soil					_	
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	93	97	102	95

PCBs in Soil						
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	104	97	95	87	89

PCBs in Soil					_	
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	86	87	89	87	89

PCBs in Soil						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
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	%	89	90	87	106	101

Acid Extractable metals in soil						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Arsenic	mg/kg	7	6	5	13	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	19	18	17	21	16
Copper	mg/kg	15	39	19	29	19
Lead	mg/kg	22	57	12	120	36
Mercury	mg/kg	<0.1	<0.1	<0.1	0.3	<0.1
Nickel	mg/kg	6	7	5	9	11
Zinc	mg/kg	41	130	32	210	96

Acid Extractable metals in soil						
Our Reference		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	TP106/0.1-0.2	TP107/0.1-0.2	TP108/0.1-0.2	TP109/0.2-0.3	TP110/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Arsenic	mg/kg	16	9	6	<4	8
Cadmium	mg/kg	2	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	20	21	16	5	9
Copper	mg/kg	27	19	16	3	21
Lead	mg/kg	73	39	20	19	14
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	15	7	9	2	10
Zinc	mg/kg	590	88	35	22	91

Acid Extractable metals in soil						
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Arsenic	mg/kg	11	6	7	6	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	10	18	17	19	19
Copper	mg/kg	24	17	20	13	13
Lead	mg/kg	17	28	33	36	28
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	14	8	13	9	9
Zinc	mg/kg	71	37	57	38	34

Acid Extractable metals in soil					i i	
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Arsenic	mg/kg	4	6	5	<4	7
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	14	18	24	21	25
Copper	mg/kg	13	16	28	27	25
Lead	mg/kg	27	34	32	24	25
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	15	30	37	26
Zinc	mg/kg	37	46	62	49	39

Acid Extractable metals in soil						
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Arsenic	mg/kg	8	6	6	8	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	20	52	15	22	16
Copper	mg/kg	22	29	11	9	11
Lead	mg/kg	46	31	47	30	42
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	9	35	9	6	6
Zinc	mg/kg	92	55	34	19	31

Acid Extractable metals in soil						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Date analysed	-	12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Arsenic	mg/kg	10	13	6	<4	5
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	24	19	20	15	18
Copper	mg/kg	11	18	16	35	24
Lead	mg/kg	23	31	37	20	61
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	5	9	13	17	15
Zinc	mg/kg	23	69	49	66	64

Acid Extractable metals in soil		
Our Reference		307469-60
Your Reference	UNITS	TP109/0.2-0.3 - [TRIPLICATE]
Date Sampled		04/10/2022
Type of sample		SOIL
Date prepared	-	12/10/2022
Date analysed	-	12/10/2022
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	5
Copper	mg/kg	4
Lead	mg/kg	23
Mercury	mg/kg	<0.1
Nickel	mg/kg	2
Zinc	mg/kg	22

Moisture						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
Moisture	%	11	15	21	22	20
Moisture						
Our Reference		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	TP106/0.1-0.2	TP107/0.1-0.2	TP108/0.1-0.2	TP109/0.2-0.3	TP110/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
Moisture	%	21	28	23	6.1	10
Moisture						
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
Moisture	%	11	24	22	16	21
Moisture						
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
Moisture	%	22	23	14	10	18
Moisture						
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
Moisture	%	14	13	25	16	26

Moisture						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	10/10/2022	10/10/2022	10/10/2022	10/10/2022	10/10/2022
Date analysed	-	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
Moisture	%	22	20	12	17	30

Asbestos ID - soils						
Our Reference		307469-1	307469-3	307469-5	307469-7	307469-9
Your Reference	UNITS	TP101/0.1-0.2	TP102/0.1-0.2	TP103/0.0-0.1	TP104/0.1-0.2	TP105/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date analysed	-	13/10/2022	13/10/2022	13/10/2022	13/10/2022	13/10/2022
Sample mass tested	g	Approx. 30g	Approx. 35g	Approx. 35g	Approx. 30g	Approx. 30g
Sample Description	-	Brown coarse- grained soil & rocks	Brown coarse- grained soil & rocks	Red 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				
Trace Analysis	-	No asbestos detected				
Asbestos ID - soils						
Our Reference						
		307469-11	307469-13	307469-15	307469-17	307469-19
Your Reference	UNITS	307469-11 TP106/0.1-0.2	307469-13 TP107/0.1-0.2	307469-15 TP108/0.1-0.2	307469-17 TP109/0.2-0.3	307469-19 TP110/0.2-0.3
Your Reference Date Sampled	UNITS	307469-11 TP106/0.1-0.2 04/10/2022	307469-13 TP107/0.1-0.2 04/10/2022	307469-15 TP108/0.1-0.2 04/10/2022	307469-17 TP109/0.2-0.3 04/10/2022	307469-19 TP110/0.2-0.3 04/10/2022
Your Reference Date Sampled Type of sample	UNITS	307469-11 TP106/0.1-0.2 04/10/2022 SOIL	307469-13 TP107/0.1-0.2 04/10/2022 SOIL	307469-15 TP108/0.1-0.2 04/10/2022 SOIL	307469-17 TP109/0.2-0.3 04/10/2022 SOIL	307469-19 TP110/0.2-0.3 04/10/2022 SOIL
Your Reference Date Sampled Type of sample Date analysed	UNITS -	307469-11 TP106/0.1-0.2 04/10/2022 SOIL 13/10/2022	307469-13 TP107/0.1-0.2 04/10/2022 SOIL 13/10/2022	307469-15 TP108/0.1-0.2 04/10/2022 SOIL 13/10/2022	307469-17 TP109/0.2-0.3 04/10/2022 SOIL 13/10/2022	307469-19 TP110/0.2-0.3 04/10/2022 SOIL 13/10/2022
Your Reference Date Sampled Type of sample Date analysed Sample mass tested	UNITS - g	307469-11 TP106/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g	307469-13 TP107/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 25g	307469-15 TP108/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g	307469-17 TP109/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g	307469-19 TP110/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g
Your Reference Date Sampled Type of sample Date analysed Sample mass tested Sample Description	UNITS - g -	307469-11 TP106/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g Brown coarse- grained soil & rocks	307469-13 TP107/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 25g Brown coarse- grained soil & rocks	307469-15 TP108/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g Brown coarse- grained soil & rocks	307469-17 TP109/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g Beige coarse- grained soil & rocks	307469-19 TP110/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g Brown coarse- grained soil & rocks
Your Reference Date Sampled Type of sample Date analysed Sample mass tested Sample Description Asbestos ID in soil	UNITS - g - -	307469-11 TP106/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg	307469-13 TP107/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 25g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg	307469-15 TP108/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg	307469-17 TP109/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g Beige coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg	307469-19 TP110/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg
Your Reference Date Sampled Type of sample Date analysed Sample mass tested Sample Description Asbestos ID in soil	UNITS - g - -	307469-11 TP106/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	307469-13 TP107/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 25g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	307469-15 TP108/0.1-0.2 04/10/2022 SOIL 13/10/2022 Approx. 30g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	307469-17 TP109/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g Beige coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	307469-19 TP110/0.2-0.3 04/10/2022 SOIL 13/10/2022 Approx. 35g Brown coarse- grained soil & rocks No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected

Asbestos ID - soils						
Our Reference		307469-21	307469-22	307469-24	307469-26	307469-27
Your Reference	UNITS	TP111/0.2-0.3	TP112/0.1-0.2	TP113/0.1-0.2	TP114/0.2-0.3	TP115/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date analysed	-	13/10/2022	13/10/2022	13/10/2022	13/10/2022	13/10/2022
Sample mass tested	g	Approx. 35g	Approx. 30g	Approx. 30g	Approx. 30g	Approx. 30g
Sample Description	-	Brown coarse- grained soil & rocks				
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg				
		Organic fibres detected				
Trace Analysis	-	No asbestos detected				
Asbestos ID - soils						
Our Reference		307469-28	307469-30	307469-31	307469-33	307469-35
Your Reference	UNITS	TP116/0.1-0.2	TP117/0.1-0.2	TP118/0.2-0.3	TP119/0.2-0.3	TP120/0.2-0.3
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date analysed	-	13/10/2022	13/10/2022	13/10/2022	13/10/2022	13/10/2022
Sample mass tested	g	Approx. 30g	Approx. 30g	Approx. 40g	Approx. 40g	Approx. 30g
Sample Description	-	Brown coarse- grained soil & rocks				
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg				
		Organic fibres detected				
Trace Analysia						

Asbestos ID - soils						
Our Reference		307469-37	307469-39	307469-41	307469-43	307469-45
Your Reference	UNITS	TP121/0.2-0.3	TP122/0.2-0.3	TP123/0.1-0.2	TP124/0.1-0.2	TP125/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date analysed	-	13/10/2022	13/10/2022	13/10/2022	13/10/2022	13/10/2022
Sample mass tested	g	Approx. 30g	Approx. 40g	Approx. 30g	Approx. 30g	Approx. 30g
Sample Description	-	Brown coarse- grained soil & rocks				
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg				
		Organic fibres detected				
Trace Analysis	-	No asbestos detected				
Asbestos ID - soils						
Our Reference		307469-47	307469-49	307469-50	307469-51	307469-53
Your Reference	UNITS	TP126/0.1-0.2	TP127/0.1-0.2	TP128/0.2-0.3	TP129/0.1-0.2	TP130/0.1-0.2
Date Sampled		04/10/2022	04/10/2022	04/10/2022	04/10/2022	04/10/2022
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date analysed	-	13/10/2022	13/10/2022	13/10/2022	13/10/2022	13/10/2022
Sample mass tested	g	Approx. 35g	Approx. 30g	Approx. 35g	Approx. 30g	Approx. 30g
Sample Description	-	Brown coarse- grained soil & rocks				
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg				
		Organic fibres				
		detected	detected	detected	detected	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.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
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.
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.
Method ID	Methodology Summary
-------------	--
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 actually="" and="" approach="" are="" at="" be="" calculation="" can="" conservative="" contribute="" false="" give="" given="" is="" may="" most="" not="" pahs="" positive="" pql.="" present.<br="" teq="" teqs="" that="" the="" this="" to="">2. 'EQ zero'values are assuming all contributing PAHs reported as <pql and="" approach="" are="" below="" but="" calculation="" conservative="" contribute="" false="" is="" least="" more="" negative="" pahs="" pql.<br="" present="" susceptible="" teq="" teqs="" that="" the="" this="" to="" when="" zero.="">3. 'EQ half PQL'values are assuming all contributing PAHs reported as <pql a="" above.<br="" and="" approaches="" are="" between="" conservative="" half="" hence="" least="" mid-point="" most="" pql.="" stipulated="" the="">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.</pql></pql></pql>
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 CONT	ROL: vTRH	(C6-C10)	/BTEXN in Soil	Duplicate					Spike Recovery %			
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	307469-3		
Date extracted	-			10/10/2022	1	10/10/2022	10/10/2022		10/10/2022	10/10/2022		
Date analysed	-			11/10/2022	1	11/10/2022	11/10/2022		11/10/2022	11/10/2022		
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	1	<25	<25	0	100	99		
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	1	<25	<25	0	100	99		
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	99	102		
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	83	97		
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	98	94		
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	111	101		
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	109	101		
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]		
Surrogate aaa-Trifluorotoluene	%		Org-023	83	1	87	92	6	87	96		

QUALITY CONT	ROL: vTRH	(C6-C10)	/BTEXN in Soil			Du		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	307469-33
Date extracted	-			[NT]	17	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			[NT]	17	11/10/2022	11/10/2022		11/10/2022	11/10/2022
TRH C ₆ - C ₉	mg/kg	25	Org-023	[NT]	17	<25	<25	0	88	82
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	[NT]	17	<25	<25	0	88	82
Benzene	mg/kg	0.2	Org-023	[NT]	17	<0.2	<0.2	0	90	84
Toluene	mg/kg	0.5	Org-023	[NT]	17	<0.5	<0.5	0	86	79
Ethylbenzene	mg/kg	1	Org-023	[NT]	17	<1	<1	0	84	78
m+p-xylene	mg/kg	2	Org-023	[NT]	17	<2	<2	0	91	84
o-Xylene	mg/kg	1	Org-023	[NT]	17	<1	<1	0	91	84
Naphthalene	mg/kg	1	Org-023	[NT]	17	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	17	84	94	11	91	82

QUALITY CONT	ROL: vTRH	(C6-C10)	/BTEXN in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	10/10/2022	10/10/2022		[NT]	[NT]
Date analysed	-			[NT]	31	11/10/2022	11/10/2022		[NT]	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	[NT]	31	<25	<25	0	[NT]	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	[NT]	31	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	31	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	31	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	31	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	31	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	31	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	31	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	31	88	89	1	[NT]	[NT]

QUALITY CONT			Du	Spike Recovery %						
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	45	10/10/2022	10/10/2022		[NT]	[NT]
Date analysed	-			[NT]	45	11/10/2022	11/10/2022		[NT]	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	[NT]	45	<25	<25	0	[NT]	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	[NT]	45	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	45	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	45	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	45	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	45	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	45	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	45	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	45	78	88	12	[NT]	[NT]

QUALITY CO	NTROL: svT	RH (C10	-C40) in Soil			Du	Spike Recovery %			
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	307469-3
Date extracted	-			10/10/2022	1	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			10/10/2022	1	10/10/2022	10/10/2022		10/10/2022	10/10/2022
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	1	<50	<50	0	110	95
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	1	<100	<100	0	115	105
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	1	<100	<100	0	86	72
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	1	<50	<50	0	110	95
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	1	<100	<100	0	115	105
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	1	<100	<100	0	86	72
Surrogate o-Terphenyl	%		Org-020	83	1	81	80	1	89	81

QUALITY CO	NTROL: svT	RH (C10	-C40) in Soil			Du		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	307469-33
Date extracted	-			[NT]	17	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			[NT]	17	10/10/2022	10/10/2022		11/10/2022	11/10/2022
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	[NT]	17	<50	<50	0	108	95
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	[NT]	17	<100	<100	0	111	108
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	[NT]	17	<100	<100	0	90	117
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	[NT]	17	<50	<50	0	108	95
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	[NT]	17	<100	<100	0	111	108
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	[NT]	17	<100	<100	0	90	117
Surrogate o-Terphenyl	%		Org-020	[NT]	17	81	81	0	81	101

QUALITY CO	QUALITY CONTROL: svTRH (C10-C40) in Soil							Duplicate				
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]		
Date extracted	-			[NT]	31	10/10/2022	10/10/2022		[NT]	[NT]		
Date analysed	-			[NT]	31	11/10/2022	11/10/2022		[NT]	[NT]		
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	[NT]	31	<50	<50	0	[NT]	[NT]		
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]		
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]		
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	[NT]	31	<50	<50	0	[NT]	[NT]		
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]		
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	[NT]	31	<100	<100	0	[NT]	[NT]		
Surrogate o-Terphenyl	%		Org-020	[NT]	31	82	87	6	[NT]	[NT]		

QUALITY CO	RH (C10-	-C40) in Soil		Duplicate Spike F					covery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	45	10/10/2022	10/10/2022		[NT]	
Date analysed	-			[NT]	45	11/10/2022	11/10/2022		[NT]	
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	[NT]	45	<50	<50	0	[NT]	
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	[NT]	45	<100	<100	0	[NT]	
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	[NT]	45	<100	<100	0	[NT]	
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	[NT]	45	<50	<50	0	[NT]	
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	[NT]	45	<100	<100	0	[NT]	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	[NT]	45	<100	<100	0	[NT]	
Surrogate o-Terphenyl	%		Org-020	[NT]	45	81	92	13	[NT]	[NT]

QUALIT	QUALITY CONTROL: PAHs in Soil						plicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	307469-3	
Date extracted	-			10/10/2022	1	10/10/2022	10/10/2022		10/10/2022	10/10/2022	
Date analysed	-			12/10/2022	1	12/10/2022	12/10/2022		12/10/2022	12/10/2022	
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	103	75	
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	103	81	
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	109	93	
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	116	
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	102	104	
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	109	109	
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	89	97	
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	92	104	
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	98	1	93	93	0	96	94	

QUALIT	Y CONTRO	L: PAHs	in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	307469-33
Date extracted	-			[NT]	17	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			[NT]	17	12/10/2022	12/10/2022		12/10/2022	12/10/2022
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	<0.1	0	103	99
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	103	97
Fluorene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	0.1	0	107	103
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	17	0.2	1.2	143	124	123
Anthracene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	0.3	100	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	17	0.2	1.4	150	104	130
Pyrene	mg/kg	0.1	Org-022/025	[NT]	17	0.2	1.1	138	107	133
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	17	0.2	0.7	111	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	17	0.2	0.7	111	95	119
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	17	0.4	1	86	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	17	0.1	0.5	133	98	129
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	17	<0.1	0.3	100	[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	0.4	120	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	17	97	92	5	92	91

QUALIT			Du	Spike Recovery %						
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	10/10/2022	10/10/2022			
Date analysed	-			[NT]	31	12/10/2022	12/10/2022			
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0		
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0		
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0		
Fluorene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0		
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	31	0.2	<0.1	67		
Anthracene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0		
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	31	0.5	0.2	86		
Pyrene	mg/kg	0.1	Org-022/025	[NT]	31	0.5	0.2	86		
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	31	0.2	<0.1	67		
Chrysene	mg/kg	0.1	Org-022/025	[NT]	31	0.2	<0.1	67		
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	31	0.4	0.2	67		
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	31	0.2	0.1	67		
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	31	0.1	<0.1	0		
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0		
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	31	0.2	<0.1	67		
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	31	92	91	1		

QUALIT	Y CONTRO	L: PAHs	in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-				45	10/10/2022	10/10/2022		[NT]	[NT]
Date analysed	-				45	12/10/2022	12/10/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025		45	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025		45	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025		45	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	45	93	80	15	[NT]	[NT]

QUALITY CONTR	OL: Organo	chlorine F	Pesticides in soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	307469-3
Date extracted	-			10/10/2022	1	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			12/10/2022	1	12/10/2022	12/10/2022		12/10/2022	12/10/2022
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	124	114
НСВ	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	124	110
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	99	99
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	120	122
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	104	106
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	115	117
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	137	132
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	121	119
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	100	108
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	110	116
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	101	1	93	91	2	96	93

QUALITY CONTR	OL: Organo	chlorine F	Pesticides in soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	307469-33
Date extracted	-				17	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-				17	12/10/2022	12/10/2022		12/10/2022	12/10/2022
alpha-BHC	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	126	108
НСВ	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	121	106
gamma-BHC	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	103	95
delta-BHC	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	132	126
Heptachlor Epoxide	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	116	102
gamma-Chlordane	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	117	113
Dieldrin	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	139	135
Endrin	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	109	115
Endosulfan II	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	100	102
Endrin Aldehyde	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	94	94
Methoxychlor	mg/kg	0.1	Org-022/025		17	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	17	95	93	2	93	92

QUALITY CONTR	OL: Organo	chlorine F	Pesticides in soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-				31	10/10/2022	10/10/2022		[NT]	
Date analysed	-				31	12/10/2022	12/10/2022		[NT]	
alpha-BHC	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
НСВ	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
beta-BHC	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
gamma-BHC	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Heptachlor	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
delta-BHC	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Aldrin	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Heptachlor Epoxide	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
gamma-Chlordane	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
alpha-chlordane	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Endosulfan I	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
pp-DDE	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Dieldrin	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Endrin	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Endosulfan II	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
pp-DDD	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Endrin Aldehyde	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
pp-DDT	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Endosulfan Sulphate	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Methoxychlor	mg/kg	0.1	Org-022/025		31	<0.1	<0.1	0	[NT]	
Surrogate TCMX	%		Org-022/025	[NT]	31	95	86	10	[NT]	[NT]

QUALITY CONTR	OL: Organo	chlorine F	Pesticides in soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	45	10/10/2022	10/10/2022		[NT]	
Date analysed	-			[NT]	45	12/10/2022	12/10/2022		[NT]	
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
НСВ	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Aldrin	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Endrin	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	45	<0.1	<0.1	0	[NT]	
Surrogate TCMX	%		Org-022/025	[NT]	45	89	89	0	[NT]	[NT]

QUALITY CONTRO	L: Organoph	nosphorus	s Pesticides in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	307469-33
Date extracted	-			10/10/2022	17	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			12/10/2022	17	12/10/2022	12/10/2022		12/10/2022	12/10/2022
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	125	115
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	102	77
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	109	101
Malathion	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	126	116
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	116	119
Parathion	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	109	99
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	17	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	106	117
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	17	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	101	17	95	93	2	96	92

QUALITY CONTRO	L: Organoph	nosphorus	Pesticides in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date extracted	-			[NT]	31	10/10/2022	10/10/2022		10/10/2022	[NT]
Date analysed	-			[NT]	31	12/10/2022	12/10/2022		12/10/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	111	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	97	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	115	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	120	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	128	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	101	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	119	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	31	95	86	10	93	[NT]

QUALIT	Y CONTRO	L: PCBs	in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	307469-3
Date extracted	-			10/10/2022	1	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			12/10/2022	1	12/10/2022	12/10/2022		12/10/2022	12/10/2022
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	120	115
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	101	1	93	91	2	96	93

QUALIT	Y CONTRO	L: PCBs	in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	307469-33
Date extracted	-			[NT]	17	10/10/2022	10/10/2022		10/10/2022	10/10/2022
Date analysed	-			[NT]	17	12/10/2022	12/10/2022		12/10/2022	12/10/2022
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	72	80
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	17	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	17	95	93	2	93	92

QUALIT	Y CONTRO	L: PCBs	in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	31	10/10/2022	10/10/2022		[NT]	
Date analysed	-			[NT]	31	12/10/2022	12/10/2022		[NT]	
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	31	<0.1	<0.1	0	[NT]	
Surrogate TCMX	%		Org-021	[NT]	31	95	86	10	[NT]	[NT]

QUALIT	Y CONTRO	L: PCBs	in Soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-				45	10/10/2022	10/10/2022		[NT]	[NT]
Date analysed	-				45	12/10/2022	12/10/2022		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021		45	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021		45	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021		45	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021		45	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021		45	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021		45	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021		45	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	45	89	89	0	[NT]	[NT]

QUALITY CONT	ROL: Acid E	xtractabl	e metals in soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	307469-3
Date prepared	-			12/10/2022	1	12/10/2022	12/10/2022		12/10/2022	12/10/2022
Date analysed	-			12/10/2022	1	12/10/2022	12/10/2022		12/10/2022	12/10/2022
Arsenic	mg/kg	4	Metals-020	<4	1	7	7	0	92	75
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	99	80
Chromium	mg/kg	1	Metals-020	<1	1	19	17	11	97	80
Copper	mg/kg	1	Metals-020	<1	1	15	15	0	90	79
Lead	mg/kg	1	Metals-020	<1	1	22	20	10	95	71
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	93	74
Nickel	mg/kg	1	Metals-020	<1	1	6	6	0	97	79
Zinc	mg/kg	1	Metals-020	<1	1	41	41	0	100	#

QUALITY CONT	ROL: Acid E	Extractabl	e metals in soil			Duplicate			Spike Re	Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	307469-33		
Date prepared	-			[NT]	17	12/10/2022	12/10/2022		12/10/2022	12/10/2022		
Date analysed	-			[NT]	17	12/10/2022	12/10/2022		12/10/2022	12/10/2022		
Arsenic	mg/kg	4	Metals-020	[NT]	17	<4	<4	0	88	72		
Cadmium	mg/kg	0.4	Metals-020	[NT]	17	<0.4	<0.4	0	96	76		
Chromium	mg/kg	1	Metals-020	[NT]	17	5	5	0	99	81		
Copper	mg/kg	1	Metals-020	[NT]	17	3	4	29	90	95		
Lead	mg/kg	1	Metals-020	[NT]	17	19	38	67	96	91		
Mercury	mg/kg	0.1	Metals-021	[NT]	17	<0.1	<0.1	0	105	85		
Nickel	mg/kg	1	Metals-020	[NT]	17	2	2	0	96	79		
Zinc	mg/kg	1	Metals-020	[NT]	17	22	21	5	99	88		

QUALITY CONT	ROL: Acid E	xtractabl	e metals in soil			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	31	12/10/2022	12/10/2022		[NT]	[NT]
Date analysed	-			[NT]	31	12/10/2022	12/10/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	31	5	4	22	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	31	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	31	24	20	18	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	31	28	21	29	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	31	32	29	10	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	31	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	31	30	23	26	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	31	62	46	30	[NT]	[NT]

QUALITY CONT	ROL: Acid E	xtractable	e metals in soil			Duj		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	45	12/10/2022	12/10/2022			[NT]
Date analysed	-			[NT]	45	12/10/2022	12/10/2022			[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	45	5	8	46		[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	45	<0.4	<0.4	0		[NT]
Chromium	mg/kg	1	Metals-020	[NT]	45	16	21	27		[NT]
Copper	mg/kg	1	Metals-020	[NT]	45	11	14	24		[NT]
Lead	mg/kg	1	Metals-020	[NT]	45	42	47	11		[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	45	<0.1	<0.1	0		[NT]
Nickel	mg/kg	1	Metals-020	[NT]	45	6	7	15		[NT]
Zinc	mg/kg	1	Metals-020	[NT]	45	31	31	0	[NT]	[NT]

Result Definiti	ons
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 Contro	I 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.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

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

PAHs in Soil - The RPD for duplicate results is accepted due to the non homogenous nature of sample 301469-17.

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 testing were sub-sampled from jars provided by the client.

Acid Extractable Metals in Soil:

- The laboratory RPD acceptance criteria has been exceeded for 307469-17 for Pb. Therefore a triplicate result has been issued as laboratory sample number 307469-60.

- # 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.



coc 6110 410 pm. SOIL ANALYSIS CHAIN OF CUSTODY FORM

								Add	ditional Te	esting	g									
Name	<u> </u>	P190752	1 6 H	loneman	Close	, Hun	tingwoo	d NS	N		<u> </u>				<u> </u>					
Atudana Contact Officer		Ben Mc(Giffin								Contact	Emai	I	bmcgiffin@martens.com.au						
			Dete	r	04.10	2022			Dispatch Do	ate	06.10.202	22		Turnara	ound Tim	ne		standar	rd	
	Southe Pare				.2022					Shinning	Moti	hod -								
Sampling and Shipping		Our Refe	erence		P1907	7521C	:0C09V0)1			(X)				Hand Post			Courier		
		On Ice ((X)		x	No	lce (X)		0	ther	(X)									
	J						-		Laborato	ry								·		
Name		EnviroL	ab																	
Sample Delivery Addres	ss.	12 Ashl	ey Str	eet, Cho	atswo	od														
Delivery Contact		Name	Aile	en Hie			Phone	9	910 6200		Fax	ĺ		Email samplereceipt@envirolabservices.cor			es.com.	αυ		
Please Send Report By ((X)	Post		Fa	IX		Email	X	Re	portin	g Email Ada	dress	bmo	giffin@	marten	s.com.	.au			
							·		TDU		- <u>_</u>	BTE	x		Asbesto	s in Mat	erial		HOLD	
Sample ID	<u> </u>	ombo 5A	• * .	<u> </u>	Combo	6A														
1 IP101/0.1-0.2		_^																	<u> </u>	
7 TP102/0.1-0.2		X								_									X	
LF TP102/0.4-0.5																	_			
5 TP103/0.0-0.1		<u> </u>															,		<u> </u>	
6 тр103/0.4-0.5				+										Envirolab	Services				<u> </u>	
7 TP104/0.1-0.2		X		+			+_						00	12 /	Ashley St				X	
FP104/0.4-0.5											ei			hatswood N	ISW 2067					
TP105/0.1-0.2		^												Ph: (02) 9	910 6200				<u>X</u>	
D P105/0.4-0.5				+							J.	ob No	<u>:</u>	3074	μΩΥ_					
				+		_						<u>. </u>	• •	Ø	6H0F	$p_{\mathcal{I}}$	 +			
1 IP107/01_02		X		+								ate R	eceived	·	110-	}0 -	+		Y	
TP107/0.4-0.5											<u> </u>	ime R	eceived	" prof		<u> </u>	+			
TP108/0 1-0 2		X	_								F	Receiv	CASY)						X	
16 TP108/0.4-0.5												[emp	CocuAr	noten						
TP109/0.2-0.3					X							Coolin	C ICEUC	HProkoh M	Jone		0		<u>x</u>	
TP109/0.5-0.6												Securi	ty: intac	MDIOKCIUI		-4	×C			
19 TP110/0.2-0.3					X														X	
20 TP110/0.5-0.6																				
7.1 TP111/0.2-0.3					X															

Head Office

7

Suite 201, Level 2, 20 George Street Hornsby NSW 2077, Australia Ph 02 9476 9999 Fax 02 9476 8767

> mail@martens.com.au > www.martens.com.au MARTENS & ASSOCIATES P/L ABN 85 070 240 890 ACN 070 240 890

SOIL ANALYSIS CHAIN OF CUSTODY

	Combo 50	Combo 6A	TRH	BTEX	Asbestos in Material	HOLD
Sample ID	Combo 5A					XX
/VK_1P111/0.5-0.6						
2 1P112/0.1-0.2	^					X
25 IP112/0.4-0.5	v					
24 TP113/0.1-0.2	X					X
25 TP113/0.4-0.5	v					
76 TP114/0.2-0.3	X					
2/ TP115/0.1-0.2	<u>X</u>					
78 TP116/0.1-0.2	X					X
29 TP116/0.4-0.5	· · · · · · · · · · · · · · · · · · ·					
30 TP117/0.1-0.2	X					
3 [TP118/0.2-0.3		<u> </u>				X
32 TP118/0.5-0.6						
33 TP119/0.2-0.3		^				X
SV TP119/0.6-0.7						
35 TP120/0.2-0.3		<u>^</u>				XX
36 TP120/0.6-0.7						
37 TP121/0.2-0.3		×				X
38 TP121/0.5-0.6	L					
29 TP122/0.2-0.3		×	<u> </u>			X
CO TP122/0.4-0.5	L	+	<u> </u>			
4 TP123/0.1-0.2		X		Envirol	b Services	X
LC2 TP123/0.4-0.5					2 Ashley St	
TP124/0.1-0.2	X			Chatswoo	U NSW 2007	X
CV TP124/0.4-0.5				<i>Ph: (0</i>	>)(60	
45 TP125/0.1-0.2	X				07409	X
LCb TP125/0.4-0.5					b(10)	
TP126/0.1-0.2	XX				<i>Chefwee</i>	X
LLS TP126/0.4-0.5			<u> </u>	Time Received	10-30	
LG TP127/0.1-0.2	X			Receiver By:)		
TP128/0.2-0.3	X	·	<u> </u>	Temp: Coolinghibient		
TP129/0.1-0.2	X			Cooling Ice/cepack		x
TP129/0.4-0.5				Security Intact/Broke	Mone	
F3 TP130/0.1-0.2	X		<u> </u>		<u>+</u>	x
CTP130/0.4-0.5			<u> </u>			
->Y			<u> </u>		+	
5 Dup 01			<u> </u>			
Ch Dup 02			<u> </u>			l
5 Dup 03					<u> </u>	<u> </u>
->/					· · · · · · · · · · · · · · · · · · ·	
Trip Spike			L	<u>×</u>		<u> </u>
FG Trip Blank			X	^		
					×	<u> </u>
NR ACMOI					+	
NR ACM02					+^- <u>-</u>	1
					+	
			·			



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 308146

Client Details	
Client	Martens & Associates Pty Ltd
Attention	Ben McGiffin
Address	Suite 201, 20 George St, Hornsby, NSW, 2077

Sample Details	
Your Reference	P1907521: 6 Honeman Close Huntingwood NSW
Number of Samples	6 Water
Date samples received	14/10/2022
Date completed instructions received	14/10/2022

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	21/10/2022						
Date of Issue	21/10/2022						
NATA Accreditation Number 2901. This document shall not be reproduced except in full.							
Accredited for compliance with ISO/IEC 1	7025 - Testing. Tests not covered by NATA are denoted with *						

Results Approved By Kyle Gavrily, Senior Chemist Loren Bardwell, Development Chemist Steven Luong, Senior Chemist Authorised By

Nancy Zhang, Laboratory Manager



vTRH(C6-C10)/BTEXN in Water											
Our Reference		308146-1	308146-2	308146-3	308146-4	308146-5					
Your Reference	UNITS	7652/MW01	7652/MW02	7652/MW03	7652/MW05	7652/MW06					
Date Sampled		12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022					
Type of sample		Water	Water	Water	Water	Water					
Date extracted	-	17/10/2022	17/10/2022	17/10/2022	17/10/2022	17/10/2022					
Date analysed	-	18/10/2022	18/10/2022	18/10/2022	18/10/2022	18/10/2022					
TRH C ₆ - C ₉	µg/L	<10	<10	<10	<10	<10					
TRH C ₆ - C ₁₀	µg/L	<10	<10	<10	<10	<10					
TRH C ₆ - C ₁₀ less BTEX (F1)	μg/L	<10	<10	<10	<10	<10					
Benzene	µg/L	<1	<1	<1	<1	<1					
Toluene	µg/L	<1	<1	<1	<1	<1					
Ethylbenzene	µg/L	<1	<1	<1	<1	<1					
m+p-xylene	µg/L	<2	<2	<2	<2	<2					
o-xylene	µg/L	<1	<1	<1	<1	<1					
Naphthalene	µg/L	<1	<1	<1	<1	<1					
Surrogate Dibromofluoromethane	%	112	84	84	107	84					
Surrogate toluene-d8	%	115	102	101	102	101					
Surrogate 4-BFB	%	103	107	104	104	104					

svTRH (C10-C40) in Water												
Our Reference		308146-1	308146-2	308146-3	308146-4	308146-5						
Your Reference	UNITS	7652/MW01	7652/MW02	7652/MW03	7652/MW05	7652/MW06						
Date Sampled		12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022						
Type of sample		Water	Water	Water	Water	Water						
Date extracted	-	19/10/2022	19/10/2022	19/10/2022	19/10/2022	19/10/2022						
Date analysed	-	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022						
TRH C ₁₀ - C ₁₄	μg/L	<50	<50	<50	<50	<50						
TRH C ₁₅ - C ₂₈	µg/L	<100	<100	<100	<100	<100						
TRH C ₂₉ - C ₃₆	μg/L	<100	<100	<100	<100	<100						
Total +ve TRH (C10-C36)	μg/L	<50	<50	<50	<50	<50						
TRH >C10 - C16	μg/L	<50	<50	<50	<50	<50						
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	μg/L	<50	<50	<50	<50	<50						
TRH >C ₁₆ - C ₃₄	μg/L	<100	<100	<100	<100	<100						
TRH >C ₃₄ - C ₄₀	μg/L	<100	<100	<100	<100	<100						
Total +ve TRH (>C10-C40)	µg/L	<50	<50	<50	<50	<50						
Surrogate o-Terphenyl	%	87	79	82	80	78						

PAHs in Water						
Our Reference		308146-1	308146-2	308146-3	308146-4	308146-5
Your Reference	UNITS	7652/MW01	7652/MW02	7652/MW03	7652/MW05	7652/MW06
Date Sampled		12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	19/10/2022	19/10/2022	19/10/2022	19/10/2022	19/10/2022
Date analysed	-	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022
Naphthalene	µg/L	<1	<1	<1	<1	<1
Acenaphthylene	µg/L	<1	<1	<1	<1	<1
Acenaphthene	µg/L	<1	<1	<1	<1	<1
Fluorene	µg/L	<1	<1	<1	<1	<1
Phenanthrene	µg/L	<1	<1	<1	<1	<1
Anthracene	µg/L	<1	<1	<1	<1	<1
Fluoranthene	µg/L	<1	<1	<1	<1	<1
Pyrene	µg/L	<1	<1	<1	<1	<1
Benzo(a)anthracene	µg/L	<1	<1	<1	<1	<1
Chrysene	µg/L	<1	<1	<1	<1	<1
Benzo(b,j+k)fluoranthene	µg/L	<2	<2	<2	<2	<2
Benzo(a)pyrene	µg/L	<1	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1	<1	<1	<1	<1
Dibenzo(a,h)anthracene	µg/L	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	µg/L	<1	<1	<1	<1	<1
Benzo(a)pyrene TEQ	µg/L	<5	<5	<5	<5	<5
Total +ve PAH's	µg/L	NIL (+)VE				
Surrogate p-Terphenyl-d14	%	82	77	86	88	81

HM in water - dissolved						
Our Reference		308146-1	308146-2	308146-3	308146-4	308146-5
Your Reference	UNITS	7652/MW01	7652/MW02	7652/MW03	7652/MW05	7652/MW06
Date Sampled		12/10/2022	12/10/2022	12/10/2022	12/10/2022	12/10/2022
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	19/10/2022	19/10/2022	19/10/2022	19/10/2022	19/10/2022
Date analysed	-	19/10/2022	19/10/2022	19/10/2022	19/10/2022	19/10/2022
Arsenic-Dissolved	µg/L	<1	<1	<1	1	<1
Cadmium-Dissolved	µg/L	<0.1	0.2	0.4	<0.1	<0.1
Chromium-Dissolved	µg/L	<1	<1	<1	<1	<1
Copper-Dissolved	µg/L	9	3	<1	2	<1
Lead-Dissolved	µg/L	<1	<1	<1	<1	<1
Mercury-Dissolved	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel-Dissolved	µg/L	5	<1	8	2	16
Zinc-Dissolved	µg/L	110	13	8	1,300	12

HM in water - dissolved		
Our Reference		308146-6
Your Reference	UNITS	7652/Dup01
Date Sampled		12/10/2022
Type of sample		Water
Date prepared	-	19/10/2022
Date analysed	-	19/10/2022
Arsenic-Dissolved	μg/L	<1
Cadmium-Dissolved	µg/L	<0.1
Chromium-Dissolved	μg/L	<1
Copper-Dissolved	µg/L	9
Lead-Dissolved	μg/L	<1
Mercury-Dissolved	µg/L	<0.05
Nickel-Dissolved	µg/L	4
Zinc-Dissolved	µg/L	110

Method ID	Methodology Summary
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-022	Determination of various metals by ICP-MS.
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.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.
Org-023	Water samples are analysed directly 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.

QUALITY CONTR	ROL: vTRH((C6-C10)/E	BTEXN in Water			Du		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date extracted	-			17/10/2022	[NT]		[NT]	[NT]	17/10/2022	
Date analysed	-			18/10/2022	[NT]		[NT]	[NT]	18/10/2022	
TRH C ₆ - C ₉	µg/L	10	Org-023	<10	[NT]		[NT]	[NT]	100	
TRH C ₆ - C ₁₀	µg/L	10	Org-023	<10	[NT]		[NT]	[NT]	100	
Benzene	µg/L	1	Org-023	<1	[NT]		[NT]	[NT]	101	
Toluene	µg/L	1	Org-023	<1	[NT]		[NT]	[NT]	100	
Ethylbenzene	µg/L	1	Org-023	<1	[NT]		[NT]	[NT]	98	
m+p-xylene	µg/L	2	Org-023	<2	[NT]		[NT]	[NT]	100	
o-xylene	µg/L	1	Org-023	<1	[NT]		[NT]	[NT]	100	
Naphthalene	µg/L	1	Org-023	<1	[NT]		[NT]	[NT]	[NT]	
Surrogate Dibromofluoromethane	%		Org-023	105	[NT]		[NT]	[NT]	103	
Surrogate toluene-d8	%		Org-023	101	[NT]		[NT]	[NT]	101	
Surrogate 4-BFB	%		Org-023	103	[NT]		[NT]	[NT]	101	

QUALITY CON	ITROL: svTF	RH (C10-0	C40) in Water		Duplicate				Spike Re	Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]		
Date extracted	-			19/10/2022	[NT]		[NT]	[NT]	19/10/2022			
Date analysed	-			20/10/2022	[NT]		[NT]	[NT]	20/10/2022			
TRH C ₁₀ - C ₁₄	µg/L	50	Org-020	<50	[NT]		[NT]	[NT]	97			
TRH C ₁₅ - C ₂₈	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	112			
TRH C ₂₉ - C ₃₆	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	71			
TRH >C ₁₀ - C ₁₆	µg/L	50	Org-020	<50	[NT]		[NT]	[NT]	97			
TRH >C ₁₆ - C ₃₄	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	112			
TRH >C ₃₄ - C ₄₀	µg/L	100	Org-020	<100	[NT]		[NT]	[NT]	71			
Surrogate o-Terphenyl	%		Org-020	102	[NT]	[NT]	[NT]	[NT]	93	[NT]		

QUALITY	CONTROL	: PAHs ir	n Water			Du	plicate		Spike Re	covery %
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			19/10/2022	[NT]		[NT]	[NT]	19/10/2022	
Date analysed	-			20/10/2022	[NT]		[NT]	[NT]	20/10/2022	
Naphthalene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	94	
Acenaphthylene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	[NT]	
Acenaphthene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	80	
Fluorene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	84	
Phenanthrene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	100	
Anthracene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	[NT]	
Fluoranthene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	88	
Pyrene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	92	
Benzo(a)anthracene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	[NT]	
Chrysene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	83	
Benzo(b,j+k)fluoranthene	µg/L	2	Org-022/025	<2	[NT]		[NT]	[NT]	[NT]	
Benzo(a)pyrene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	71	
Indeno(1,2,3-c,d)pyrene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	[NT]	
Dibenzo(a,h)anthracene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	[NT]	
Benzo(g,h,i)perylene	µg/L	1	Org-022/025	<1	[NT]		[NT]	[NT]	[NT]	
Surrogate p-Terphenyl-d14	%		Org-022/025	109	[NT]	[NT]	[NT]	[NT]	76	[NT]

QUALITY CC	ONTROL: HM	1 in water	- dissolved		Duplicate S					Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	308146-2		
Date prepared	-			19/10/2022	1	19/10/2022	19/10/2022		19/10/2022	19/10/2022		
Date analysed	-			19/10/2022	1	19/10/2022	19/10/2022		19/10/2022	19/10/2022		
Arsenic-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	97	116		
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	1	<0.1	<0.1	0	96	109		
Chromium-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	96	104		
Copper-Dissolved	µg/L	1	Metals-022	<1	1	9	9	0	97	100		
Lead-Dissolved	µg/L	1	Metals-022	<1	1	<1	<1	0	98	103		
Mercury-Dissolved	µg/L	0.05	Metals-021	<0.05	1	<0.05	<0.05	0	94	99		
Nickel-Dissolved	µg/L	1	Metals-022	<1	1	5	4	22	94	98		
Zinc-Dissolved	µg/L	1	Metals-022	<1	1	110	100	10	97	95		

Result Definiti	ons								
NT	ot 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	ol 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

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.

are similar to the analyte of interest, however are not expected to be found in real samples.

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.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

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 HM in water - dissolved: no filtered, preserved sample was received for#3,5, therefore the unpreserved sample was filtered through 0.45μm filter at the lab.

Note: there is a possibility some elements may be underestimated.





SOIL ANALYSIS CHAIN OF CUSTODY FORM

<u> </u>		. <u> </u>			Δ	ddition	al Testin	g							
Name	P190752	1 – 6 Hone	man Close	e, Huntii	ngwood	NSW									
Martens Contact Officer	Ben McC	Giffin						Contact Email			<u>bmcgif</u>	fin@martens.c	com.au		
	Sample	Date	12.10).22		Dispato	h Date	14.10.22			Turnaround Time		standard		
Sampling and Shipping	Our Refe	Our Reference P1907521COC10V01						Shipping Method (X)		Hand		Post	Courier	×	
	On Ice (X)	X	No lo	ce (X)		Other	(X)							
	- I					Labo	atory								
Name	EnviroLo	ab													
Sample Delivery Address	12 Ashle	ey Street,	Chatswo	od											
Delivery Contact	Name	Aileen H	lie	s 1	Phone	9910 62	00	Fax		Email	samplerecei	pt@envirol	labservices.com	า.au	
Piease Send Report By (X)	Post		Fax		Email)	(Reportir	ıg Email Ad	dress	bmo	cgiffin@r	nartens.com	.au		
Sample ID	Combo 3		8 Met	als		······································		1	· · · ·			ÿ		Enviolet 12	Services Ashley St

	Sample ID	Combo 3	8 Metais	 · · · ·	12 Ashley St
	7652/MW01	X		 	
- [7652/MW02	x			
3 [7652/MW03	X		 	
4 🗆	7652/MW05	X			
5	7652/MW06	X		 	Late Received: 141/00 -
Ĺ	7652/Dup01		X	 	Tiple Received: 1322
0 F				 	Received By:
				 ·	Terp: Cool/Ambient
				 · · · · · · · · · · · · · · · · · · ·	
				 <u></u>	Copurity: Kract/Broken/None
				 	SELUITO, ARACULIONELLI

-

Ź . . -

١

.

Head Office

,

Suite 201, Level 2, 20 George Street Hornsby NSW 2077, Australia Ph 02 9476 9999 Fax 02 9476 8767

> mail@martens.com.au > www.martens.com.au MARTENS & ASSOCIATES P/L ABN 85 070 240 890 ACN 070 240 890

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET106213 / 109393 / 1 – 3 Your ref : P1907521BC12 – 6 Honeman Close Huntingwood NSW NATA Accreditation No: 14484

18 November 2022

Martens and Associates Suite 201, 20 George Street Hornsby NSW 2077

Attn: Mr Ben McGiffin

Dear Ben

Asbestos Identification

This report presents the results of three samples, forwarded by Martens and Associates on 18 November 2022, for analysis for asbestos.

1.Introduction: Three samples forwarded were examined and analysed for the presence of asbestos.

- 2. Methods: The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method (Australian Standard AS 4964 - 2004 and Safer Environment Method 1 as the supplementary work instruction) (Qualitative Analysis only).
- **3. Results :** Sample No. 1. ASET106213 / 109393 / 1. 7521/ACM01. Approx dimensions 2.7 cm x 2.0 cm x 0.5 cm The sample consisted of a fragment of a fibre cement material. Chrysotile asbestos and Amosite asbestos detected.

Sample No. 2. ASET106213 / 109393 / 2. 7521/ACM02. Approx dimensions 4.8 cm x 2.3 cm x 0.5 cm The sample consisted of a fragment of a fibre cement material. Chrysotile asbestos and Amosite asbestos detected.

Sample No. 3. ASET106213 / 109393 / 3. 7521/ACM03. Approx dimensions 6.6 cm x 2.1 cm x 0.5 cm The sample consisted of a fragment of a fibre cement material. Chrysotile asbestos and Amosite asbestos detected.

Reported by,

WORLD RECOGNISED ACCREDITATION

Mahen De Silva. BSc, MSc, Grad Dip (Occ Hyg) Occupational Hygienist / Approved Identifier. Approved Signatory

Accredited for compliance with ISO/IEC 17025 - Testing.

The results contained in this report relate only to the sample/s submitted for testing. Australian Safer Environment & Technology accepts no responsibility for whether or not the submitted sample/s is/are representative. Results indicating

SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1635 PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: info@ausset.com.au WEBSITE: www.Ausset.com.au

OCCUPATIONAL HEALTH & SAFETY STUDIES • INDOOR AIR QUALITY SURVEYS • HAZARDOUS MATERIAL SURVEYS • RADIATION SURVEYS • ASBESTOS SURVEYS ASBESTOS DETECTION & IDENTIFICATION • REPAIR & CALIBRATION OF SCIENTIFIC EQUIPMENT • AIRBORNE FIBRE & SILICA MONITORING


"No asbestos detected" indicates a reporting limit specified in AS4964-2004 which is 0.1g/Kg (0.01%). Any amounts detected at assumed lower level than that would be reported, however those assumed lower levels may be treated as "No asbestos detected" as specified and recommended by A4964-2004. Trace / respirable level asbestos will be reported only when detected.



Appendix I – Groundwater Sampling Field Sheets

FORI
RECORD
SAMPLING
WATER §

	ice 1989
ens	engineers sin
hart	consulting
6	5

	-
CT INFORMATION	TNUMBER: 7521
PROJEC	PROJEC

SITE LOCATION: 6 HONEMON CLOSE, HUNT, AGUOOU , NSW CLIENT:

DATE: 12 OC+ 22 SAMPLED BY: R W R

MVUOI 3 835 (1).1 (3 1.3.2 2.36 6.70 - C (a art / No 0 doc/ / No Status) I 1.7.7 6.35 140.2 2.32 473 - 1.1. I I 1.7.7 6.35 140.2 2.12 474 - 1.1. I I 1.7.7 6.35 141.2 2.12 474 - 11.1. I I I 1.7.7 6.35 141.2 2.12 474 - 11.1. I I I 1.7.7 6.35 141.2 2.12 474 - 11.1.1 I I I 1.7.7 6.35 141.2 2.12 474 - 11.1.1 I<	Bore / Location ID	Time	Depth to Water (TOC)	Temp (°C)	Hd	Redox Potential (mV)	Dissolved Oxygen (mg/L - % Sat)	EC uS/CM- mS/cm	Turbidity (ntu)	Appearance (colour, turbidity, odoùr, etc)	Samples Collected
i i	VOMV		3.85	17.7	6.33	119.2	2.86	690		CLORY / NO ODAN / NO SLOOM	
Int. 1 6.3 S Ids. 2 2.3 S Ids. 3 Ids. 1 Int. 1 <td></td> <td></td> <td>-</td> <td>17.7</td> <td>6.24</td> <td>133.2</td> <td>2.35</td> <td>522</td> <td>1</td> <td></td> <td></td>			-	17.7	6.24	133.2	2.35	522	1		
Image: block				17.7	6.35	140.4-	2.24	498	(1 5 1 1	
Image: Sector				17.7	6.35	141.2	2.24	491	1	1 11	IONW
Image: black in the state in the s											
Image: black in the state in the s											
Image: Sector											
Image: Sector											
Image: Sector in the											
Image: Sector in the											
Image: Sector											
Image: Second state											
Image: Normal System Image: No											
Image: Second											
Image: Second											
Image: Second											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Veather conditions: Temperature: Sample Source											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Veather conditions: Temperature: 255											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid OBSERVATIONS Temperature: SAMM											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid OBSERVATIONS Temperature: Veather conditions: Temperature:											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid OBSERVATIONS Temperature:											
OBSERVATIONS Temperature: S N M M - 25 Weather conditions: Temperature: S N M M - 25	Sample bottle	codes: P-pl	lastic, G - glass,	V - vial			Preservation	Codes - U - ui	npreserved, S -	sulfuric acid, N - nitric acid, H - hydrochloric acid	
Weather conditions: Temperature: SNNM, 25	OBSERVATIO	NS		110115							
	Weather condi	tions:		Temperature	5	-Lunn	- 25"				

~
- LE.
0
TT.
0
~
14
0
. <u></u>
ш.
R.
Ċ.
-
_
5
2
22
W 2
8
<u> </u>
-
.
5
5
-

68
<u>ف</u>
8
툾
201
5
3 (D)
- 業!
1 2 8
181
- 1 mm

	22
1	
	NUMBEK:
1011000	FROJECT

PROJECT INFORMATION

CLIENT:

SITE LOCATION: 6 HORE MORE CLOSE, 14 MITS AGUODU, NSW

DATE: 12 0C+ 22 SAMPLED BY: 3 W / RM

Multi 2.44 1.8.3 6.73 19.7.1 0.20 47.2 Apprint actood, ratio Simple concerts	MU01 2.44 IL:S 6.73 IG.2.7 0.20 GT/2	MMJ0L 2.44 IL:3 6.73 19.2.7 0.22 47.2	Bore / Location ID Tim	Depth to Water (TOC)) Temp (°C)	풥	Redox Potential (mV)	Dissolved Oxygen (mg/L - % Sat)	EC uS/CM - mS/cm	Turbidity		
3.4. 1.6.7 6.6.5 1.6.1 6.6.5 1.6.1 6.6.5 1.6.1 6.6.5 1.6.1 6.6.5 1.6.1 1.6.1 1.6.2 1.6.5 1.6.1 <th1< th=""><th>2.4. 1.6.7 6.6.3 19.12 0.12 9.6.2 - - - - - - - - 10.02</th><th>AA 16.7 6.65 131.8 0.18 96.2 0.0000 1 16.8 6.63 190.2 0.15 96.1 100.0000 1 1 16.8 6.63 190.2 0.15 96.1 100.0000 1</th><th>MWOL</th><th>3.44</th><th>16.8</th><th>6.78</th><th>192.7</th><th>0.20</th><th>21.2</th><th>1</th><th>C I & / / / / / /</th><th>Samples Collected</th></th1<>	2.4. 1.6.7 6.6.3 19.12 0.12 9.6.2 - - - - - - - - 10.02	AA 16.7 6.65 131.8 0.18 96.2 0.0000 1 16.8 6.63 190.2 0.15 96.1 100.0000 1 1 16.8 6.63 190.2 0.15 96.1 100.0000 1	MWOL	3.44	16.8	6.78	192.7	0.20	21.2	1	C I & / / / / / /	Samples Collected
ILI-G 6.6.3 14.0 6.6.3 14.0 0.1 14.0 <	Image: Non-Sector	Image: boot in the state in the st		24	16.7	6 165	191.8	0.18	962	1	100 000 100 000 000 000 000 000 000 000	
Set is in the interval of the i	Simple but codes: Part of the pa	Image: base of the state of the st			16.8	6.63	1902	0.15	961	{		441AB7
Image: boot in the state i	Image: Sector	Image: Sector										7
Second bootle codes: Polated G. elfase, V - Val Polated G. edites, V - Val	Image: Sector	Image: Sector	_									
Setting bottle codes: Palast, G glass, V. vial Palasta	Image: Normal System Image: No	Simple bottle Simple bottle Simple bottle Mathematical Mathmatical Mathematical Mathematica										
Image: Sector in the	Semicle codes: P-plasts, G = glass, V - val Planet Planet <t< td=""><td>Image: Sector Sector</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Image: Sector										
Image: Sector	Image: Sector	Set in the se										
Image: Sector in the	Image: Second	Set of the level Image: le										
Sample bottle codes: P-plastic, G - glass, V - vial Plane Plane <th< td=""><td>Image: Sector Sector</td><td>Image: Second second</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Image: Sector	Image: Second										
Sample bottle codes: P-plastic, G - glass, V - vial Plane	Semple Image: Second Seco	Image: Second state in the second state in										
Sample bottle codes: P-plastly, G - glass, V - vial Plane	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Preservation <td>Image: Second state state</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Image: Second state	-									
OBSERVATIONS Page 1 Page 2 Page 2<	Sample bottle Sample south of the second of th	Image: Second state of the se						T	T			
OBSERVATIONS OBSERVATIONS Image: Display in the served of the serve	Sample bottle codes: P-plastic, G - glass, V - vial Freservation Codes - U - unpreserved, S -sulfuric acid, N - ntric acid, N - ntric acid, N - ntric acid, N - ntric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Preservation Weather conditions: Temperature: SAMPLe										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unbreserved, S -sulfuric acid, N - ntric acid, N - ntric acid, N - ntric acid, N - ntric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, N - nitric acid, N - nitric acid, N - nitric acid, M - nitric acid	Sample bottle codes: P-plastic, G - glass, V - vial Amount of the codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Weather conditions: Temperature::::::::::::::::::::::::::::::::::::										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unbreserved, S -sulfuric acid, N - nitric acid, N - nitric acid, N - nitric acid, H - hydrochloric acid	Image: Second state in the second s	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Weather conditions: Temperature::::::::::::::::::::::::::::::::::::										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, M - hydrochloric acid Veather conditions: Temperature:::::Sund	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Weather conditions: Temperature::::::::::::::::::::::::::::::::::::										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - ntric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric, acid, M - hydrochloric acid OBSERVATIONS Temperature::::::::::::::::::::::::::::::::::::	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions: Temperature::::::::::::::::::::::::::::::::::::										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric, acid, H - hydrochloric acid OBSERVATIONS Temperature::::::::::::::::::::::::::::::::::::										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Complete bottle Codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid OBSERVATIONS Temperature::::::State State	Sample bottle codes: P-plastic, G - glass, V - vial Caservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions:										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, M - nitric acid, H - hydrochloric acid OBSERVATIONS Temperature:	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Weather conditions: Temperature:										
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, M - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid OBSERVATIONS Temperature:S M M M	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid OBSERVATIONS Temperature: Show M										
OBSERVATIONS	OBSERVATIONS Temperature:	OBSERVATIONS Temperature: Sward	Sample bottle codes: I	^o -plastic, G - glass,	V - vial			reservation Cr	Ndes - 11 - unn	Presented S -eult	iels and All strate	
	Weather conditions: Temperature:Sty AM	Weather conditions: Temperature:	OBSERVATIONS	The state of the s	CU CHENNEL	in the state	The raw of the				unicació, N - nitricació, H - nydrochioricació	

-
<u> </u>
- 5
- LL
-
- 0
- CC
<u> </u>
0
- 111
~
L.
2B
9
z
-
<u> </u>
•
-
ŝ
-
E .
ш
1
2
~

6
100 A
9
온
*
5 11
3 CD
ATT 2
S
-

1	ь.c
	5
NOL	7
MAT	ч. Ай
104	MBEF
CT II	TNU
BLOJE	OJEC
PR	PR

CLIENT:

SITELOCATION: 6 HONLMON CLOSE, HUNT'S SQUOOU, NSW WATER SAMPLING FIELD PARAMETERS

DATE: 12 OCT 22 SAMPLED BY: 73 VV 1899

MUOD Instruction Instruction Instruction Instruction Month of the image (instruction) Semina colored MUOD IL 6 6 1 9 2 6 1 3 1	MUOD Instruction Mater (TOG) Instruction Mater (Add) Appendato (Add) Sample Collected MUOD IL7 IL-3 6.45 14.31 0.17 IL-3 6.45 14.31 0.17 IL-3 5.45 MOD M	Constraint Trage Marcin (Col) Trage Marcin (Col) Trage Marcin (Col) Trage Marcin (Col) Marcin (Col)<	Bore /	i	Depth to			Redox Potential	Oxygen (mg/L -	EC uS/CM -	Turbidity		
Mew U2 IL-178 16-5 6.65 16/13 - CLE ST Automatication IL IL IL 6.61 192.3 0.15 16/13 - Source Multiple IL IL 16.2 6.61 192.3 0.15 16/13 - Source Source IL IL 6.61 192.3 0.11 16/05 - Source Source Source Source Source Source Multiple Multi	Marrow District Ling Tes S Ter S	WYWUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	Location ID	Time	Water (TOC)	Temp (°C)	На	(m)	% Sat)	mS/cm	(ntu)	Appearance (colour, turbidity, odour, etc)	Samniae Collocated
MA IL:-3 6:-63 19(3)	MA IL: A C: A I G: A C: A I G: A C: A I G: A C: A I B C C Mu U Nu I IL: S G: A I G: D D: I I G: A C: A I C: C Nu	MA IL: 4 C: 62 IG: 3 O: 19 IG: 5 O: 10 IG: 7 IG	COMW		81.1	16.3	6.65	121.8	0.25	1972	t	CIDE AND AND CAL	
I ILU-S G-MI IQ2-S IQI-S IQU-S IQU-S IQU-S I ILU-S G-M4 IQO-S IQU-S	Interview Interview <t< td=""><td>Intersection Intersection Intersection<</td><td></td><td></td><td>MA</td><td>6.4</td><td>6.62</td><td>192.1</td><td>61.0</td><td>1962</td><td></td><td>and haran for</td><td></td></t<>	Intersection Intersection<			MA	6.4	6.62	192.1	61.0	1962		and haran for	
I I	Ibit Lib.3 6.44 IQ.02 D.11 IQ.05 T Ibit Ib	Ibit Ibit <th< td=""><td></td><td></td><td></td><td>16.5</td><td>6.61</td><td>1929</td><td>0.15</td><td>1915</td><td>1</td><td>man</td><td></td></th<>				16.5	6.61	1929	0.15	1915	1	man	
Image: black in the line Image:	Image: black in the state in the s	Image: boot in the state of the st				16.2	6.64	190.2	0.11	1906	(
Image: black in the line Image:	Multiple	Image: Image:<											C 101 1 1 1
Image: boot in the state of the state o	Image: bold black	Image: black in the state											NWUS
Image: Display in the state of the stat	Image: black in the state in the s	Image: Sector											
Image: Design of the state	Image: black in the state in the s	Image: bound of the state											
Sample bottle codes: P-plastic, G. glass, V - vila Plastic	Image: Second	Image: black in the line Image:											
Sample bottle codes: P-plastic, G. e glass, V. vial Plastic	Mether conditions: Mether	Image: Sector											
Image: Sector	Image: Sector	Image: black in the state in the s											
Sample bottle Image: Second distribution Image: Secon	Image: Second	Image: Sector											
Sample bottle Addresserved, Ssulfurtle acid, N ntric acid, H hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Plane	Amount											
Sample bottle codes: P-plastic, G - glass, V - vial Plan Plan <td>Sample bottle codes: P-plastic, G = glass, V - vial Plane Plane</td> <td>Image: Second state sta</td> <td></td>	Sample bottle codes: P-plastic, G = glass, V - vial Plane	Image: Second state sta											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S - sulfuric acid, N - ntric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Plane	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions: Temperature::::::::::::::::::::::::::::::::::::											
Sample bottle codes: P-plastic, G - glass, V - vial Plane	Sample bottle codes: P-plastic, G - glass, V - vial Planet Plastic, G - glass, V - vial Meather conditions: Tanvervie.	Image: Set of the set of											
Sample bottle codes: P-plastic, G - glass, V - vial Freservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Plastic, G - glass, V - vial Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial OBSERVATIONS Weather conditions:	Sample bottle codes: P-plastic, G - glass, V - vial CBSERVATIONS Weather conditions: Temperature:											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Feservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Weather conditions:	Sample bottle codes: P-plastic, G - glass, V - vial Freservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions: Temperature:											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions: Tamvestried	Sample bottle codes: P-plastic, G - glass, V - vial Arreservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Weather conditions: Temperature:											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions:	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, H - hydrochloric acid Weather conditions: Temperature:							T				
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S - sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions: Tamwashing	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid OBSERVATIONS Temperature:											
OBSERVATIONS	OBSERVATIONS Temperatures Temperatures of Control acid, H - hydrochloric acid, H - hydrochloric acid Weather conditions: Temperatures	OBSERVATIONS Temperature:	Sample bottle	codes: P-pl	astic, G - glass, V	V - vial			Percention C	ndie - 11 - und			
	Weather conditions: Tammerature.	Weather conditions: Temperature:	OBSERVATIO	SN	and the first		Control of the	0.001-501			ieserved, 5 -sui	Turic acid, N - nitric acid, H - hydrochloric acid	

n and a second
~
<u> </u>
н.
0
Ľ.
0
\overline{O}
- XX
4 D
9
z
_
2
第
2
•
è.
<u> </u>
Ш.
1
2
5

e 1989
S
entin
B/

DATE: 12 004 22 SAMPLED BY: 73 WM / RM

N TW	
TION	7521
INFORMA	UMBER:
PROJECT	PROJECT N

CLIENT:

STELOCATION: 6 HONEMON CLOSE, HUNTINGWOOL , NSW

MWUS [b.8] 6.31 9.7.2 0.34 - CURAN Samples contend	MWUS Ib.8 6.31 97.2 b.34 0.13 c. WMON Sample collected Ib.8 6.43 70.10 0.13 0.13 0.13 0.13 0.14 Ib.00 Sample collected Ib.8 6.43 71.1 0.13 0.13 0.13 0.14 MVD.5 Ib.9 6.43 71.1 0.13 0.13 0.13 0.14 MVD.5 Ib.9 6.43 71.1 0.13 0.13 0.13 1 MVD.5 Ib.9 1 1 1 1 1 MVD.5 1 Ib.9 1 <t< th=""><th>Bore / Location ID</th><th>Time</th><th>Depth to Water (TOC)</th><th>Temp (°C)</th><th>Hđ</th><th>Redox Potential (mV)</th><th>Dissolved Oxygen (mg/L - % Sat)</th><th>EC uS/CM - mS/cm</th><th>Turbidity (ntu)</th><th>Annassince fealour suchiality, adams 440</th><th></th></t<>	Bore / Location ID	Time	Depth to Water (TOC)	Temp (°C)	Hđ	Redox Potential (mV)	Dissolved Oxygen (mg/L - % Sat)	EC uS/CM - mS/cm	Turbidity (ntu)	Annassince fealour suchiality, adams 440	
Ib. 8 6.43 70.0 0.27 0.27 0.02 <t< td=""><td>Ib. 8 6.43 71.2 0.27 7 Model Model<</td><td>MWUS</td><td></td><td></td><td>10.8</td><td>6.31</td><td>2.26</td><td>D.31</td><td>0.2</td><td>. 1</td><td>Contraction (the + Least -</td><td>Samples Collected</td></t<>	Ib. 8 6.43 71.2 0.27 7 Model Model<	MWUS			10.8	6.31	2.26	D.31	0.2	. 1	Contraction (the + Least -	Samples Collected
Image: Normal and Series July Series Guly Series Multiple Series Multiple Series Image: Normal and Series July Series July Series July Series July Series Multiple Series Image: Normal and Series July Series July Series July Series July Series July Series July Series Image: Normal and Series July Series	Ib.S 6.43 71.2 0.12 0.12 0.12 MV05 Ib.S 1b.S 1b				16.8	6.42	70.0	72.0	0.27	1	No offer Astron	
Time Time <th< td=""><td>Image: Sector Sector</td><td></td><td></td><td></td><td>16.8</td><td>6.43</td><td>71.2</td><td>0.25</td><td>52.0</td><td>1</td><td></td><td>ANNA</td></th<>	Image: Sector				16.8	6.43	71.2	0.25	52.0	1		ANNA
Simula both codes: Palastic, G glass, V. vsli Image: Simula both codes: Palastic, G glass, V. vsli Displation: Simula both codes: Palastic, G glass, V. vsli Image: Simula both code, N Nitrc add, N Nitrc add, N Nitrc add, N Nitrc add.	Image: black blac											222
Simular Simular <t< td=""><td>Image: Sector Sector</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Image: Sector											
Simulation of the state of	Image: Second											
Simple bottle codes: P-plastic G glass, V-vial Plane P	Image: Second											
Sample bottle codes: P-latistic G - glass, V- vial Periodic add. N - nitric add, N - nitric add, N - nitric add. N - nitric add. N - nitric add.	Image: black											
Sample bottle codes: P-jastk, G glass, V - vial Preservation	Simple botter conditioner Simple botter conditioner Simple botter codes Protecter codes Protecter botter codes Prote											
Image: Sector	Image: Second											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, N - nitric acid, H - hydrochloric acid	Image: Sector											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Preservation <td>Image: Second state sta</td> <td></td>	Image: Second state sta											
OBSERVATIONS Part Part Part Part Part Part Part Part	Image: Second											
OBSERVATIONS OBSERVATIONS Provide of the set of t	Observed in the level of t											
Sample bottle codes: P-plastic, G - glass, V - vial Plastic, G - glass, V - vial	Image: Second State Condition:											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Mether conditions. Transaction Transactio											
Sample bottle codes: P-plastic, G - glass, V - vial DBSERVATIONS	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions:											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions:											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S - sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid Weather conditions: Transmission											
Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid	Sample bottle codes: P-plastic, G - glass, V - vial Preservation Codes - U - unpreserved, S -sulfuric acid, N - nitric acid, H - hydrochloric acid OBSERVATIONS Towarber conditions: Towarber conditions:											
OBSERVATIONS	OBSERVATIONS Townshins. Townshins.	Sample bottle	codes: P-pl	astic, G - glass,	V - vial			reservation C	ndae - 11 - ann	Tracented C an	division of the second s	
	Weather conditions.	OBSERVATIC	SN	Carriel Internet	ST-16-1	A BUT THE	State of the				unutic acid, N - nitric acid, H - hydrochloric acid	

Precipitation:....

-
- C
-
- 0
-
0
~~~
0
- 63
218
- CC
_
400
- C)
<u> </u>
2
1
-
0
-
-
-
10
~
n n
- 111
-
-
-
~

6963
ince.
<b>NS</b>
e te
Mal answ
0

5	6
V	2
Γ	
LIFCT NI MARRY	

PROJECT INFORMATION

CLIENT:

SITE LOCATION: 6 HONEMOIN CLOSE, HUNT, aqueod, NSW

DATE: 12 0C4 22 SAMPLED BY: 13 M / RIV 1000

Bore / Location ID	Time	Depth to Water (TOC)	Temp (°C)	Ha	Redox Potentia! (mV)	Oxygen (mg/L - % Sat)	EC uS/CM - mS/cm	Turbidity		
mw06		189	5.71	112.9	185.6	6.56	1890	<i>i</i> (	Appearance (colour, turbidity, odour, etc)	Samples Collected
			6. 5	6.72	101 8	0.41	1877		VUD OCCOUNT INU SHOP	
			16.5	6.78	192.4	0:27	1840	0	104 0002 1	
			16-21	6.79	1927	C2.0	1917	1		
										1 very
										90-01
imple bottle cc	ides: P-pla	stic, G - glass, \	V - vial			reservation C	ndie - 11 - inde	- S personal	denter and the second	
BSERVATION	0	The second s	The second se	Contraction of the local division of the loc	and the second se			reserved, 5 -su	JITUTIC acid, N - NITRIC acid, H - hydrochloric acid	

Precipitation:

.



## **Appendix J – Calibration Certificates**

#### Multi Parameter Water Meter

Instrument	YSI Quatro Pro Plus
Serial No.	18J104330



17/10/2022

## Air-Met Scientific Pty Ltd 1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	1	
	Fuses	√	
	Capacity	$\checkmark$	
Switch/keypad	Operation	✓ -	
Display	Intensity	√	
	Operation (segments)	$\checkmark$	
Grill Filter	Condition	√	
	Seal	$\checkmark$	
PCB	Condition	$\checkmark$	
Connectors	Condition	$\checkmark$	
Sensor	1. pH	✓	
	2. mV	1	
	3. EC	1	
	4. D.O	1	
	5. Temp	√	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

#### Certificate of bump test

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

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
2. pH 7.00		pH 7.00		381241	pH 7.06
3. pH 4.00		pH 4.00		389384	pH 4
4. mV		237.58mV		390802/393728	239.8mV
5. EC		2.76mS		385041	2.76mS
6. D.O		0.00ppm		379624	0.00ppm
7. Temp		20.8°C		MultiTherm	21.1°C

Calibrated by: Yu Jiang

Calibration date:

17/10/2022

Next calibration due: 16/11/2022

InstrumentGeotech Interface Meter (60M)Serial No.3963



Item	Test	Pass	Comments
Battery	Compartment	1	connichts
	Capacity	$\checkmark$	
Probe	Cleaned/Decon.	$\checkmark$	
	Operation	$\checkmark$	
	• • • • • •		
Connectors	Condition	$\checkmark$	
		$\checkmark$	
Tape Check	Cleaned	1	
Connectors	Checked for cuts	✓	
Instrument Test	At surface level		
	A CONTROCTOVOL		
	· · · · ·		
	torus.		

### Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

 Calibrated by:
 Elizabeth Cansdale

 Calibration date:
 14/10/2022

 Next calibration due:
 14-Dec-22



## **Appendix K – Survey of Stockpiles**

COORDINATE SCHEDULE						
MADK	MGA CO-ORDINATES			DU	METHOD	CTATE
MARK	EASTING	NORTHING	LLASS	PU	METHUD	STATE
PM 178489	305243.363	6257966.731	В	0.02	SCIMS	FOUND
SSM 19931	305329.723	6257833.835	В	-	SCIMS	FOUND
SSM 116395	305362.196	6258514.815	C	-	SCIMS	FOUND
DATE OF SCIMS COORDINATES: 11 JAN 2023 MGA ZONE: 56 MGA DATUM: GDA2020						
COMBINED SCALE FACTOR: 1.000052						



No.	BEARING	DISTANCE	MARK	ORIGIN
1	163°06′45′′	3.650	DH&W FOUND	ORIGIN UNKNOWN
2	62°59′55′′	14.580	GIP FOUND	DP1238405
3	81°06'25''	12.390	GIP FOUND	DP1238405
4	62°28′55′′	6.605	GIP FOUND	DP1238405
5	138°26′35″	2.710	GIP FOUND	DP1238405
6	188°32′45′′	3.435	DH&W FOUND	DP809530
7	188°32′45′′	17.085	DH&W FOUND	DP809530
8	248°59′45″	3.970	DH&W FOUND	DP828155
9	65°11′10′′	13.680	GIP	PLACED
10	154°50′45″	4.425	DH&W	PLACED
11	73°48′50″	15.035	GIP	PLACED
12	46°11′45′′	16.420	GIP	PLACED
13	43°04'40''	17.260	GIP	PLACED
14	35°50'10''	17.455	GIP	PLACED

## SCHEDULE OF BOUNDARY LINES

Number	Bearing	Distance	
1	111°37′25′′	34	
2	135°14′15′′	29.63	
3	NOT USED	NOT USED	
4	127°50'15''	12.5	
5	8°31′10′′	242.02	
6	338°58'45''	66.375	
7	291°37′25′′	178.51	
8	86°58'15''	45.83	
9	86°58'15''	9.0	
10	24°19′15′′	9.795	
11	8°32′45″	20.195	
12	8°32′45″	53.86	
13	6°12′55″	41.94	
16	323°32′45′′	3.12	
17	292°02′55′′	3.815	
18	288°56'10''	88.865	
19	148°27'00''	52.715	
28	176°05'00''	12.19	
29	266°05'00''	57.44	
30	289°04'45''	137.295	
31	291°37′25′′	87.525	
32	357°39′45′′	9.85	
33	294°10'05''	22.52	
34	1°29′25′′	190.63	
35	9°25′55′′	56.385	
36	127°50'15''	89.575	
37	133°40'25''	76.81	
38	139°49'25''	79.34	
39	148°26'25''	185.06	

NOTE: LINES 14 TO 15, AND 20 TO 27 ARE NOT USED IN THIS PLAN

SURVEYOR Name: JACEK IDZIKOWSKI Date of Survey: 10/02/2023 Surveyor's Reference: 51947 001DP

#### PLAN OF REDEFINITION

## SCHEDULE OF REFERENCE MARKS

N OF LOT 5 IN DP1238405	LGA: BLACKTOWN Locality : HUNTINGWOOD Reduction Ratio 1: 1250 Lengths are in metres.	Registered	DP