

# ASSOCIATED BRITISH PORTS, CARDIFF SITE INVESTIGATION REPORT

**Ex**CAL



Prepared for: **Mark Elliott**

By: **Anita Davis**

Date: **March 2023**



DOCUMENT CONTROL SHEET

<b>PROJECT:</b>	Associated British Ports, Cardiff
<b>TITLE:</b>	Site Investigation Report

<b>PROJECT REF:</b>	238-02-07-23
<b>REPORT No.:</b>	238-02-07.R3

**PREPARED BY:**

A Davis:



**APPROVED BY:**

S Owen:



Version	Date	Amendments
Original	March 2023	

This report, and information or advice which it contains, is provided by ExCAL solely for internal use and reliance by its Client in performance of ExCAL's duties and liabilities under its contract with the Client. Any advice, opinions, or recommendations within this report should be read and relied upon only in the context of the report as a whole. The advice and opinions in this report are based upon the information made available to ExCAL at the date of this report and on current UK standards, codes, technology and construction practices as at the date of this report. Following final delivery of this report to the Client, ExCAL will have no further obligation or duty to advise the Client on any matters, including development affecting the information or advice provided in this report. This report has been prepared by ExCAL in their professional capacity as Environmental Consultants. The contents of this report do not, in any way, purport to include any manner of legal advice or opinion. This report is prepared in accordance with the terms and conditions of ExCAL's contract with the Client. Regard should be had to those terms and conditions when considering and/or placing any reliance on this report. Should the Client wish to release this report to a Third Party for the party's reliance, ExCAL may, at its discretion, agree to such release provided that:

- (a) ExCAL's written agreement is obtained prior to such release and,
- (b) By release of the report to the Third Party, that Third Party does not acquire any rights, contractual or otherwise, whatsoever against ExCAL and ExCAL, accordingly, assume no duties, liabilities or obligations to that Third Party, and
- (c) ExCAL accepts no responsibility for any loss or damage incurred by the Client or for any conflict of ExCAL's interests arising out of the Clients' release of this report to the Third Party.

# ASSOCIATED BRITISH PORTS, CARDIFF

## SITE INVESTIGATION REPORT

Contents	Page
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 Limitations.....	1
<b>2.0 SITE LOCATION AND DESCRIPTION.....</b>	<b>2</b>
2.1 Site Description.....	2
2.2 Current Site Use and Access.....	2
2.3 Proposed Site Use.....	2
2.4 Preliminary Site Walkover Investigation .....	2
2.5 Results of Preliminary Site Walkover Investigation .....	3
<b>3.0 INTRUSIVE SITE INVESTIGATION.....</b>	<b>4</b>
3.1 Borehole Strata Encountered.....	4
3.2 Laboratory Chemical Testing .....	5
3.3 Geotechnical Testing and Gas Monitoring.....	5
<b>4.0 GEOTECHNICAL INVESTIGATION AND RESULTS.....</b>	<b>6</b>
4.1 Standard Penetration Testing.....	6
4.2 Results of Geotechnical Testing .....	6
<b>5.0 LABORATORY ANALYSIS RESULTS .....</b>	<b>8</b>
5.1 Results of Soil Analysis.....	8
5.2 Results of Water Analysis .....	8
<b>6.0 REVISED CONCEPTUAL MODEL.....</b>	<b>9</b>
<b>7.0 RISK ASSESSMENT .....</b>	<b>12</b>
7.1 Methodology .....	12
7.2 Source-Pathway-Receptor Model.....	12
7.3 Human Health Risk Assessment .....	12
7.3.1 <i>Current Site Condition</i> .....	12
7.3.2 <i>Future Site Users</i> .....	12
7.4 Risks to Vegetation .....	13
7.5 Groundwater Risk Assessment .....	13
7.6 Ground Gas Risk Assessment.....	13
7.7 Risks to Buildings and Materials Durability.....	13
7.7.1 <i>Concrete Classification</i> .....	13
7.7.2 <i>Water Services</i> .....	13
7.8 Waste Disposal .....	14
7.9 Uncertainties.....	14
<b>8.0 CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>15</b>
<b>APPENDIX A Drawings</b>	
<b>APPENDIX B Borehole Logs</b>	
<b>APPENDIX C Chemical Analysis Results Table</b>	
<b>APPENDIX D Laboratory Results</b>	

## 1.0 INTRODUCTION

ExCAL Limited have been commissioned by Associated British Ports (hereafter referred to as the client / ABP) to undertake an intrusive site investigation on land adjacent to Queen Alexandra Dock, Cardiff.

The intrusive site investigation was undertaken based upon the results of a Phase 1 Preliminary Risk Assessment / Geoenvironmental Desk Study. The desktop study concluded that due to the presence of numerous historical and current large-scale industries which are located in close proximity of the site, an intrusive site investigation should be undertaken in order to collate data to assess groundwater and soil quality onsite.

A total of 5 no. boreholes between depths of 4m – 7m were installed in order to provide comprehensive data of the ground constituents across the site. Samples were collected at every 1m interval / change of strata and sent for chemical analysis at a UKAS accredited laboratory. In addition, 3 standpipes were installed for future water and gas analysis where required.

### 1.1 Limitations

This report is intended to be utilised as a working document that is used to enable consultation and advice from the Local Planning Authority, Natural Resources Wales and other governing bodies to be sought as and when deemed necessary.

The term “Contamination” is taken throughout the report to mean the “presence of one or more potentially harmful substances as a result of human activity”.

The use of the term in this way does not imply that harm is being, or might be, caused by the contamination. It should be noted that “contamination” can have different meanings under different regulatory regimes, for example, planning, building control and Part IIA of the Environmental Protection Act 1990.

It is important to recognise that areas of contamination that have not been found may be present on site. In addition, contaminants may be present at concentrations above those that have been found. It is also important to recognise that contamination may be localised and that no investigation, however comprehensive, is capable of finding such occurrences other than by chance.

This report has been prepared for the benefit of ABP and its contents should not be relied upon by others without the written authority of ExCAL Ltd. Unauthorised third part use of this report is done so at the parties’ own risk and ExCAL Ltd owe these parties no duty of care or skill.

## 2.0 SITE LOCATION AND DESCRIPTION

### 2.1 Site Description

The site comprises approximately 4.42 hectares of land, and the grid reference for the approximate centre of the site is ST 20226 73951.

The site address is listed below: -

South Side,  
Queen Alexandra Dock,  
Longships Road,  
Port of Cardiff,  
Cardiff,  
CF10 4RP.

The site location and aerial photograph is visible on Drawing 238-02-07.D01 in Appendix A – Drawings.

The site is bounded by various urban development and infrastructure, including warehouses on the western boundary and a pipe manufacturing facility further west. The northern boundary of the site is bounded by Queen Alexandra Dock whilst Longships Road runs along the south of the site.

### 2.2 Current Site Use and Access

The site is considered as an “operational berth” on Queen Alexandra Dock, and consists of a typical steel-frame and clad warehouse building, with associated hardstanding areas which are used for the storage of ferrous metals.

The site is currently being tenanted by Ward Recycling who are using the site as a metal recycling yard which handles the bulk processing and recycling of ferrous metals.

Access to the site is gained via the A4232, followed by a third exit on to Compass Road before finally joining Cold Stores Road, from which the site is accessed to the south.

### 2.3 Proposed Site Use

ABP are proposing to continue to use the site as an “operational berth” on Queen Alexandra Dock. The site is currently being tenanted and operated by Ward Recycling, a metals recycling site.

The results and conclusions within this report can be used to inform any future proposed commercial or industrial development on the site should these be considered.

### 2.4 Preliminary Site Walkover Investigation

An initial preliminary walk-over survey was undertaken with the following objectives: -

- Noting any immediate hazards to public health or safety or the environment;
- Recording the location and condition of existing surface features if present;
- Noting the condition of site boundary features and vegetation if present;
- Identifying susceptible receptors and immediate hazards;
- Noting any visual or olfactory evidence indicative of soil or water contamination;
- Noting the use of land adjacent to the site, if applicable, comment upon potential impact of this land on the site.

The purpose of considering the layout and usage of the site in its current state is to enable an initial appreciation of the potential for above and below ground features to act as a constraint to, or have an adverse impact upon, proposed works or to represent a contamination source, pathway or receptor.

## 2.5 Results of Preliminary Site Walkover Investigation

No obvious contamination in the form of black surface staining on the ground (suggestive of the potential for oil or petroleum hydrocarbon contamination) or other contamination was noted on the slab in general. Numerous metal stockpiles comprising of varying metals of differing shapes and sizes were however observed to be present on site, which are associated with the metal recycling company currently tenanted on the site.

At present, the slab is used for a metals recycling site for the processing and recycling of ferrous metals. In addition to the metal stockpiles, heavy machinery and plant comprising of two industrial crane claw machines and a scrap metal recycling machine operate on the slab.

Other observations include a weighbridge with a security cabin and security gates to the north of the site, an additional smaller cladded warehouse to the east of the weighbridge and cabins used for welfare with toilets and canteen facilities, which are located north-west of the security cabin. No olfactory evidence of contamination was evident during the site walkover survey.

Due to the historical usage of the site and surrounding areas, there is a potential for legacy contamination to be present below the concrete slab. As a result, a site investigation was carried out in order to determine the level of contamination present on site.

### 3.0 INTRUSIVE SITE INVESTIGATION

A site investigation was designed in accordance with BS10175:2011+A2:2017 the Code of Practice for Investigation of Potentially Contaminated Sites and 'Development of Land Affected by Contamination: A Guide for Developers' prepared by Welsh Local Government Association (WLGA) / Environment Agency Wales (EAW) Land Contamination Working Group, 2017.

The site investigation was also designed to provide information to support and refine the preliminary conceptual site model/conceptual exposure model, whilst also providing geotechnical data in order to support any future use and design of the site.

An investigation comprising of 5 borehole installations was undertaken in January/February 2023. Boreholes were located across the site in a grid formation in order to target all areas of the site and to achieve representative samples for chemical analysis.

Boreholes were excavated to a maximum depth of 8m using a shell and auger drilling rig, in order to determine the composition and nature of shallow ground conditions on site. Where groundwater was encountered, the borehole was terminated, a water sample collected, and the arisings reinstated. One borehole was terminated at 400mm due to the ground being too compacted to drill further.

Representative soil samples were obtained from the boreholes at approximate 1m intervals and at every change of strata for the purpose of chemical testing at a UKAS accredited laboratory. Soil samples were also collected at the surface for asbestos testing where deemed appropriate.

Samples were stored in appropriate sample containers including; plastic tubs, glass jars and bottles depending on the required chemical analysis. Strict protocols were adopted during this process in order to avoid cross contamination of samples.

The fieldworks were supervised by a suitably qualified engineer from ExCAL Limited who also logged the samples and prepared the necessary chain of custodies for submission to a UKAS accredited laboratory for the analysis.

The locations of the boreholes are shown on Drawing 238-02-07.D03 in Appendix A – Drawings.

#### 3.1 Borehole Strata Encountered

Borehole logs containing a description of soils encountered during the investigation are presented in Appendix B – Borehole Logs. A brief summary of the findings within each of the boreholes meanwhile is visible in Table 1 below: -

**Table 1 – Summary of Borehole Findings**

Borehole 1	Borehole 2A	Borehole 3	Borehole 4	Borehole 5	Comments
G.L – 0.2m Concrete	G.L – 0.6m Made Ground	G.L – 1.0m Made Ground	G.L – 0.3m Concrete	G.L – 0.5m Made Ground	Water Strike in BH01 at 5m.
0.2m – 1.5m Clay and Stone	0.6m – 2.0m Clay	1.0m – 2.5m Loose Ash	0.3m – 1.0m Sub-base	0.5m – 3.7m Made Ground and Clay	Water Strike in BH02A at 4m.
1.5m – 4.5m Clay and Cobbles	2.0m – 3.0m Clay	2.5m – 5.0m Clay and Gravels	1.0m – 3.7m Made Ground	3.7m – 7.0m Clay and Gravels	Water Strike in BH03 at 4m.
4.5m – 5.6m Gravels	3.0m – 4.0m Clay and Gravels	5.0m – 6.0m Gravelly Clay	3.7m – 8.0m Clay and Gravels	7.0m – 8.0m Clay	Water Strike in BH04 at 8m.
5.6m – 7.0m Sand and Clay					Water Strike in BH05 at 7m.

### 3.2 Laboratory Chemical Testing

Samples were stored in individual containers, labelled, and stored in cool boxes for transport to a UKAS accredited laboratory.

The samples were tested for a range of contaminants that reflect the findings of the desk study, including historical use of the site, and based upon the preliminary conceptual site model/conceptual exposure model. A list of the tested determinands is visible in Table 2 below: -

**Table 2 – Scheduled Chemical Analysis**

Determinand Type	Specific Determinands for Analysis
Metals	<ul style="list-style-type: none"> <li>• <b>Total and Soluble Metals:</b> - Al, As, B, Ba, Be, Cd, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Sb, Se, Ti, V, Zn and Hexavalent Cr</li> </ul>
Organic Substances	<ul style="list-style-type: none"> <li>• <b>Speciated Total Petroleum Hydrocarbons (TPH):</b> - Aliphatic/Aromatic Split;</li> <li>• <b>Speciated Polycyclic Aromatic Hydrocarbons (PAH):</b> - Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(ghi)perylene, Chrysene, Dibenz(ah)anthracene, Fluorene, Fluoranthene, Indeno(123-cd)pyrene, Napthalene, Phenanthrene;</li> <li>• <b>Volatile Organic Compounds and Semi-volatile Organic Compounds (VOC's &amp; SVOC's);</b></li> <li>• <b>Total Phenols</b></li> </ul>
Non-Organic Substances	<ul style="list-style-type: none"> <li>• <b>pH;</b></li> <li>• <b>Water Soluble Sulphate;</b></li> <li>• <b>Total, Free &amp; Complex Cyanides;</b></li> <li>• <b>Asbestos (Soils);</b></li> <li>• <b>Polychlorinated Biphenyls (PCB's)</b></li> </ul>

### 3.3 Geotechnical Testing and Gas Monitoring

It was recommended that, given the high likelihood that the land will be scheduled for future development at some point, boreholes with standpipes should be installed in order that groundwater samples can be collected and analysed for contamination during the lifetime of any future permitted activity. Furthermore, the provision of standpipes within these boreholes will also enable future gas monitoring to be undertaken where required. During this investigation, 3 of the 5 boreholes were fitted with standpipes and gas monitoring equipment.

During the borehole installation, geotechnical testing in the form of SPT/CPT (Standard/Cone Penetration Test) was undertaken at 2 metre intervals, starting at 1 metre. This was completed in order to provide "N-values" in each location to determine the density and properties of the subsurface material. This data can be used to enable appropriate foundation design for future proposed development.

More information regarding CPT can be found in Section 4.0.

## 4.0 GEOTECHNICAL INVESTIGATION AND RESULTS

### 4.1 Standard Penetration Testing

The standard penetration test, commonly known as 'SPT', was developed to provide geotechnical engineering properties for foundation design purposes. The test is carried out within a borehole. The results can be used to determine the relative density, bearing capacity and settlement of granular soil. The results can also be used to correlate the approximate strength of stiff cohesive soil.

In cohesive soil the test involves driving a 50mm diameter split-barrel (spoon) sample tube into the ground to recover a disturbed sample. In granular soil the split-barrel is replaced by a solid 60 degree cone. Where this is the case, this is indicated as a CPT test within the borehole logs contained in Appendix B – Borehole Logs.

The split-barrel or solid cone is driven using a sliding hammer with a mass of 63.5kg falling through a distance of 760mm. The test is advanced in six 75mm increments and the number of blows required to drive the last 300mm of penetration is termed the "standard penetration resistance" or "N-value".

The penetration resistance during the first 150mm of penetration is ignored, because the soil is considered to have been disturbed by the action of boring the hole. In cases where 50 blows are insufficient to advance the sample tube through a 300mm interval the penetration after 50 blows is recorded.

In cohesive soil the sample remaining inside the split-barrel is recovered after the test. The sample is only suitable for visual examination and identification. If engineering properties like strength or compressibility parameters are required, undisturbed samples of the cohesive soil will be recovered. If very silty clay, very sandy clay and hard clay is encountered, the undisturbed sampling should be alternated with standard penetration tests to correlate the soil strength.

In granular soils if the test is carried out below the groundwater level, the N-values may indicate the relative density is loose. In these circumstances, it may be appropriate to continue driving the sampler beyond the specified distance. This additional drive is not a standard test, but it does provide an indication as to whether the deposit is as loose as the initial N-value has indicated.

### 4.2 Results of Geotechnical Testing

The N-value provides an indication of the relative density of the subsurface soil, and it is used in empirical geotechnical correlation to estimate the approximate shear strength properties of the soils.

Typical correlations can be made between the CPT N-value, friction angle and relative density of the subsurface material encountered. These correlations are outlined in Table 3 below: -

**Table 3 – Correlation between CPT N-value, Friction Angle and Relative Density**

CPT N3 (Blows / 0.3m)	Soil Packing	Relative Density (%)	Friction Angle (°)
<4	Very Loose	<20	<30
4 – 10	Loose	20 – 40	30 – 35
10 - 30	Compact	40 – 60	35 – 40
30 – 50	Dense	60 – 80	40 – 45
>50	Very Dense	>80	>45

CPT / SPT's were undertaken within each borehole starting at 1m followed with 2m intervals. The recorded N-values within each borehole are outlined in Tables 4 – 8 overleaf: -

**Table 4 – CPT Result and Calculated N-Values Generated within BH01**

Test Number	Depth (m)	CPT Result	N-Value
CPT2	1.00 – 1.50	(2, 2, 1, 2, 2, 2)	7
CPT5	3.00 – 3.50	(5, 4, 2, 2, 4, 4)	12
CPT8	5.00 – 5.50	(5, 3, 3, 4, 2, 2)	11
CPT11	7.00 – 7.50	(0, 1, 0, 1, 1, 1)	3

**Table 5 – CPT Result and Calculated N-Values Generated within BH02A**

Test Number	Depth (m)	CPT Result	N-Value
CPT2	1.00 – 1.50	(0, 1, 0, 1, 0, 1)	2
CPT5	3.00 – 3.50	(2, 2, 2, 2, 3, 4)	11

**Table 6 – CPT Result and Calculated N-Values Generated within BH03**

Test Number	Depth (m)	CPT Result	N-Value
CPT2	1.00 – 1.50	(4, 4, 4, 3, 3, 3)	13
CPT5	3.00 – 3.50	(0, 1, 0, 1, 0, 1)	2
CPT8	5.00 – 5.50	(1, 1, 1, 1, 1, 1)	4

**Table 7 – CPT Result and Calculated N-Values Generated within BH04**

Test Number	Depth (m)	CPT Result	N-Value
CPT2	1.00 – 1.50	(3, 4, 3, 4, 4, 4)	15
CPT5	3.00 – 3.50	(7, 7, 25, 25)	64
CPT8	5.00 – 5.50	(0, 0, 1, 0, 1, 1)	3
CPT11	7.00 – 7.50	(0, 1, 1, 1, 1, 1)	4

**Table 8 – CPT Result and Calculated N-Values Generated within BH05**

Test Number	Depth (m)	CPT Result	N-Value
CPT2	1.00 – 1.50	(2, 2, 2, 6, 6, 6)	20
CPT5	3.00 – 3.50	(0, 0, 1, 0, 1, 1)	3
CPT8	5.00 – 5.50	(2, 2, 2, 2, 2, 2)	8
CPT11	7.00 – 7.50	(0, 0, 1, 0, 1, 1)	3

## 5.0 LABORATORY ANALYSIS RESULTS

Samples of both the existing surface material and the underlying made ground were taken from across the site and tested at a UKAS accredited laboratory.

For the purposes of this investigation, the analysis results have been compared with screening concentrations for a proposed commercial end-use to determine whether or not the soil should be considered to be contaminated.

The Category 4 Screening Levels (C4SL's) published by DEFRA for arsenic, cadmium, chromium (VI), lead, benzo(a)pyrene and benzene have been adopted as critical concentrations against which soil contaminant concentrations can be compared.

In the absence of additional published C4SLs, analysis results have been compared with Land Quality Management (LQM) / Chartered Institute of Environmental Health (CIEH) Suitable 4 Use Levels (S4UL), which provide generic assessment criteria (GAC's) based on minimal or tolerable risk that are intended to be protective of human health for individual/mixtures of substances.

Where the site concentration of a contaminant exceeds the relevant S4UL, this does not necessarily mean the risk is unacceptable under Part 2A/IIA or unsuitable for use under planning, and indeed, many conservative assumptions are included in the derivation of the S4UL's, as they are for all GAC's. To reduce the conservatism, Detailed Quantitative Risk Assessments (DQRA) can be undertaken to derive Site Specific Assessment Criteria (SSAC) where appropriate, which better reflect the conditions at the site.

### 5.1 Results of Soil Analysis

In total, 20 soil samples were sent for chemical analysis, with a further 5 being sent for asbestos analysis at a UKAS accredited laboratory.

Concentrations below the S4UL recommended thresholds for commercial development were returned for all of the analysed determinands.

These comparisons are available for review in 'S4UL Guideline Values vs ABP Cardiff Soil Results' located within Appendix C – Chemical Analysis Results Table.

Of the 5 samples analysed, no samples returned evidence of the presence of asbestos or asbestos containing materials.

The full soil results can be viewed in Appendix D – Laboratory Results.

### 5.2 Results of Water Analysis

Water samples were obtained from each of the boreholes, with 5 water samples, namely BH01, BH02A, BH03, BH04 and BH05 being sent for chemical analysis.

The purpose of the analysis was to generate a baseline of existing conditions present on site, in order to ensure no detriment to the groundwater condition occurs as a result of any future permitted activities, especially given the proximity of the site to Queen Alexandra Dock to the north and the Severn Estuary to the south.

The full results of the chemical analysis undertaken on the water samples can be viewed in Appendix D – Laboratory Results.

## 6.0 REVISED CONCEPTUAL MODEL

The preliminary conceptual exposure model has been reviewed and revised to reflect the findings of the site investigation and the results of the laboratory testing of soils and waters.

The revised conceptual model can be viewed in Table 9 overleaf: -

Table 9 – Revised Conceptual Model Risk Assessment Matrices

Potential Source	Potential Pathway	Potential Receptor	Potential Probability & Consequence	Potential Risk	Comments	Pathway Confirmed?
Toxic & phytotoxic metals and non-metals within shallow soil / groundwater	Inhalation of fugitive dust	Site Workers	Moderate	Low	An intrusive site investigation has been undertaken that has confirmed the presence of toxic metals, within shallow surface soil samples.  Concentrations of metals were however recorded below S4UL's for a commercial end-use and furthermore, the contamination is sealed beneath an impermeable concrete slab.	Yes – metal contamination is present in shallow soils, however these were recorded below Commercial End-Use S4UL Limits
		End Users	Moderate	Low		
		Local Residents	Moderate	Low		
	Ingestion and absorption via direct contact	Site Workers	Moderate	Moderate		
		End Users	Moderate	Moderate		
		Surface Water	Moderate	Moderate		
		Aquifer	Moderate	Moderate		
	Migration in solution via groundwater flow	Local Flora	Moderate	Moderate		
		Site Workers	Low	Low		
		End Users	Low	Low		
Toxic & phytotoxic metals and non-metals within deeper soil / groundwater	Inhalation of fugitive dust	Local Residents	Low	Low	An intrusive site investigation has been undertaken which has confirmed that toxic and phytotoxic contamination is located within deeper soils.  Very low concentrations of toxic and phytotoxic metals were found in groundwater.  The contamination is also sealed beneath an impermeable concrete slab and as a result, the probability, consequence and risk has been reduced accordingly.	Yes – metal contamination is present in deeper soils but very little in groundwater. All concentrations were found to fall below Commercial End-Use S4UL threshold values
		Site Workers	Low	Low		
		End Users	Low	Low		
	Ingestion and absorption via direct contact	Surface Water	Moderate	Moderate		
		Aquifer	Moderate	Moderate		
		Local Flora	Moderate	Moderate		
		Site Workers	Moderate	Moderate		
	Migration in solution via groundwater flow	Local Residents	Moderate	Moderate		
		Site Workers	Moderate	Moderate		
		End Users	Moderate	Moderate		
TPH / PAH / SVOC's / VOC's / PCB's within shallow soil / groundwater	Inhalation of fugitive dust	Local Residents	Moderate	Moderate	An intrusive site investigation has been undertaken that has confirmed the presence of TPH / PAH / SVOC's / VOC's within shallow soil / groundwater.  The highest PAH value was found in BH05 – 3m whereby a concentration of 76.5mg/kg was recorded.  Concentrations of these were however recorded below S4UL's for a commercial end-use and furthermore, the contamination is sealed beneath an impermeable concrete slab.	Yes – TPH / PAH / SVOC's / VOC's / PCB's contamination is present in shallow soils, however these were recorded below Commercial End-Use S4UL Limits
		Site Workers	Moderate	Moderate		
		End Users	Moderate	Moderate		
	Ingestion and absorption via direct contact	Surface Water	Moderate	Moderate		
		Aquifer	Moderate	Moderate		
		Local Flora	Moderate	Moderate		
		Site Workers	Moderate	Moderate		
	Migration in solution via groundwater flow	Local Residents	Moderate	Moderate		
		Site Workers	Moderate	Moderate		
		End Users	Moderate	Moderate		
TPH / PAH / SVOC's / VOC's / PCB's within deeper soil / groundwater	Inhalation of fugitive dust	Local Residents	Low	Low	An intrusive site investigation has been undertaken that has confirmed the presence of TPH / PAH / SVOC's / VOC's within deeper soils / groundwater.  PAH concentrations are generally higher in the	Yes – TPH / PAH / SVOC's / VOC's / PCB's contamination is present in deeper soils.
		Site Workers	Low	Low		
		End Users	Low	Low		
	Ingestion and absorption via direct contact	Local Residents	Low	Low		
		Site Workers	Low	Low		
		Local Flora	Moderate	Moderate		
		Site Workers	Moderate	Moderate		

Potential Source	Potential Pathway	Potential Receptor	Potential Probability & Consequence	Potential Risk	Comments	Pathway Confirmed?	
	direct contact	End Users	Low	Low	shallower soil samples and decrease significantly with depth in some boreholes.	TPH / SVOC's / VOC's were generally low across all boreholes at all depths.  Higher levels of PAH and TPH were found in groundwater samples from BH04.  All concentrations were found to fall below Commercial End-Use S4UL threshold values	
	Migration in solution via groundwater flow	Surface Water Aquifer	Moderate Moderate	Moderate Moderate	PAH was relatively low in all groundwater samples apart from BH04 which shows a total PAH of 1,230ug/l. Total TPH was also recorded the highest in this borehole at 19.4mg/l.		
	Plant uptake	Local Flora	Moderate	Low	TPH / SVOC's / VOC's were generally low across all boreholes at all depths. The soil sample taken at BH05 – 3m shows the most contamination for these determinands.  The contamination is also sealed beneath an impermeable concrete slab and as a result, the probability, consequence and risk has been reduced accordingly.		
Asbestos within Made Ground	Inhalation of fugitive dust	Site Workers End Users Local Residents	Low Low Low	Moderate Moderate Moderate	No asbestos containing materials (ACM's) were returned in any of the analysed samples.	No – No ACM's were identified within any of the analysed soil samples	
Ground Gas from Made Ground and natural strata	Migration in to excavations	Site Workers End Users Local Residents	Low Low Low	Low Low Low	Screened out during desktop study	No – no evidence of ground gas was confirmed during the site investigation.	
	Migration in to development	Site Workers End Users Local Residents	Low Low Low	Low Low Low			
Herbicides and Pesticides within shallow soil	Inhalation of vapour	Site Workers End Users Local Residents	Low Low Low	Low Low Low	Screened out during desktop study	No – no evidence of herbicides or pesticides was confirmed during the site investigation.	
	Ingestion and absorption via direct contact	Site Workers	Low	Low			
	Migration by surface run-off	End Users	Low	Low			
	Migration by liquid flow	Surface Water Surface Water Aquifer	Low Low Low	Low Low Low			
	Plant uptake		Local Flora	Low			Low

## 7.0 RISK ASSESSMENT

### 7.1 Methodology

The risk of pollution, health effects or environmental harm occurring as a result of ground contamination is dependent upon three principal factors: -

- The scale of the contamination sources;
- The presence of sensitive “receptors”, e.g. **Humans**; health of the general public, site occupiers, redevelopment workers. **Environment**; flora, fauna etc.;
- The existence of migration pathways by which contaminants can reach the sensitive receptors.

This section assesses each of these factors in order to evaluate the overall level of risk and potential harm to sensitive receptors. The receptor may be human, a water resource, an ecosystem or construction materials. Pathways connecting a perceived hazard to a receptor are referred to as exposure pathways.

The sources of contamination and the links connecting the hazards to the sensitive receptors will represent the basis for the risk assessment.

### 7.2 Source-Pathway-Receptor Model

The preliminary conceptual site model was based on the findings of the desktop study. This has now been reviewed and refined according to the findings of the site investigation, allowing for the ground conditions encountered and the results of laboratory testing of the soils and groundwater.

### 7.3 Human Health Risk Assessment

#### 7.3.1 Current Site Condition

The presence of PAH contamination was noted in shallow soils in some locations beneath the impermeable slab present on site, however, all results were found to be below the S4UL guideline values.

The highest concentrations of determinands returned from the chemical analysis were identified in samples obtained from BH05 and BH04, with soils from BH05 and waters from BH04 being identified to return the highest concentrations of analysed determinands in each matrix.

It should be noted however that in its current state, the contamination within the soils below the slab is capped and sealed by an impermeable slab, preventing the infiltration of surface water into the subsurface soils which significantly reduces the opportunity for contaminants to migrate within the groundwater on site.

#### 7.3.2 Future Site Users

Normal good hygiene practices should be adequate to protect the health and safety of workers and should include: -

- Minimum handling of materials;
- Washing of hands prior to all meal breaks, which should be taken in a designated clean area;
- The use of standard PPE such as boots, overalls and gloves, where considered relevant.

A system should be established by which any ‘unusual’ materials that may be encountered are reported rapidly to the site management, so that the appropriate action may be taken, following specialist advice if necessary. An unusual material may be identified on site by colour, odour or physical nature.

Reference should be made to the Health and Safety Executive document “Protection of Workers and the General Public during the Development of Contaminated Land’ for further detailed guidance on these matters.

## 7.4 Risks to Vegetation

Consideration should be made with regard to vegetation on site, especially for future site users.

Although suitable for a future commercial development, the soil in its current state is unsuitable for growing consumable produce due to the elevated concentrations of a number of organic and inorganic determinands detected during the site investigation.

A remediation strategy will need to be designed to enable the above if required.

## 7.5 Groundwater Risk Assessment

The site is covered with an impermeable concrete slab and as a result, the subsurface soil is, and has historically been, protected from rainfall infiltration. As a result, subsurface contaminants have likely been protected from excessive mobilisation within groundwater movement.

It is likely that any future development will not result in the destruction of this slab, and subsequently, it is unlikely that any excavation of the existing material present below the slab will occur. As a result, the existing made ground material below the slab will continue to be protected from future rainfall infiltration and associated migration.

Based upon the above and data collected from the borehole installations, it is considered that the site presents a low risk to controlled waters from soil generated contaminants.

## 7.6 Ground Gas Risk Assessment

No biodegradable organic materials were encountered within the existing made ground during the investigation and as such, the potential for gas generation within the site is assessed as low.

It is recommended however that, due to constituents of the made ground on site being unknown, the distribution of materials within the ground unlikely to be homogenous and that no gas monitoring information is available at present, that consideration is taken for the possibility that ground gas is present on site.

It is recommended that, prior to any future development being undertaken on site, rigorous testing of ground gases is undertaken to minimise the risk of undetected gas posing future issues if required. Three of the five boreholes which were installed in January/February 2023 have gas monitoring standpipes to allow for future monitoring.

The desktop study indicated that the site is not located within a radon action area, and <1% of properties within the area are impacted by radon. As a result, no radon protection measures are deemed necessary for any future developments.

## 7.7 Risks to Buildings and Materials Durability

The laboratory chemical test results for water soluble sulphate and pH, which may adversely affect the durability of building materials, is presented in Appendix D – Laboratory Results.

### 7.7.1 Concrete Classification

In accordance with BRE Digest SD1:2005 it is recommended that prior to any future development being undertaken, the aggressiveness of the chemical environment should be evaluated to ensure the correct category is selected for foundation designs.

### 7.7.2 Water Services

Depending on the end use of the site, water supply pipes may need to be protected from any contamination present within the ground. In particular, the presence of organic contamination, such as PAH, TPH or PCB's should be addressed when selecting pipe materials.

Measures to protect the pipes can include clean backfill to trenches and possibly alternate material selection. Reference should be made to UKWIR Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites Document No. 10/WM/03/21.

In order to comply with the UKWIR guidance, specific sampling and testing along the actual line of the proposed water supply route may need to be carried out since this has been established.

## 7.8 Waste Disposal

Excavated materials generated by any development may be considered as waste and subject to waste controls.

Any re-use of excavated materials on-site should be undertaken in accordance with current waste and environmental legislation and which may require the production of an approved Materials Management Plan (MMP) prepared in accordance with the CL:AIRE Code of Practice.

It is recommended that a sustainable development strategy is adopted which reduces to a practicable minimum the need for export of waste to a licensed tip. Emphasis should be on recovery and re-use rather than disposal.

However, any waste or surplus materials that are generated will need to be classified in accordance with current EC regulations and Environment Agency guidance prior to disposal. It is the responsibility of the waste producer to classify the waste.

Based on the data obtained from the site investigation works, any waste materials from any existing made ground is likely to be classified as hazardous waste due to the presence of elevated concentrations of contaminants even though all results were below S4UL's for commercial development.

Although no ACM's were identified, should any asbestos containing materials be identified during any future works, these will be classified as hazardous waste.

This classification is provisional and indicative of the likely waste classification based on the data obtained to date (including chemical composition, moisture content, etc.). It also assumes the materials tested will be representative of future generated waste.

In order to minimise disposal, the materials generated should be segregated and examined, with appropriate testing as necessary, to enable the materials to be sorted or treated into lower classifications, with the resultant benefit of potentially generating re-use rather than disposal.

Once final waste sources and volumes are known, the waste stockpile to be disposed offsite will need to be classified in accordance with Environment Agency/Natural Resources Wales Waste Classification – Guidance on the Classification and Assessment of Waste Technical Guidance WM3 (2015). This is likely to require additional sampling and testing of the generated waste materials to provide an up to date current basis for classification.

Depending on the waste classification, Waste Acceptance Criteria (WAC) testing may be required, in order to determine which class of landfill site the waste can be sent to. It is recommended that the results of the waste classification and any WAC test results are sent to the intended licensed waste operator prior to disposal in order to confirm their classification and acceptance.

## 7.9 Uncertainties

It is important to recognise there may be areas of contamination within the site that have not been found, or that contaminants may be present at concentrations above those that have been found.

It is also important to recognise that contamination is not homogenous and may be localised, and that no investigation, however comprehensive, is capable of finding such occurrences, other than by chance.

It should be noted that vertical and lateral variations in ground conditions could be present between borehole locations.

## 8.0 CONCLUSIONS AND RECOMMENDATIONS

Prior to any future proposed works commencing on site, any services within the site area should be identified and either relocated or protected. Any existing underground services, including drainage runs and manholes, should be removed or protected and/or diverted from beneath the development area. Any diversionary works should be carried out in the supervision of, any to the specification of, the appropriate statutory authorities. Furthermore, any resulting excavations should be backfilled with suitable acceptable granular fill material.

Of the 20 soil samples sent for chemical analysis, all 20 returned concentrations within acceptable screening criteria for their respective determinands for a proposed commercial end-use.

Subject to the results of further testing, it may be possible to re-use some of the existing material. Even though none of the samples exceeded the acceptable screening criteria for commercial end-use, some samples returned high PAH concentrations, particularly within shallow soil samples. It is recommended that should the shallow soils be planned for re-use, further analysis is carried out to determine whether it is suitable for this purpose.

Waste Acceptance Criteria (WAC) testing may also be required should it be determined that material is unsuitable for re-use and requires off-site disposal at a suitably licenced landfill. It is recommended that the results of the waste classification and any WAC test results are sent to the intended licensed waste operator prior to disposal in order to confirm their classification and acceptance.

There is a potential for variations to be present in the made ground over short distances. Should future site development works encounter any hitherto undetected suspected contamination, there may be an associated risk to the ground workers. Appropriate investigation and assessment may be required which may result in specific measures for works involving any made ground/contaminated materials encountered.

A system should be established by which any 'unusual' materials that may be encountered are reported rapidly to the site management so that appropriate action can be taken following specialist advice if necessary. An unusual material may be identified by colour, odour or physical nature.

In conclusion, if any excavations were to take place alongside future development works, the treatment and disposal of any excavation should be considered in a Construction Environmental Management Plan (CEMP) which should be submitted alongside development proposals and an associated risk assessment.

## **APPENDIX A**

### **Drawings**

Site Boundary



Job:  
Associated British Ports,  
Cardiff

Title:  
Site Location Plan

Date: January 2023

Scale: NTS

Drawn by: AJD

Checked by: SO



ExCAL House,  
Capel Hendre Ind. Est.  
Annamford  
Carmarthenshire  
SA18 3SJ  
Tel: 01268 831665  
Website: www.excaluk.com  
Email: info@excaluk.com

Drawing No: 238-02-07.D01

Revision No:

Date: 16/01/2023

- Boundary
- Borehole

Note: Boreholes 01, 04 & 05 are monitoring wells

BH Co-ordinates

- BH01 - X 320142.927, Y 173869.078
- BH02 - X 320181.138, Y 174073.936
- BH02A - X 320201.285, Y 173052.105
- BH03 - X 320263.103, Y 174003.822
- BH04 - X 320237.706, Y 173903.134
- BH05 - X 320162.097, Y 173805.594

**Job:**  
 ABP Cardiff,  
 Land adjacent to Queen Alexandra  
 Dock

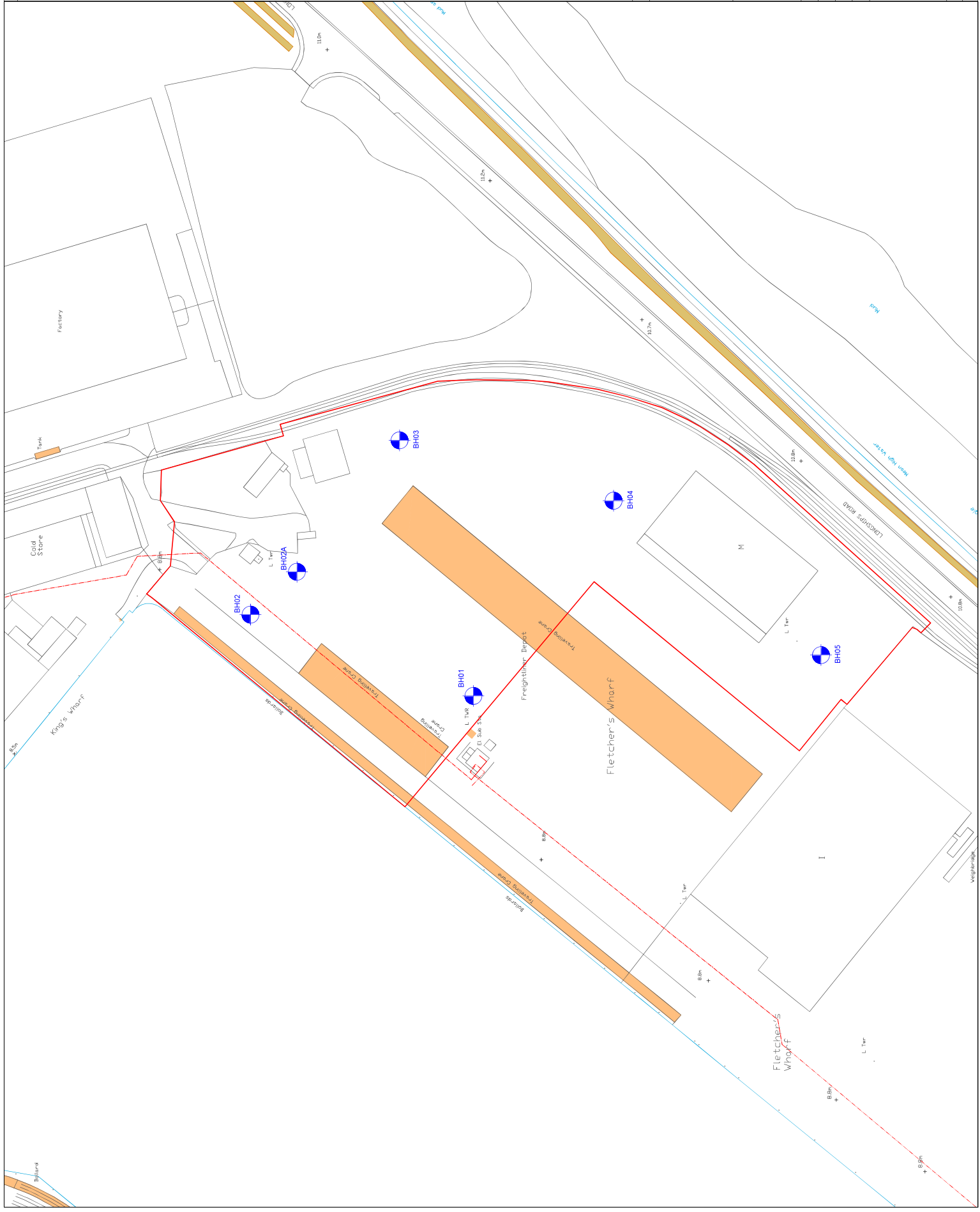
**Title:**  
 Borehole Locations

**Date:** February 2023  
**Scale:** NTS  
**Drawn by:** AJD  
**Checked by:** SO



E-CAL House,  
 Chapel Hendre Ind. Est.,  
 Ammanford,  
 Carmarthenshire,  
 SA18 3SA  
 Tel: 01298 631606  
 Fax: 01298 641687  
 E-mail: info@ecaluk.com

**Drawing No:** 238-02-07.D03  
**Revision No:**      **Date:** 17.02.2023



## **APPENDIX B**

### **Borehole Logs**

Contract: South Side, Queen Alexandra Dock, ABP Cardiff - Site Investigation  
 Client: ExCAL Limited

Borehole No.  
**BH05**

Dates: 07/02/2023

Job Number: 238-02-07

Ground Level:

Location: South Side, QA Dock

Engineer: A Davis

Coordinates:

X 320162.097, Y 173805.594

Run Details					Test Details			STRATA					Water	Install/ Backfill
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend		
0.10								0.00 - 0.10		0.10	Concrete		0.10	
0.50					0.10 - 1.00	BS1		0.10 - 0.50		(0.40)	Sub-base Slag / Boulders / Clay		(0.40)	
1.50					1.00 - 1.50	CPT2	N=20 (2, 2, 2, 6, 6, 6)	0.50 - 1.50		0.50	Slag / Bricks / Ash		0.50	
2.00					1.50 - 2.00	BS3				(1.00)			(1.00)	
3.00					2.00 - 3.00	BS4				1.50	Loose Black Ash / Bricks / Clay		1.50	
3.70					3.00 - 3.50	CPT5	N=3 (0, 0, 1, 0, 1, 1)	1.50 - 3.70		(2.20)			(2.20)	
5.00					3.00 - 4.00	BS6				3.70	Soft Grey / Brown Clay with Gravel		3.70	
5.50					4.00 - 5.00	BS7				(1.30)			(1.30)	
6.00					5.00 - 5.50	CPT8	N=8 (2, 2, 2, 2, 2, 2)	3.70 - 5.00		5.00	Soft Clay with Some Railway Sleepers		5.00	
6.50					5.00 - 6.00	BS9								
7.00					6.00 - 7.00	BS10				(2.00)			(2.00)	
7.50					7.00 - 7.50	CPT11	N=3 (0, 0, 1, 0, 1, 1)	5.00 - 7.00		7.00	Soft Clay		7.00	
8.00					7.50 - 8.00	BS12		7.00 - 8.00		(1.00)			(1.00)	
										8.00			8.00	

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
03/02/2023			200mm		7.00m			Fast inflow - Raised to 4.1m after 20 minutes			

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 8.00m. Concrete, bentonite and 50mm slotted/plain pipes used for borehole. Water tight well cover installed flush with G.L. for future monitoring. Borehole terminated on engineer's instruction.



ExCAL House  
 Capel Hendre Industrial Estate  
 Amlwch  
 Carmarthenshire  
 SA18 3SU  
 Tel: 01293 931000 Fax: 01293 94967  
 Website: www.excaluk.com E-mail: info@excaluk.com

Operator:  
 A Jones

Logged By:  
 A Davis

Sheet No.  
 1 of 1

Scale:  
 1:60.83

All measurements in metres unless otherwise stated

Contract: South Side, Queen Alexandra Dock, ABP Cardiff - Site Investigation  
 Client: ExCAL Limited

Borehole No.  
**BH04**

Dates: 03/02/2023

Job Number: 238-02-07

Ground Level:

Location: South Side, QA Dock

Engineer: A Davis


Coordinates:

X 320237.706, Y 173903.134

Run Details					Test Details			STRATA					Water	Install/ Backfill
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend		
					0.30			0.00 - 0.30		0.30	Concrete		0.30	
1					0.30 - 1.00	BS1		0.30 - 1.00		(0.70)	Sub-base / Boulders / Ash		(0.70)	
					1.00 - 1.50	CPT2	N=15 (3, 4, 3, 4, 4, 4)	0.30 - 1.00		1.00			1.00	
2					1.50 - 2.00	BS3				(1.50)	Black Ash / Metal / Slag		(1.50)	
					2.00 - 3.00	BS4		1.00 - 2.50		(0.50)	Slag / Boulders / Metal		(0.50)	
3					3.00 - 3.50	CPT5	N=64 (7,7,25,25)	2.50 - 3.00		3.00	Slag / Ash / Bricks / Clay		3.00	
					3.00 - 4.00	BS6		3.00 - 3.70		(0.70)			(0.70)	
4					3.70 - 4.50					3.70	Loose Black Ash with Stone		3.70	
					4.50 - 5.00	BS7		3.70 - 4.50		(0.80)			(0.80)	
5					5.00 - 5.50	CPT8	N=3 (0, 0, 1, 0, 1, 1)			4.50			4.50	
					5.50 - 6.00	BS9								
6					6.50 - 7.00	BS10								
					7.00 - 7.50	CPT11	N=4 (0, 1, 1, 1, 1, 1)							
7					7.50 - 8.00	BS12				(3.50)			(3.50)	
8					8.00			4.50 - 8.00		8.00			8.00	

Drilling Progress and Water Observations					Groundwater				Flush		
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
03/02/2023			200mm		8.00m						

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 8.00m. Concrete, bentonite and 50mm slotted/plain pipes used for borehole. Water tight well cover installed flush with G.L. for future monitoring. Borehole terminated on engineer's instruction.

 <small>EXCAL House          Capel Hendre Industrial Estate          Amlwch          Carmarthenshire          SA41 3SJ          Tel: 01269 831906 Fax: 01269 846697          Website: www.excaluk.com E-mail: info@excaluk.com</small>	Operator:	Logged By:	Sheet No.	Scale:	All measurements in metres unless otherwise stated
	A Jones	A Davis	1 of 1	1:60.83	

Contract: South Side, Queen Alexandra Dock, ABP Cardiff - Site Investigation  
 Client: ExCAL Limited

Borehole No.  
**BH03**

Dates: 02/02/2023

Job Number: 238-02-07

Ground Level:

Location: South Side, QA Dock

Engineer: A Davis

Coordinates:

X 320263.103, Y 174003.822

Run Details					Test Details			STRATA					Water	Install/ Backfill	
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend			Depth (Thickness)
								0.00 - 0.20		0.20	Concrete		0.20		
					0.60 - 1.00	BS1		0.20 - 1.00		(0.80)	MADE GROUND - Ironstone Slag		(0.80)		
1	1.00				1.00 - 1.50	CPT2	N=13 (4, 4, 4, 3, 3, 3)			1.00			1.00		
					1.50 - 2.00	BS3					Loose - Fine Clayey Ash				
2								1.00 - 2.50		(1.50)			(1.50)		
	2.50				2.50 - 3.00	BS4				2.50			2.50		
3					3.00 - 3.50	CPT5	N=2 (0, 1, 0, 1, 0, 1)								
					3.50 - 4.00	BS6					Soft Grey Clay with Some Cobbles / Gravels				
4					4.50 - 5.00	BS7				(2.50)			(2.50)		
5	5.00				5.00 - 5.50	CPT8	N=4 (1, 1, 1, 1, 1, 1)			5.00			5.00		
					5.50 - 6.00	BS9				(1.00)			(1.00)		
6	6.00							5.00 - 6.00		6.00			6.00		

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
02/02/2023			200mm		4.00m			Medium inflow - Raised to 3.5m after 20 minutes			

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 6.00m. Borehole reinstated with bentonite. Borehole terminated on engineer's instruction.

<p>ExCAL House          Capel Hendra Industrial Estate          Ammanford          Carmarthenshire          SA19 3SU          Tel: 01269 831806 Fax: 01269 84887          Website: www.excaluk.com E-mail: info@excaluk.com</p>	Operator:	Logged By:	Sheet No.	Scale:	All measurements in metres unless otherwise stated
	A Jones	A Davis	1 of 1	1:60.83	

Contract: South Side, Queen Alexandra Dock, ABP Cardiff - Site Investigation

Borehole No.

Client: ExCAL Limited

BH02A

Dates: 01/02/2023

Job Number: 238-02-07

Ground Level:

Location: South Side, QA Dock

Engineer: A Davis

Coordinates:

X 320201.285, Y 173052.105

Run Details					Test Details			STRATA							
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend	Depth (Thickness)	Water	Install/Backfill
0.20					0.20 - 0.60	BS1		0.00 - 0.20		0.20	Concrete		0.20		
0.60								0.20 - 0.60		(0.30)	Sub-base / Slag / Stone		(0.30)		
1					1.00 - 1.50	CPT2	N=2 (0, 1, 0, 1, 0, 1)			0.60	Soft Grey Clay with Some Cobbles		0.60		
2					1.50 - 2.00	BS3		0.60 - 2.00		(1.40)			(1.40)		
2.00					2.50 - 3.00	BS4				2.00	Grey Soft Clay		2.00	1	
3					3.00 - 3.50	CPT5	N=11 (2, 2, 2, 2, 3, 4)	2.00 - 3.00		(1.00)			(1.00)	1	
3.00					3.50 - 4.00	BS6				3.00	Loose Fine Clay with Gravels		3.00		
4								3.00 - 4.00		(1.00)			(1.00)		
4.00										4.00			4.00		
5															
6															
7															
8															
9															
10															

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
01/02/2023			200mm		3.00m			Medium inflow - Raised to 2.6m after 20 minutes			

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 4.00m, Borehole reinstated with bentonite. Borehole terminated on engineer's instruction.

<p>ExCAL House Capel Hendre Industrial Estate Ammannford Carmarthenshire SA18 3SJ Tel: 01269 631006 Fax: 01269 84867 Website: www.excaluk.com E-mail: info@excaluk.com</p>	Operator:	Logged By:	Sheet No.	Scale:	All measurements in metres unless otherwise stated
	A Jones	A Davis	1 of 1	1:60.83	

Contract: South Side, Queen Alexandra Dock, ABP Cardiff - Site Investigation  
 Client: ExCAL Limited

Borehole No.  
**BH02**

Dates: 30/01/2023

Job Number: 238-02-07

Ground Level:

Location: South Side, QA Dock

Engineer: A Davis

Coordinates:

X 320181.138, Y 174073.936

Run Details					Test Details			STRATA					Water	Install/ Backfill
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend		
0.25								0.00 - 0.25		0.25	Concrete		0.25	
0.40								0.25 - 0.40		(0.15)	Compacted Sub-base Stone		(0.15)	
										0.40			0.40	
1											Borehole terminated as the rig was unable to penetrate through the thick slab			
2														
3														
4														
5														
6														
7														
8														
9														
10														

Drilling Progress and Water Observations					Groundwater				Flush		
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
30/01/2023			200mm								

Remarks: Dando 2000 drill rig used. Light cable percussion G.L. - 0.40m. Borehole reinstated with concrete. Borehole terminated on engineer's instruction.

Contract: South Side, Queen Alexandra Dock, ABP Cardiff - Site Investigation  
 Client: ExCAL Limited

Borehole No.  
**BH01**

Date: 31/01/2023

Job Number: 238-02-07

Ground Level:

Location: South Side, QA Dock

Engineer: A Davis

Coordinates:

X 320142.927, Y 173969.078

Run Details					Test Details			STRATA					Water	Install/ Backfill
Core Run	TCR	SCR	RQD	FI	Depth	Test Type	Test Results	Depth	Natural GW Depth	Depth (Thickness)	Description	Legend		
0.20					0.20 - 0.50	BS1		0.00 - 0.20		0.20	Concrete		0.20	
1					1.00 - 1.50	CPT2	N=7 (2, 2, 1, 2, 2, 2)			(1.30)	Stone with Red Marl Bands, Black Ash		(1.30)	
1.50					1.50 - 2.00	BS3		0.20 - 1.50		1.50			1.50	
2					2.00 - 3.00	BS4								
3					3.00 - 3.50	CPT5	N=12 (5, 4, 2, 2, 4, 4)				(3.00)	Reworked Marl with some Large Cobbles		(3.00)
4					3.50 - 4.00	BS6								
4.50					4.50 - 5.00	BS7		1.50 - 4.50		4.50	Gravels and Round Cobbles		4.50	
5					5.00 - 5.50	CPT8	N=11 (5, 3, 3, 4, 2, 2)			(0.50)	Gravels and Cobbles		(0.50)	
5.60					5.50 - 6.00	BS9		4.50 - 5.00		5.00			5.00	
6					5.50 - 6.00	BS9		5.00 - 5.60		5.60			5.60	
7					6.50 - 7.00	BS10				(1.40)	Fine to Coarse Silt, Clay and Sand		(1.40)	
7.00					7.00 - 7.50	CPT11	N=3 (0, 1, 0, 1, 1, 1)	5.60 - 7.00		7.00			7.00	
8														
9														
10														

Drilling Progress and Water Observations					Groundwater			Flush			
Date/Time	Depth	Casing	BH Dia.	Water	Struck	Sealed	Flow Rate	Remarks	Depth	Type	Returns
31/01/2023			200mm		5.00m			Medium inflow - Raised to 4.5m after 20 minutes			

Remarks: Dando 2000 drill rig used, Light cable percussion G.L. - 7.00m. Concrete, bentonite and 50mm slotted/plain pipes used for borehole. Water tight well cover installed flush with G.L. for future monitoring. Borehole terminated on engineer's instruction.

**APPENDIX C**

**Chemical Analysis Results Table**







**APPENDIX D**  
**Laboratory Results**



Environmental  
Chemistry

## Certificate of Analysis

**Client:** ExCAL Limited

**Project:** 23030224

**Quote:** BEC230228922 V1.2

**Project Ref:** 238-02-07

**Site:** South Side, Queens Alexandra Dock - Cardiff

**Contact:** Stephen Owen

**Address:** Capel Hendre Industrial Estate  
Ammanford  
Carmarthenshire  
SA18 3SJ

**E-Mail:** [stephen.owen@excaluk.com](mailto:stephen.owen@excaluk.com)

**Phone:** +44(0)1269 831606

**No. Samples Received:** 25

**Date Received:** 02/03/2023

**Analysis Date:** 14/03/2023

**Date Issued:** 14/03/2023

**Report Type:** Final Version 01

This report supersedes any versions previously issued by the laboratory

A handwritten signature in black ink that reads 'J. Hannah'.

Reported by Customer Service Co-Ordinator  
Jacqui Hannah  
01283 204384



Client: ExCAL Limited  
Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
Project No: 23030224  
Date Issued: 14/03/2023

**Samples Analysed**

<b><u>Text ID</u></b>	<b><u>Sample Reference</u></b>	<b><u>Sampling Date</u></b>	<b><u>Sample Type</u></b>	<b><u>Sample Description</u></b>
23030224-001	BH05 - 7m	17/02/2023 08:00:00	SOLID	Soil Sample
23030224-002	BH05 - 3m	17/02/2023 08:15:00	SOLID	Soil Sample
23030224-003	BH05 - 2.5-3m - Asbestos	17/02/2023 08:15:00	SOLID	Soil Sample
23030224-004	BH05 - 5m	17/02/2023 08:45:00	SOLID	Soil Sample
23030224-005	BH05 - 1m	17/02/2023 09:00:00	SOLID	Soil Sample
23030224-006	BH04 - 5m	17/02/2023 09:15:00	SOLID	Soil Sample
23030224-007	BH04 - 3m	17/02/2023 09:30:00	SOLID	Soil Sample
23030224-008	BH04 - 1-2m - Asbestos	17/02/2023 09:45:00	SOLID	Soil Sample
23030224-009	BH04 - 1m	17/02/2023 09:45:00	SOLID	Soil Sample
23030224-010	BH04 - 7m	17/02/2023 10:00:00	SOLID	Soil Sample
23030224-011	BH03 - 5m	17/02/2023 10:30:00	SOLID	Soil Sample
23030224-012	BH03 - 4m	17/02/2023 10:45:00	SOLID	Soil Sample
23030224-013	BH03 - 2m	17/02/2023 11:15:00	SOLID	Soil Sample
23030224-014	BH03 - 1-3m - Asbestos	17/02/2023 11:30:00	SOLID	Soil Sample
23030224-015	BH03 - 1m	17/02/2023 11:30:00	SOLID	Soil Sample
23030224-016	BH02A - 4m	17/02/2023 11:45:00	SOLID	Soil Sample
23030224-017	BH02A - 3m	17/02/2023 13:00:00	SOLID	Soil Sample
23030224-018	BH02A - 2m	17/02/2023 13:15:00	SOLID	Soil Sample
23030224-019	BH02A - 1-2m - Asbestos	17/02/2023 13:30:00	SOLID	Soil Sample
23030224-020	BH02A - 1m	17/02/2023 13:30:00	SOLID	Soil Sample
23030224-021	BH01 - 1m	17/02/2023 13:45:00	SOLID	Soil Sample
23030224-022	BH01 - 1-3m - Asbestos	17/02/2023 13:45:00	SOLID	Soil Sample
23030224-023	BH01 - 3m	17/02/2023 14:00:00	SOLID	Soil Sample
23030224-024	BH01 - 5m	17/02/2023 14:15:00	SOLID	Soil Sample
23030224-025	BH01 - 7m	17/02/2023 14:30:00	SOLID	Soil Sample

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
					17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.329	<0.255	<0.255	<0.255	<0.287			
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.329	<0.255	<0.255	<0.287				
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.017	<0.013	<0.013	<0.014				
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.329	<0.255	<0.255	<0.287				
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.04	mg/kg <sup>a</sup>	UM	<0.067	<0.052	<0.052	<0.057				
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.329* <sup>B</sup>	<0.255* <sup>B</sup>	<0.255* <sup>B</sup>	<0.287* <sup>B</sup>				
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.017	<0.013	<0.013	<0.014				
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.329	<0.255	<0.255	<0.287				
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM	8.1	8.4	8.4	8.2				
Chromium (VI) as Cr	KONENS	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1				
Complex Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.8	<0.6	<0.6	<0.7				
Free Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.8	<0.6	<0.6	<0.7				
Phenol Index	SFAPI	0.5	mg/kg <sup>a</sup>	U	<0.8	<0.6	<0.6	<0.7				
Total Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.8	<0.6	<0.6	<0.7				
Antimony as Sb	ICPMSS	0.1	mg/kg <sup>a</sup>	U	0.2	1.1	1.1	0.3				
Arsenic as As	ICPMSS	0.3	mg/kg <sup>a</sup>	UM	19.6	15.5	15.5	17.4				
Cadmium as Cd	ICPMSS	0.2	mg/kg <sup>a</sup>	UM	<0.2	2.7	2.7	0.9				
Copper as Cu	ICPMSS	1.6	mg/kg <sup>a</sup>	UM	43.0	63.8	63.8	28.1				
Lead as Pb	ICPMSS	0.7	mg/kg <sup>a</sup>	UM	71.4	86.0	86.0	34.2				

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)



Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.224	<0.292	<0.254*	<0.254*	<0.254*	<0.254*	
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.224	<0.292	<0.254*	<0.254*	<0.254*	<0.254*	
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.011	<0.015	<0.013*	<0.013*	<0.013*	<0.013*	
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.224	<0.292	<0.254*	<0.254*	<0.254*	<0.254*	
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.04	mg/kg <sup>a</sup>	UM	<0.045	<0.059	<0.051*	<0.051*	<0.051*	<0.051*	
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.224* <sup>B</sup>	<0.292* <sup>B</sup>	<0.254* <sup>B</sup>	<0.254* <sup>B</sup>	<0.254* <sup>B</sup>	<0.254* <sup>B</sup>	
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.011	<0.015	<0.013*	<0.013*	<0.013*	<0.013*	
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.224	<0.292	<0.254*	<0.254*	<0.254*	<0.254*	
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM	8.1	8.9	8.8*	8.8*	8.8*	8.8*	
Chromium (VI) as Cr	KONENS	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Complex Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.9	<0.7	<0.6*	<0.6*	<0.6*	<0.6*	
Free Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.6	<0.7	<0.6*	<0.6*	<0.6*	<0.6*	
Phenol Index	SFAPI	0.5	mg/kg <sup>a</sup>	U	<0.6	<0.7	<0.6*	<0.6*	<0.6*	<0.6*	
Total Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	0.9	<0.7	<0.6*	<0.6*	<0.6*	<0.6*	
Antimony as Sb	ICPMSS	0.1	mg/kg <sup>a</sup>	U	2.3	<0.1	0.8*	0.8*	0.8*	0.8*	
Arsenic as As	ICPMSS	0.3	mg/kg <sup>a</sup>	UM	26.7	15.1	13.3*	13.3*	13.3*	13.3*	
Cadmium as Cd	ICPMSS	0.2	mg/kg <sup>a</sup>	UM	0.4	<0.2	<0.2*	<0.2*	<0.2*	<0.2*	
Copper as Cu	ICPMSS	1.6	mg/kg <sup>a</sup>	UM	274.9	18.7	41.2*	41.2*	41.2*	41.2*	
Lead as Pb	ICPMSS	0.7	mg/kg <sup>a</sup>	UM	120.2	23.0	78.1*	78.1*	78.1*	78.1*	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)



Analysis	Method Code	MDL	Units	Accred.	009		010		011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m			BH03 - 4m
					LPL	SOLID	LPL	SOLID	LPL	SOLID		
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.266	<0.305	<0.266	<0.305	<0.286	<0.286		
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.266	<0.305	<0.266	<0.305	<0.286	<0.286		
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.013	<0.015	<0.013	<0.015	<0.014	<0.014		
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.266	<0.305	<0.266	<0.305	<0.286	<0.286		
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.04	mg/kg <sup>a</sup>	UM	<0.053	<0.061	<0.053	<0.061	<0.057	<0.057		
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.266* B	<0.305* B	<0.266* B	<0.305* B	<0.286* B	<0.286* B		
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.013	<0.015	<0.013	<0.015	<0.014	<0.014		
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.266	<0.305	<0.266	<0.305	<0.286	<0.286		
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM	9.2	8.4	9.2	8.4	8.3	8.3		
Chromium (VI) as Cr	KONENS	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Complex Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.7	<0.8	<0.7	<0.8	<0.7	<0.7		
Free Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.7	<0.8	<0.7	<0.8	<0.7	<0.7		
Phenol Index	SFAPI	0.5	mg/kg <sup>a</sup>	U	<0.7	<0.8	<0.7	<0.8	<0.7	<0.7		
Total Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.7	<0.8	<0.7	<0.8	<0.7	<0.7		
Antimony as Sb	ICPMSS	0.1	mg/kg <sup>a</sup>	U	0.4	<0.1	0.4	<0.1	<0.1	<0.1		
Arsenic as As	ICPMSS	0.3	mg/kg <sup>a</sup>	UM	10.8	14.0	10.8	14.0	14.0	14.0		
Cadmium as Cd	ICPMSS	0.2	mg/kg <sup>a</sup>	UM	0.3	<0.2	0.3	<0.2	<0.2	<0.2		
Copper as Cu	ICPMSS	1.6	mg/kg <sup>a</sup>	UM	31.4	19.4	31.4	19.4	16.7	16.7		
Lead as Pb	ICPMSS	0.7	mg/kg <sup>a</sup>	UM	63.9	24.6	63.9	24.6	22.0	22.0		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)



Analysis	Method Code	MDL	Units	Accred.	012		013		014		015		016	
					BH03 - 4m		BH03 - 2m		BH03 - 1-3m - Asbestos		BH03 - 1m		BH02A - 4m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.264	<0.228	<0.228	<0.228	<0.236					
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.264	<0.228	<0.228	<0.236						
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.013	0.037	0.037	0.015						
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.264	<0.228	<0.228	<0.236						
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.04	mg/kg <sup>a</sup>	UM	<0.053	0.052	0.052	<0.048						
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.264 <sup>b</sup>	<0.228 <sup>b</sup>	<0.228 <sup>b</sup>	<0.236 <sup>b</sup>						
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.013	0.020	0.020	<0.012						
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.264	<0.228	<0.228	<0.236						
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM	8.9	9.1	9.1	9.7						
Chromium (VI) as Cr	KONENS	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1						
Complex Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.7	<0.6	<0.6	<0.6						
Free Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.7	<0.6	<0.6	<0.6						
Phenol Index	SFAPI	0.5	mg/kg <sup>a</sup>	U	<0.7	<0.6	<0.6	<0.6						
Total Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.7	<0.6	<0.6	<0.6						
Antimony as Sb	ICPMSS	0.1	mg/kg <sup>a</sup>	U	0.3	0.5	0.5	0.7						
Arsenic as As	ICPMSS	0.3	mg/kg <sup>a</sup>	UM	9.8	5.8	5.8	6.3						
Cadmium as Cd	ICPMSS	0.2	mg/kg <sup>a</sup>	UM	<0.2	<0.2	<0.2	<0.2						
Copper as Cu	ICPMSS	1.6	mg/kg <sup>a</sup>	UM	15.9	48.0	48.0	67.7						
Lead as Pb	ICPMSS	0.7	mg/kg <sup>a</sup>	UM	18.5	14.1	14.1	8.5						

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)



Analysis	Method Code	MDL	Units	Accred.	016		017		018		019		020	
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos		BH02A - 1m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.231	<0.256	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.231	<0.256	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.012	<0.013	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.231	<0.256	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.04	mg/kg <sup>a</sup>	UM	<0.047	<0.052	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.231* <sup>B</sup>	<0.256* <sup>B</sup>	<0.279* <sup>B</sup>	<0.279* <sup>B</sup>	<0.279* <sup>B</sup>	<0.279* <sup>B</sup>	<0.279* <sup>B</sup>	<0.279* <sup>B</sup>	<0.279* <sup>B</sup>	<0.279* <sup>B</sup>
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM	<0.012	<0.013	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	<0.231	<0.256	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279	<0.279
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM	8.5	8.7	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
Chromium (VI) as Cr	KONENS	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Complex Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Free Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Phenol Index	SFAPI	0.5	mg/kg <sup>a</sup>	U	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Total Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Antimony as Sb	ICPMSS	0.1	mg/kg <sup>a</sup>	U	0.3	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Arsenic as As	ICPMSS	0.3	mg/kg <sup>a</sup>	UM	9.2	15.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Cadmium as Cd	ICPMSS	0.2	mg/kg <sup>a</sup>	UM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Copper as Cu	ICPMSS	1.6	mg/kg <sup>a</sup>	UM	19.9	45.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
Lead as Pb	ICPMSS	0.7	mg/kg <sup>a</sup>	UM	46.6	149.8	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID									
				020		021		022		023		024	
				Customer ID	Sample Type	Sampling Date	Accred.	Customer ID	Sample Type	Sampling Date	Accred.	Customer ID	Sample Type
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM	BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m				
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM									
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM									
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM									
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.04	mg/kg <sup>a</sup>	UM									
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM									
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	UM									
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	UM									
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM									
Chromium (VI) as Cr	KONENS	0.1	mg/kg <sup>a</sup>	N									
Complex Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM									
Free Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM									
Phenol Index	SFAPI	0.5	mg/kg <sup>a</sup>	U									
Total Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	UM									
Antimony as Sb	ICPMSS	0.1	mg/kg <sup>a</sup>	U									
Arsenic as As	ICPMSS	0.3	mg/kg <sup>a</sup>	UM									
Cadmium as Cd	ICPMSS	0.2	mg/kg <sup>a</sup>	UM									
Copper as Cu	ICPMSS	1.6	mg/kg <sup>a</sup>	UM									
Lead as Pb	ICPMSS	0.7	mg/kg <sup>a</sup>	UM									

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID	
				024	025
Customer ID	BH01 - 5m				
Sample Type	SOLID		LPL	SOLID	
Sampling Date	17/02/2023		17/02/2023	17/02/2023	
Accred.					
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	<0.236	<0.242
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	<0.236	<0.242
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	<0.012	<0.012
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	<0.236	<0.242
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.04	mg/kg <sup>a</sup>	<0.048	<0.048
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	<0.236 <sup>b</sup>	<0.242
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.01	mg/kg <sup>a</sup>	<0.012	<0.012
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.2	mg/kg <sup>a</sup>	<0.236	<0.242
pH (2.5:1 extraction)	PHSOIL	1	pH units	7.7	7.8
Chromium (VI) as Cr	KONENS	0.1	mg/kg <sup>a</sup>	<0.1	<0.1
Complex Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	<0.6	<0.6
Free Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	<0.6	<0.6
Phenol Index	SFAPI	0.5	mg/kg <sup>a</sup>	<0.6	<0.6
Total Cyanide	SFAPI	0.5	mg/kg <sup>a</sup>	<0.6	<0.6
Antimony as Sb	ICPMSS	0.1	mg/kg <sup>a</sup>	1.4	1.1
Arsenic as As	ICPMSS	0.3	mg/kg <sup>a</sup>	16.5	12.2
Cadmium as Cd	ICPMSS	0.2	mg/kg <sup>a</sup>	0.2	0.4
Copper as Cu	ICPMSS	1.6	mg/kg <sup>a</sup>	56.4	17.3
Lead as Pb	ICPMSS	0.7	mg/kg <sup>a</sup>	101.4	35.4

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Accred.
				001	002	
				Customer ID	Customer ID	
Manganese as Mn	ICPMSS	1	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	004
Mercury as Hg	ICPMSS	0.5	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Molybdenum as Mo	ICPMSS	0.5	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Nickel as Ni	ICPMSS	2	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Selenium as Se	ICPMSS	0.5	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Total Chromium as Cr	ICPMSS	1.2	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Vanadium as V	ICPMSS	0.6	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Zinc as Zn	ICPMSS	16	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Aluminium as Al	ICPSOIL	10	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Barium as Ba	ICPSOIL	0.5	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Beryllium as Be	ICPSOIL	0.1	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Boron as B	ICPSOIL	10	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Iron as Fe	ICPSOIL	36	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Titanium as Ti	ICPSOIL	6	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Water Soluble Sulphate as SO4 by Mass	ICPMSS	20	mg/kg <sup>a</sup>	BH05 - 7m	BH05 - 3m	BH05 - 5m
Antimony as Sb	ICPMSSW (Dissolved)	0.001	mg/l	BH05 - 7m	BH05 - 3m	BH05 - 5m
Arsenic as As	ICPMSSW (Dissolved)	0.001	mg/l	BH05 - 7m	BH05 - 3m	BH05 - 5m
Cadmium as Cd	ICPMSSW (Dissolved)	0.0002	mg/l	BH05 - 7m	BH05 - 3m	BH05 - 5m
Total Chromium as Cr	ICPMSSW (Dissolved)	0.001	mg/l	BH05 - 7m	BH05 - 3m	BH05 - 5m

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)



Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Sample ID	Customer ID	Sample Type	Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	
Manganese as Mn	ICPMSS	1	mg/kg <sup>a</sup>	UM		12740					
Mercury as Hg	ICPMSS	0.5	mg/kg <sup>a</sup>	UM		<0.5					
Molybdenum as Mo	ICPMSS	0.5	mg/kg <sup>a</sup>	UM		3.2					
Nickel as Ni	ICPMSS	2	mg/kg <sup>a</sup>	UM		28.2					
Selenium as Se	ICPMSS	0.5	mg/kg <sup>a</sup>	UM		<0.5					
Total Chromium as Cr	ICPMSS	1.2	mg/kg <sup>a</sup>	UM		407.9					
Vanadium as V	ICPMSS	0.6	mg/kg <sup>a</sup>	N		1032					
Zinc as Zn	ICPMSS	16	mg/kg <sup>a</sup>	UM		295.1					
Aluminium as Al	ICPSOIL	10	mg/kg <sup>a</sup>	U		20500					
Barium as Ba	ICPSOIL	0.5	mg/kg <sup>a</sup>	UM		806					
Beryllium as Be	ICPSOIL	0.1	mg/kg <sup>a</sup>	U		2.52					
Boron as B	ICPSOIL	10	mg/kg <sup>a</sup>	N		26					
Iron as Fe	ICPSOIL	36	mg/kg <sup>a</sup>	UM		89900					
Titanium as Ti	ICPSOIL	6	mg/kg <sup>a</sup>	N		1280					
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	mg/kg <sup>a</sup>	UM		1290					
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U	0.002		0.022			0.033	
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U	0.010		0.014			0.051	
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U	<0.00002		<0.00020 <sup>b</sup>			<0.00020 <sup>b</sup>	
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U	0.016		<0.010 <sup>b</sup>			<0.010 <sup>b</sup>	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009				010				011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m		BH03 - 4m		LPL	SOLID	LPL	SOLID
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID				
Sample ID	Customer ID	Sample Type	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	
Manganese as Mn	ICPMSS	1	mg/kg <sup>a</sup>	UM	7704											
Mercury as Hg	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	<0.5											
Molybdenum as Mo	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	1.8											
Nickel as Ni	ICPMSS	2	mg/kg <sup>a</sup>	UM	21.2											
Selenium as Se	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	<0.5											
Total Chromium as Cr	ICPMSS	1.2	mg/kg <sup>a</sup>	UM	330.1											
Vanadium as V	ICPMSS	0.6	mg/kg <sup>a</sup>	N	619.8											
Zinc as Zn	ICPMSS	16	mg/kg <sup>a</sup>	UM	203.5											
Aluminium as Al	ICPSOIL	10	mg/kg <sup>a</sup>	U	13600											
Barium as Ba	ICPSOIL	0.5	mg/kg <sup>a</sup>	UM	277											
Beryllium as Be	ICPSOIL	0.1	mg/kg <sup>a</sup>	U	0.88											
Boron as B	ICPSOIL	10	mg/kg <sup>a</sup>	N	26											
Iron as Fe	ICPSOIL	36	mg/kg <sup>a</sup>	UM	49200											
Titanium as Ti	ICPSOIL	6	mg/kg <sup>a</sup>	N	343											
Water Soluble Sulphate as SO <sub>4</sub> by Mass	ICPWSS	20	mg/kg <sup>a</sup>	UM	727											
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U	<0.010 <sup>d</sup>											
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U	0.046											
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U	<0.00020 <sup>d</sup>											
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U	<0.010 <sup>d</sup>											

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 14/03/2023  
 Date Issued: 14/03/2023

[Analysis Results](#)



Analysis	Method Code	MDL	Units	Sample ID										
				012	013		014	015		016				
				BH03 - 4m	BH03 - 2m		BH03 - 1-3m - Asbestos	BH03 - 1m		BH02A - 4m				
Sample Type	Sampling Date	Accred.	LPL	SOLID	SOLID	LPL	SOLID	LPL	SOLID					
Manganese as Mn	ICPMSS	1	mg/kg <sup>a</sup>	UM										
Mercury as Hg	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Molybdenum as Mo	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	0.6	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	7.8
Nickel as Ni	ICPMSS	2	mg/kg <sup>a</sup>	UM	36.7	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	74.2
Selenium as Se	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Chromium as Cr	ICPMSS	1.2	mg/kg <sup>a</sup>	UM	32.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	181.4
Vanadium as V	ICPMSS	0.6	mg/kg <sup>a</sup>	N	41.1	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	149.1
Zinc as Zn	ICPMSS	16	mg/kg <sup>a</sup>	UM	89.6	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	43.9
Aluminium as Al	ICPSOIL	10	mg/kg <sup>a</sup>	U	19800	10800	10800	10800	10800	10800	10800	10800	10800	21600
Barium as Ba	ICPSOIL	0.5	mg/kg <sup>a</sup>	UM	51.0	242	242	242	242	242	242	242	242	874
Beryllium as Be	ICPSOIL	0.1	mg/kg <sup>a</sup>	U	0.88	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.80
Boron as B	ICPSOIL	10	mg/kg <sup>a</sup>	N	42	29	29	29	29	29	29	29	29	70
Iron as Fe	ICPSOIL	36	mg/kg <sup>a</sup>	UM	33600	86500	86500	86500	86500	86500	86500	86500	86500	97300
Titanium as Ti	ICPSOIL	6	mg/kg <sup>a</sup>	N	165	213	213	213	213	213	213	213	213	986
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	mg/kg <sup>a</sup>	UM	295	156	156	156	156	156	156	156	156	221
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U		0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U		<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		016		017		018		019	020
				Customer ID	Sample Type	BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos	020
				Accred.	Sampling Date	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID
Manganese as Mn	ICPMSS	1	mg/kg <sup>a</sup>	UM	650.7			9135					
Mercury as Hg	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	<0.5		<0.5						
Molybdenum as Mo	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	0.6		3.1						
Nickel as Ni	ICPMSS	2	mg/kg <sup>a</sup>	UM	28.3		39.9						
Selenium as Se	ICPMSS	0.5	mg/kg <sup>a</sup>	UM	<0.5		<0.5						
Total Chromium as Cr	ICPMSS	1.2	mg/kg <sup>a</sup>	UM	23.7		348.7						
Vanadium as V	ICPMSS	0.6	mg/kg <sup>a</sup>	N	32.4		780.6						
Zinc as Zn	ICPMSS	16	mg/kg <sup>a</sup>	UM	377.9		7557						
Aluminium as Al	ICPSOIL	10	mg/kg <sup>a</sup>	U	9540		18500						
Barium as Ba	ICPSOIL	0.5	mg/kg <sup>a</sup>	UM	72.1		314						
Beryllium as Be	ICPSOIL	0.1	mg/kg <sup>a</sup>	U	0.60		0.99						
Boron as B	ICPSOIL	10	mg/kg <sup>a</sup>	N	<10		27						
Iron as Fe	ICPSOIL	36	mg/kg <sup>a</sup>	UM	24800		79600						
Titanium as Ti	ICPSOIL	6	mg/kg <sup>a</sup>	N	140		723						
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	mg/kg <sup>a</sup>	UM	106		531						
Antimony as Sb	ICPMSW (Dissolved)	0.001	mg/l	U			0.002				0.003		0.003
Arsenic as As	ICPMSW (Dissolved)	0.001	mg/l	U			0.008				0.012		0.003
Cadmium as Cd	ICPMSW (Dissolved)	0.00002	mg/l	U			<0.00002				<0.00002		<0.00002
Total Chromium as Cr	ICPMSW (Dissolved)	0.001	mg/l	U			0.001				0.002		<0.001



Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 14/03/2023  
 Date Issued: 14/03/2023

[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		Units	Accred.
			024	025		
Customer ID	BH01 - 5m					
Sample Type	SOLID					
Sampling Date	17/02/2023					
Sample ID	BH01 - 5m					
Customer ID	BH01 - 7m					
Sample Type	SOLID					
Sampling Date	17/02/2023					
Sample ID	BH01 - 7m					
Customer ID	BH01 - 7m					
Manganese as Mn	ICPMSS	1	571.4		UM	616.3
Mercury as Hg	ICPMSS	0.5	<0.5		UM	<0.5
Molybdenum as Mo	ICPMSS	0.5	1.2		UM	<0.5
Nickel as Ni	ICPMSS	2	40.3		UM	24.3
Selenium as Se	ICPMSS	0.5	<0.5		UM	<0.5
Total Chromium as Cr	ICPMSS	1.2	22.4		UM	19.6
Vanadium as V	ICPMSS	0.6	23.8		N	21.5
Zinc as Zn	ICPMSS	16	107.5		UM	75.0
Aluminium as Al	ICPSOIL	10	14300		U	8960
Barium as Ba	ICPSOIL	0.5	339		UM	123
Beryllium as Be	ICPSOIL	0.1	0.66		U	0.41
Boron as B	ICPSOIL	10	<10		N	<10
Iron as Fe	ICPSOIL	36	34700		UM	25200
Titanium as Ti	ICPSOIL	6	94.6		N	80.9
Water Soluble Sulphate as SO4 by Mass	ICPWSS	20	349		UM	138
Antimony as Sb	ICPMSW (Dissolved)	0.001			U	0.027
Arsenic as As	ICPMSW (Dissolved)	0.001			U	0.005
Cadmium as Cd	ICPMSW (Dissolved)	0.00002			U	<0.00002
Total Chromium as Cr	ICPMSW (Dissolved)	0.001			U	<0.001



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Accred.
				001	002	
				BH05 - 7m	BH05 - 3m	
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	LPL 17/02/2023	SOLID 17/02/2023	004 BH05 - 5m
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	<0.001	<0.001	
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	0.040	<0.002	
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	<0.00003	<0.00003	
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	0.090	0.010	
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	0.003	<0.001	
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	<0.001	0.014	
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	0.011	0.001	
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	0.002	0.070	
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	<0.01	<0.01	
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	0.03	0.03	
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	<0.01	<0.01	
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	1.76	0.15	
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	0.01	0.01	
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	<0.01	<0.01	
Benzene HS_1D_AR	BTEXHSA	10	µg/kg <sup>a</sup>	<17	<13	<14
Ethylbenzene HS_1D_AR	BTEXHSA	10	µg/kg <sup>a</sup>	<17	<13	<14
m/p-Xylene HS_1D_AR	BTEXHSA	20	µg/kg <sup>a</sup>	<33	<26	<29
o-Xylene HS_1D_AR	BTEXHSA	10	µg/kg <sup>a</sup>	<17	<13	<14

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID			Accred.				
				005		006		007		008	
				LPL	SOLID	LPL		SOLID	LPL	SOLID	BH04 - 1-2m - Asbestos
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U	0.003	<0.010 <sup>D</sup>	<0.010 <sup>D</sup>	0.011			
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001	<0.010 <sup>D</sup>	<0.010 <sup>D</sup>	<0.010 <sup>D</sup>			
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U	<0.002	<0.020 <sup>D</sup>	<0.020 <sup>D</sup>	<0.020 <sup>D</sup>			
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U	0.00232	<0.00030 <sup>D</sup>	<0.00030 <sup>D</sup>	<0.00030 <sup>D</sup>			
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U	0.042	0.115	0.115	0.081			
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001	<0.010 <sup>D</sup>	<0.010 <sup>D</sup>	0.013			
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U	0.005	<0.010 <sup>D</sup>	<0.010 <sup>D</sup>	0.017			
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U	0.642	0.040	0.040	0.190			
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U	<0.002	<0.020 <sup>D</sup>	<0.020 <sup>D</sup>	<0.020 <sup>D</sup>			
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.02	0.03	0.03	0.03			
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.04	0.02	0.02	0.01			
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01	<0.01	<0.01	<0.01			
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.20	1.26	1.26	0.62			
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.09	0.01	0.01	0.03			
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01	<0.01	<0.01	<0.01			
Benzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>A</sup>	UM	<11	<15	<15	<13 <sup>*</sup>			
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>A</sup>	UM	<11	<15	<15	<13 <sup>*</sup>			
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg <sup>A</sup>	UM	<22	<29	<29	<25 <sup>*</sup>			
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg <sup>A</sup>	UM	<11	<15	<15	<13 <sup>*</sup>			

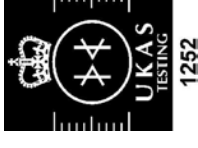
Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009			010			011			012		
					BH04 - 1m			BH04 - 7m			BH03 - 5m			BH03 - 4m		
					LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U	0.015			<0.010 D			0.002			<0.010 D		
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U	<0.010 D			<0.010 D			<0.001			<0.010 D		
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U	<0.020 D			<0.020 D			0.126			0.038		
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U	0.00180			<0.00030 D			<0.00003			<0.00030 D		
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U	0.072			0.106			0.065			0.053		
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U	0.014			<0.010 D			0.002			<0.010 D		
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U	<0.010 D			<0.010 D			0.004			<0.010 D		
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U	1.90			0.072			0.008			<0.010 D		
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U	<0.020 D			<0.020 D			0.004			<0.020 D		
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.47			0.02			0.01			0.01		
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.01			0.02			0.02			<0.01		
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01			<0.01			<0.01			<0.01		
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.49			1.12			0.39			0.85		
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.05			0.02			<0.01			0.03		
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01			<0.01			<0.01			<0.01		
Benzene HS_ID_AR	BTEXHSA	10	µg/kg^A	UM				<13						<14		
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg^A	UM				<13						<14		
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg^A	UM				<27						<29		
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg^A	UM				<13						<14		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	012		013		014		015		016	
					Sample ID	Customer ID	Sample Type	Sampling Date	Sample ID	Customer ID	Sample Type	Sampling Date	Sample ID	Customer ID
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U	BH03 - 4m	BH03 - 4m	BH03 - 2m	BH03 - 1-3m - Asbestos	BH03 - 1m	BH02A - 4m				
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U										
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U										
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U										
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U										
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U										
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U										
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U										
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U										
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N										
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N										
Benzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM										
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM										
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg <sup>a</sup>	UM										
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM										

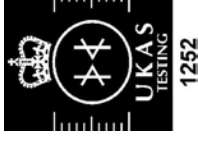
Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019	020	
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos		BH02A - 1m
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	SOLID	
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U	0.012	0.012	0.012	0.012	0.012	0.012	0.001	0.001	
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U	0.008	0.008	0.015	0.015	0.015	0.015	0.667	0.667	
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U	0.00052	0.00052	0.00076	0.00076	0.00076	0.00076	<0.00003	<0.00003	
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U	0.047	0.047	0.076	0.076	0.076	0.076	0.057	0.057	
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U	0.008	0.008	0.009	0.009	0.009	0.009	0.002	0.002	
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U	0.052	0.052	0.091	0.091	0.091	0.091	0.006	0.006	
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U	<0.002	<0.002	0.002	0.002	0.002	0.002	0.006	0.006	
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U	<0.01	<0.01	0.01	0.01	0.01	0.01	<0.01	<0.01	
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.07	0.07	0.11	0.11	0.11	0.11	0.28	0.28	
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.05	0.05	0.14	0.14	0.14	0.14	0.01	0.01	
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Benzene HS_ID_AR	BTEXHSA	10	µg/kg^A	UM	<12	<12	<13	<13	<14	<14	<14	<14	
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg^A	UM	<12	<12	<13	<13	<14	<14	<14	<14	
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg^A	UM	<23	<23	<26	<26	<28	<28	<28	<28	
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg^A	UM	<12	<12	<13	<13	<14	<14	<14	<14	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	020		021		022		023		024	
					Sample ID	Customer ID	Sample Type	Sampling Date	Sample Type	Sampling Date	Sample Type	Sampling Date	Sample Type	Sampling Date
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U	BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m					
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U										
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U										
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U										
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U										
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U										
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U										
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U										
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U										
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N										
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U										
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N										
Benzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM										
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM										
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg <sup>a</sup>	UM										
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM										

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		
			024	025	
			Customer ID	BH01 - 5m	BH01 - 7m
			Sample Type	LPL	SOLID
			Sampling Date	17/02/2023	17/02/2023
			Units		
			Accred.		
Copper as Cu	ICPMSW (Dissolved)	0.001	mg/l	U	0.004
Lead as Pb	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001
Manganese as Mn	ICPMSW (Dissolved)	0.002	mg/l	U	0.175
Mercury as Hg	ICPMSW (Dissolved)	0.00003	mg/l	U	<0.00003
Molybdenum as Mo	ICPMSW (Dissolved)	0.001	mg/l	U	0.025
Nickel as Ni	ICPMSW (Dissolved)	0.001	mg/l	U	0.002
Selenium as Se	ICPMSW (Dissolved)	0.001	mg/l	U	<0.001
Vanadium as V	ICPMSW (Dissolved)	0.001	mg/l	U	0.004
Zinc as Zn	ICPMSW (Dissolved)	0.002	mg/l	U	0.015
Aluminium as Al	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.01
Barium as Ba	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.05
Beryllium as Be	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01
Boron as B	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.35
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	U	0.01
Titanium as Ti	ICPWATVAR (Dissolved)	0.01	mg/l	N	<0.01
Benzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<12
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<12
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg <sup>a</sup>	UM	<24
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<12



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
Sample Type	Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	
Toluene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<17	<13	<13	<13	<14			
Acenaphthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.13	0.33	0.33	<0.12				
Acenaphthylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.13	1.24	1.24	0.15				
Anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	0.19	3.72	3.72	0.74				
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.14	6.22	6.22	1.05				
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.20	4.55	4.55	0.71				
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.30	5.83	5.83	1.07				
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.13	2.12	2.12	0.33				
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.13	2.13	2.13	0.41				
Chrysene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.30	4.78	4.78	1.13				
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.13	0.69	0.69	0.13				
Fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.77	15.1	15.1	3.07				
Fluorene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.18	1.95	1.95	0.27				
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.13	2.60	2.60	0.42				
Naphthalene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.18	0.32	0.32	0.13				
Phenanthrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.68	14.5	14.5	2.41				
Pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.55	10.3	10.3	2.07				
Total PAH 16	PAHMSUS	1.28	mg/kg <sup>a</sup>	U	4.28	76.4	76.4	14.2				
PCB 101	PCBECD	5	µg/kg <sup>a</sup>	UM	<8.24	<6.37	<6.37	<7.16				

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Toluene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<11	<15	<13*				
Acenaphthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.12	<0.10*				
Acenaphthylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.09	<0.12	<0.10*				
Anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.09	<0.12	<0.10*				
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.14	<0.12	<0.10*				
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.21	<0.12	0.15*				
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.33	<0.12	0.23*				
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.14	<0.12	<0.10*				
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.13	<0.12	<0.10*				
Chrysene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.26	<0.12	0.22*				
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.12	<0.10*				
Fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.38	<0.12	0.43*				
Fluorene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.12	<0.10*				
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.15	<0.12	0.10*				
Naphthalene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.10	<0.12	<0.10*				
Phenanthrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.34	<0.12	0.43*				
Pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.27	<0.12	0.32*				
Total PAH 16	PAHMSUS	1.28	mg/kg <sup>a</sup>	U	2.90	<1.87	2.79*				
PCB 101	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.59	<7.29	<6.35*				

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009			010			011				
					BH04 - 1m			BH04 - 7m			BH03 - 5m				
					LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023	LPL	SOLID
Toluene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<13	<15	<14							012	BH03 - 4m
Acenaphthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.12	<0.11								
Acenaphthylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.11	<0.12	<0.11								
Anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	0.32	<0.12	<0.11								
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.64	<0.12	<0.11								
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.52	<0.12	<0.11								
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.89	0.15	<0.11								
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.28	<0.12	<0.11								
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.32	<0.12	<0.11								
Chrysene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.67	0.15	<0.11								
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.12	<0.12	<0.11								
Fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	1.49	0.30	<0.11								
Fluorene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.12	<0.11								
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.36	<0.12	<0.11								
Naphthalene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.17	<0.12	<0.11								
Phenanthrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	1.01	0.26	<0.11								
Pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	1.06	0.24	<0.11								
Total PAH 16	PAHMSUS	1.28	mg/kg <sup>a</sup>	U	8.17	2.44	<1.83								
PCB 101	PCBECD	5	µg/kg <sup>a</sup>	UM	<6.66	<7.62	<7.15								

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID								
					012		013		014		015		016
					BH03 - 4m	BH03 - 2m	BH03 - 1-3m - Asbestos	BH03 - 1m	BH02A - 4m				
Customer ID	Sample Type	Sampling Date	Units	UM	LPL	SOLID	LPL	SOLID	LPL				
Toluene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<13	37			15				
Acenaphthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			<0.09				
Acenaphthylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.11	<0.09			<0.09				
Anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.11	<0.09			<0.09				
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.21				
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.36				
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.54				
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.24				
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.21				
Chrysene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.37				
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			<0.09				
Fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.36				
Fluorene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			<0.09				
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.25				
Naphthalene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	0.09			<0.09				
Phenanthrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	0.11			0.22				
Pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.11	<0.09			0.31				
Total PAH 16	PAHMSUS	1.28	mg/kg <sup>a</sup>	U	<1.69	1.47			3.64				
PCB 101	PCBECD	5	µg/kg <sup>a</sup>	UM	<6.61	<5.70			<5.91				

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019	020		
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos			
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Toluene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<12	<13	<14							
Acenaphthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Acenaphthylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.09	<0.10	<0.11							
Anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.09	<0.10	<0.11							
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	0.10	0.12							
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Chrysene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	0.10	0.12							
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	0.16	0.22							
Fluorene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Naphthalene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10	<0.11							
Phenanthrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	0.17	0.18							
Pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	0.13	0.17							
Total PAH 16	PAHMSUS	1.28	mg/kg <sup>a</sup>	U	<1.48	1.80	2.05							
PCB 101	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.77	<6.41	<6.96							

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID															
					020		021		022		023		024							
					Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units				
Toluene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	BH02A - 1m	SOLID	17/02/2023	<15	BH01 - 1m	SOLID	17/02/2023	<13	BH01 - 3m	SOLID	17/02/2023	<13	BH01 - 5m	SOLID	17/02/2023	<13
Acenaphthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				<0.12				<0.10					0.12			
Acenaphthylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U				<0.12				<0.10					<0.11			
Anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U				<0.12				<0.10					<0.11			
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.21				<0.10					<0.11			
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.24				<0.10					<0.11			
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.37				<0.10					<0.11			
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				<0.12				<0.10					<0.11			
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.15				<0.10					<0.11			
Chrysene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.36				<0.10					<0.11			
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				<0.12				<0.10					<0.11			
Fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.56				<0.10					0.15			
Fluorene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				<0.12				<0.10					<0.11			
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.15				<0.10					<0.11			
Naphthalene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				<0.12				<0.10					<0.11			
Phenanthrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.29				<0.10					0.32			
Pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM				0.41				<0.10					0.12			
Total PAH 16	PAHMSUS	1.28	mg/kg <sup>a</sup>	U				3.55				<1.60					1.95			
PCB 101	PCBECD	5	µg/kg <sup>a</sup>	UM				<7.29				<6.24					<6.56			

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Sample ID		
				024	025	
				Customer ID	BH01 - 5m	
				Sample Type	LPL	
				Sampling Date	17/02/2023	
			Accred.		SOLID	
					17/02/2023	
					SOLID	
Toluene HS_ID_AR	BTEXHSA	10	µg/kg <sup>a</sup>	UM	<12	<12
Acenaphthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10
Acenaphthylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	<0.09	<0.10* <sup>b</sup>
Anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	U	0.11	<0.10
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.34	<0.10
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.58	<0.10
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.65	<0.10
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.33	<0.10
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.28	<0.10
Chrysene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.48	<0.10
Dibenzo[e,h]anthracene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.11	<0.10
Fluoranthene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.62	0.15* <sup>b</sup>
Fluorene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.38	<0.10
Naphthalene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	<0.09	<0.10
Phenanthrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.48	0.14
Pyrene	PAHMSUS	0.08	mg/kg <sup>a</sup>	UM	0.57	0.13
Total PAH 16	PAHMSUS	1.28	mg/kg <sup>a</sup>	U	5.31	1.68
PCB 101	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.90	<6.05



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
Sample ID	Sample Type	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	
PCB 118	PCBECD	5	µg/kg <sup>a</sup>	UM	<8.24	<8.24	<6.37	<6.37	<6.37	<6.37	<7.16	
PCB 138	PCBECD	5	µg/kg <sup>a</sup>	UM	<8.24	<8.24	<6.37	<6.37	<6.37	<6.37	<7.16	
PCB 153	PCBECD	5	µg/kg <sup>a</sup>	UM	<8.24	<8.24	<6.37	<6.37	<6.37	<6.37	<7.16	
PCB 180	PCBECD	5	µg/kg <sup>a</sup>	UM	<8.24	<8.24	<6.37	<6.37	<6.37	<6.37	<7.16	
PCB 28	PCBECD	5	µg/kg <sup>a</sup>	UM	<8.24	<8.24	<6.37	<6.37	<6.37	<6.37	<7.16	
PCB 52	PCBECD	5	µg/kg <sup>a</sup>	UM	<8.24	<8.24	<6.37	<6.37	<6.37	<6.37	<7.16	
1,2,4-Trichlorobenzene	SVOCSW	0.1	mg/kg <sup>a</sup>	N	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
1,2-Dichlorobenzene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
1,3-Dichlorobenzene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
1,4-Dichlorobenzene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
1-Methylnaphthalene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	0.4	0.4	0.4	0.4	<0.1	
2,4,5-Trichlorophenol	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
2,4,6-Trichlorophenol	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
2,4-Dichlorophenol	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
2,4-Dimethylphenol	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
2,4-Dinitrophenol	SVOCSW	0.1	mg/kg <sup>a</sup>	N	<0.8	<0.8	<0.6	<0.6	<0.6	<0.6	<0.7	
2,4-Dinitrotoluene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
2,6-Dinitrotoluene	SVOCSW	0.5	mg/kg <sup>a</sup>	U	<0.8	<0.8	<0.6	<0.6	<0.6	<0.6	<0.7	
2-Chloronaphthalene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
PCB 118	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.59	<7.29	<7.29	<6.35*	<6.35*	<6.35*	17/02/2023
PCB 138	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.59	<7.29	<7.29	<6.35*	<6.35*	<6.35*	17/02/2023
PCB 153	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.59	<7.29	<7.29	<6.35*	<6.35*	<6.35*	17/02/2023
PCB 180	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.59	<7.29	<7.29	<6.35*	<6.35*	<6.35*	17/02/2023
PCB 28	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.59	<7.29	<7.29	<6.35*	<6.35*	<6.35*	17/02/2023
PCB 52	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.59	<7.29	<7.29	<6.35*	<6.35*	<6.35*	17/02/2023
1,2,4-Trichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	17/02/2023
1,2-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
1,3-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
1,4-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
1-Methylnaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	0.2	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
2,4,5-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
2,4,6-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
2,4-Dichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
2,4-Dinitrophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023
2,4-Dinitrotoluene	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.7	<0.6	<0.6	<0.6	<0.6	17/02/2023
2,6-Dinitrotoluene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6	<0.7	<0.6	<0.6*	<0.6*	<0.6*	17/02/2023
2-Chloronaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*	<0.1*	<0.1*	17/02/2023

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009			010			011			012
					Sample ID			Sample ID			Sample ID			
					Customer ID	Sample Type	Sampling Date	Customer ID	Sample Type	Sampling Date	Customer ID	Sample Type	Sampling Date	
PCB 118	PCBECD	5	µg/kg <sup>a</sup>	UM	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
PCB 138	PCBECD	5	µg/kg <sup>a</sup>	UM	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
PCB 153	PCBECD	5	µg/kg <sup>a</sup>	UM	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
PCB 180	PCBECD	5	µg/kg <sup>a</sup>	UM	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
PCB 28	PCBECD	5	µg/kg <sup>a</sup>	UM	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
PCB 52	PCBECD	5	µg/kg <sup>a</sup>	UM	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
1,2,4-Trichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
1,2-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
1,3-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
1,4-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
1-Methylnaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2,4,5-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2,4,6-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2,4-Dichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2,4-Dinitrophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2,4-Dinitrophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2,4-Dinitrotoluene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2,6-Dinitrotoluene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m
2-Chloronaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	BH04 - 1m	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	BH03 - 4m

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID															
					012		013		014		015		016							
					Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units				
PCB 118	PCBECD	5	µg/kg <sup>^</sup>	UM	BH03 - 4m	SOLID	17/02/2023	<6.61	BH03 - 2m	LPL	17/02/2023	<5.70	BH03 - 1-3m - Asbestos	SOLID	17/02/2023	<5.91	BH02A - 4m	LPL	17/02/2023	<5.91
PCB 138	PCBECD	5	µg/kg <sup>^</sup>	UM				<6.61				<5.70				<5.91				<5.91
PCB 153	PCBECD	5	µg/kg <sup>^</sup>	UM				<6.61				<5.70				<5.91				<5.91
PCB 180	PCBECD	5	µg/kg <sup>^</sup>	UM				<6.61				<5.70				<5.91				<5.91
PCB 28	PCBECD	5	µg/kg <sup>^</sup>	UM				<6.61				<5.70				<5.91				<5.91
PCB 52	PCBECD	5	µg/kg <sup>^</sup>	UM				<6.61				<5.70				<5.91				<5.91
1,2,4-Trichlorobenzene	SVOCSSW	0.1	mg/kg <sup>^</sup>	N				<0.1				<0.1				<0.1				<0.1
1,2-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1
1,3-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1
1,4-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1
1-Methylnaphthalene	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1 <sup>^</sup> B				<0.1 <sup>^</sup> B				<0.1 <sup>^</sup> B
2,4,5-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1
2,4,6-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1
2,4-Dichlorophenol	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1
2,4-Dimethylphenol	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1
2,4-Dinitrophenol	SVOCSSW	0.5	mg/kg <sup>^</sup>	N				<0.7				<0.6				<0.6				<0.6
2,4-Dinitrotoluene	SVOCSSW	0.2	mg/kg <sup>^</sup>	U				<0.3				<0.2				<0.2				<0.2
2,6-Dinitrotoluene	SVOCSSW	0.5	mg/kg <sup>^</sup>	U				<0.7				<0.6				<0.6				<0.6
2-Chloronaphthalene	SVOCSSW	0.1	mg/kg <sup>^</sup>	U				<0.1				<0.1				<0.1				<0.1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019	020		
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos			
					SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023
PCB 118	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.77	<6.41	<6.41	<6.96	<6.96	<6.96				
PCB 138	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.77	<6.41	<6.41	<6.96	<6.96	<6.96				
PCB 153	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.77	<6.41	<6.41	<6.96	<6.96	<6.96				
PCB 180	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.77	<6.41	<6.41	<6.96	<6.96	<6.96				
PCB 28	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.77	<6.41	<6.41	<6.96	<6.96	<6.96				
PCB 52	PCBECD	5	µg/kg <sup>a</sup>	UM	<5.77	<6.41	<6.41	<6.96	<6.96	<6.96				
1,2,4-Trichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
1,2-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
1,3-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
1,4-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
1-Methylnaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>				
2,4,5-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
2,4,6-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
2,4-Dichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
2,4-Dimethylphenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
2,4-Dinitrophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7				
2,4-Dinitrotoluene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
2,6-Dinitrotoluene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7				
2-Chloronaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Accred.	020		021		022		023		024			
					Sample ID	Customer ID	Sample Type	Sampling Date	Sample ID	Customer ID	Sample Type	Sampling Date	Sample ID	Customer ID	Sample Type	Sampling Date
					BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m							
PCB 118	PCBECD	5	µg/kg <sup>a</sup>	UM	<7.29	<6.24	<6.24	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56		
PCB 138	PCBECD	5	µg/kg <sup>a</sup>	UM	<7.29	<6.24	<6.24	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56		
PCB 153	PCBECD	5	µg/kg <sup>a</sup>	UM	<7.29	<6.24	<6.24	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56		
PCB 180	PCBECD	5	µg/kg <sup>a</sup>	UM	<7.29	<6.24	<6.24	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56		
PCB 28	PCBECD	5	µg/kg <sup>a</sup>	UM	<7.29	<6.24	<6.24	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56		
PCB 52	PCBECD	5	µg/kg <sup>a</sup>	UM	<7.29	<6.24	<6.24	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56	<6.56		
1,2,4-Trichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
1,2-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
1,3-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
1,4-Dichlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
1-Methylnaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>		
2,4,5-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2,4,6-Trichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2,4-Dichlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2,4-Dimethylphenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2,4-Dinitrophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7		
2,4-Dinitrotoluene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
2,6-Dinitrotoluene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7	<0.6	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7		
2-Chloronaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID	
				024	025
				Customer ID	Customer ID
				BH01 - 5m	BH01 - 7m
				<b>SOLID</b>	<b>SOLID</b>
				<b>17/02/2023</b>	<b>17/02/2023</b>
PCB 118	PCBECD	5	µg/kg <sup>A</sup>	<5.90	<6.05
PCB 138	PCBECD	5	µg/kg <sup>A</sup>	<5.90	<6.05
PCB 153	PCBECD	5	µg/kg <sup>A</sup>	<5.90	<6.05
PCB 180	PCBECD	5	µg/kg <sup>A</sup>	<5.90	<6.05
PCB 28	PCBECD	5	µg/kg <sup>A</sup>	<5.90	<6.05
PCB 52	PCBECD	5	µg/kg <sup>A</sup>	<5.90	<6.05
1,2,4-Trichlorobenzene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
1,2-Dichlorobenzene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
1,3-Dichlorobenzene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
1,4-Dichlorobenzene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
1-Methylnaphthalene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1 <sup>*</sup>	<0.1 <sup>*</sup>
2,4,5-Trichlorophenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
2,4,6-Trichlorophenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
2,4-Dichlorophenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
2,4-Dimethylphenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1
2,4-Dinitrophenol	SVOC <sub>SW</sub>	0.5	mg/kg <sup>A</sup>	<0.6	<0.6
2,4-Dinitrotoluene	SVOC <sub>SW</sub>	0.2	mg/kg <sup>A</sup>	<0.2	<0.2
2,6-Dinitrotoluene	SVOC <sub>SW</sub>	0.5	mg/kg <sup>A</sup>	<0.6	<0.6
2-Chloronaphthalene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	<0.1	<0.1



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023	SOLID 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023
2-Chlorophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
2-Methylnaphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	0.3	0.8	0.8	0.8	0.3	0.3	0.3	
2-Methylphenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
2-Nitroaniline	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.8	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	
2-Nitrophenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
3- & 4-Methylphenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
3-Nitroaniline	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.8	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	
4,6-Dinitro-2-methylphenol	SVOCSSW	0.2	mg/kg <sup>a</sup>	N	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
4-Bromophenyl-phenylether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
4-Chloro-3-methylphenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
4-Chloroaniline	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.8	1.0	1.0	1.0	<0.7	<0.7	<0.7	
4-Chlorophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.8	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	
4-Chlorophenyl-phenylether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
4-Nitroaniline	SVOCSSW	0.6	mg/kg <sup>a</sup>	N	<1.0	<0.8	<0.8	<0.8	<0.9	<0.9	<0.9	
4-Nitrophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.8	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	
Acenaphthene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	3.2	3.2	3.2	<0.1	<0.1	<0.1	
Acenaphthylene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.2	0.3	0.3	0.3	<0.1	<0.1	<0.1	
Anthracene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	0.2	8.8	8.8	8.8	0.6	0.6	0.6	
Azobenzene	SVOCSSW	0.3	mg/kg <sup>a</sup>	N	<0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
2-Chlorophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1*		
2-Methylnaphthalene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	0.6	<0.1	<0.1	0.1*			
2-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
2-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.7	<0.7	<0.6			
2-Nitrophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
3-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.7	<0.7	<0.6			
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg <sup>a</sup>	N	<0.2	<0.3	<0.3	<0.3			
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
4-Chloroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.7	<0.7	<0.6			
4-Chlorophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	U	<0.6	<0.7	<0.7	<0.6*			
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
4-Nitroaniline	SVOC SW	0.6	mg/kg <sup>a</sup>	N	<0.7	<0.9	<0.9	<0.8			
4-Nitrophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.7	<0.7	<0.6			
Acenaphthene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
Acenaphthylene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
Anthracene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1*			
Azobenzene	SVOC SW	0.3	mg/kg <sup>a</sup>	N	<0.3	<0.4	<0.4	<0.4			

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009		010		011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m			BH03 - 4m
					LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023		
2-Chlorophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2-Methylnaphthalene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	0.1	0.2	0.2	0.2	<0.1	<0.1		
2-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
2-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.8	<0.7	<0.7	<0.7	<0.7		
2-Nitrophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
3-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.8	<0.7	<0.7	<0.7	<0.7		
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg <sup>a</sup>	N	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
4-Chloroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.8	<0.7	<0.7	<0.7	<0.7		
4-Chlorophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	U	<0.7	<0.8	<0.7	<0.7	<0.7	<0.7		
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
4-Nitroaniline	SVOC SW	0.6	mg/kg <sup>a</sup>	N	<0.8	<0.9	<0.9	<0.9	<0.9	<0.9		
4-Nitrophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.8	<0.7	<0.7	<0.7	<0.7		
Acenaphthene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
Acenaphthylene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
Anthracene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Azobenzene	SVOC SW	0.3	mg/kg <sup>a</sup>	N	<0.4	<0.5	<0.4	<0.4	<0.4	<0.4		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID															
					012		013		014		015		016							
					Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units				
2-Chlorophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	BH03 - 4m	SOLID	17/02/2023	<0.1	BH03 - 2m	LPL	17/02/2023	<0.1	BH03 - 1m	LPL	17/02/2023	<0.1	BH02A - 4m	LPL	17/02/2023	<0.1
2-Methylnaphthalene	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		0.4		SOLID		0.2				
2-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
2-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N		SOLID		<0.7		SOLID		<0.6		SOLID		<0.6				
2-Nitrophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
3-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N		SOLID		<0.7		SOLID		<0.6		SOLID		<0.6				
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg <sup>a</sup>	N		SOLID		<0.3		SOLID		<0.2		SOLID		<0.2				
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
4-Chloroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N		SOLID		<0.7		SOLID		<0.6		SOLID		<0.6				
4-Chlorophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	U		SOLID		<0.7		SOLID		<0.6		SOLID		<0.6				
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
4-Nitroaniline	SVOC SW	0.6	mg/kg <sup>a</sup>	N		SOLID		<0.8		SOLID		<0.7		SOLID		<0.7				
4-Nitrophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	N		SOLID		<0.7		SOLID		<0.6		SOLID		<0.6				
Acenaphthene	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
Acenaphthylene	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
Anthracene	SVOC SW	0.1	mg/kg <sup>a</sup>	U		SOLID		<0.1		SOLID		<0.1		SOLID		<0.1				
Azobenzene	SVOC SW	0.3	mg/kg <sup>a</sup>	N		SOLID		<0.4		SOLID		<0.3		SOLID		<0.4				

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019	020
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos	020
					SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023
2-Chlorophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-Methylnaphthalene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
2-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.6	<0.6	<0.7	<0.6	<0.6	<0.6	<0.6
2-Nitrophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.6	<0.6	<0.7	<0.6	<0.6	<0.6	<0.6
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg <sup>a</sup>	N	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-Chloroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.6	<0.6	<0.7	<0.6	<0.6	<0.6	<0.6
4-Chlorophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	U	<0.6	<0.6	<0.6	<0.7	<0.6	<0.6	<0.6	<0.6
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-Nitroaniline	SVOC SW	0.6	mg/kg <sup>a</sup>	N	<0.7	<0.8	<0.8	<0.8	<0.7	<0.7	<0.7	<0.7
4-Nitrophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.6	<0.6	<0.7	<0.6	<0.6	<0.6	<0.6
Acenaphthene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	SVOC SW	0.3	mg/kg <sup>a</sup>	N	<0.3	<0.4	<0.4	<0.4	<0.3	<0.3	<0.3	<0.3

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID									
				020		021		022		023		024	
				BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m					
2-Chlorophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2-Methylnaphthalene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
2-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7		
2-Nitrophenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
3- & 4-Methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
3-Nitroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7		
4,6-Dinitro-2-methylphenol	SVOC SW	0.2	mg/kg <sup>a</sup>	N	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
4-Bromophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
4-Chloro-3-methylphenol	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
4-Chloroaniline	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7		
4-Chlorophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	U	<0.7	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7		
4-Chlorophenyl-phenylether	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
4-Nitroaniline	SVOC SW	0.6	mg/kg <sup>a</sup>	N	<0.9	<0.7	<0.7	<0.8	<0.8	<0.8	<0.8		
4-Nitrophenol	SVOC SW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.7	<0.7	<0.7	<0.7	<0.7		
Acenaphthene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Acenaphthylene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Anthracene	SVOC SW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Azobenzene	SVOC SW	0.3	mg/kg <sup>a</sup>	N	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		Units	Accred.	024	025	
			Customer ID	Sample Type				024	025
				BH01 - 5m			BH01 - 5m	BH01 - 7m	
				SOLID			17/02/2023	17/02/2023	
2-Chlorophenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
2-Methylnaphthalene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
2-Methylphenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
2-Nitroaniline	SVOC <sub>SW</sub>	0.5	mg/kg <sup>a</sup>	N			<0.6	<0.6	
2-Nitrophenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
3- & 4-Methylphenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
3-Nitroaniline	SVOC <sub>SW</sub>	0.5	mg/kg <sup>a</sup>	N			<0.6	<0.6	
4,6-Dinitro-2-methylphenol	SVOC <sub>SW</sub>	0.2	mg/kg <sup>a</sup>	N			<0.2	<0.2	
4-Bromophenyl-phenylether	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
4-Chloro-3-methylphenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
4-Chloroaniline	SVOC <sub>SW</sub>	0.5	mg/kg <sup>a</sup>	N			<0.6	<0.6	
4-Chlorophenol	SVOC <sub>SW</sub>	0.5	mg/kg <sup>a</sup>	U			<0.6	<0.6	
4-Chlorophenyl-phenylether	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
4-Nitroaniline	SVOC <sub>SW</sub>	0.6	mg/kg <sup>a</sup>	N			<0.7	<0.7	
4-Nitrophenol	SVOC <sub>SW</sub>	0.5	mg/kg <sup>a</sup>	N			<0.6	<0.6	
Acenaphthene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
Acenaphthylene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			<0.1	<0.1	
Anthracene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>a</sup>	U			0.1	<0.1	
Azobenzene	SVOC <sub>SW</sub>	0.3	mg/kg <sup>a</sup>	N			<0.4	<0.4	



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
Sample Type	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	
Benzo[ <i>a</i> ]anthracene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	17/02/2023	<0.3	17/02/2023	21.1	17/02/2023	<0.3	17/02/2023
Benzo[ <i>a</i> ]pyrene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	17/02/2023	<0.3	17/02/2023	12.7	17/02/2023	<0.3	17/02/2023
Benzo[ <i>b</i> ]fluoranthene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	0.3	17/02/2023	0.3	17/02/2023	24.4	17/02/2023	0.3	17/02/2023
Benzo[ <i>g,h,i</i> ]perylene	SVOCSW	0.5	mg/kg <sup>a</sup>	U	<0.8* <sub>B</sub>	17/02/2023	<0.8* <sub>B</sub>	17/02/2023	5.2* <sub>B</sub>	17/02/2023	<0.7* <sub>B</sub>	17/02/2023
Benzo[ <i>k</i> ]fluoranthene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	17/02/2023	<0.3	17/02/2023	7.4	17/02/2023	<0.3	17/02/2023
Benzoic Acid	SVOCSW	0.5	mg/kg <sup>a</sup>	N	<0.8	17/02/2023	<0.8	17/02/2023	<0.6	17/02/2023	<0.7	17/02/2023
Benzyl alcohol	SVOCSW	0.5	mg/kg <sup>a</sup>	U	<0.8* <sub>B</sub>	17/02/2023	<0.8* <sub>B</sub>	17/02/2023	<0.6* <sub>B</sub>	17/02/2023	<0.7* <sub>B</sub>	17/02/2023
Biphenyl	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	17/02/2023	<0.2	17/02/2023	0.3	17/02/2023	<0.1	17/02/2023
bis(2-Chloroethoxy)methane	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	17/02/2023	<0.2	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023
bis(2-Chloroethyl)ether	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	17/02/2023	<0.2	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023
bis(2-Chloroisopropyl)ether	SVOCSW	0.5	mg/kg <sup>a</sup>	U	<0.8	17/02/2023	<0.8	17/02/2023	<0.6	17/02/2023	<0.7	17/02/2023
bis(2-Ethylhexyl)phthalate	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	17/02/2023	<0.3	17/02/2023	<0.3	17/02/2023	<0.3	17/02/2023
Butylbenzylphthalate	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	17/02/2023	<0.3	17/02/2023	<0.3	17/02/2023	<0.3	17/02/2023
Carbazole	SVOCSW	0.3	mg/kg <sup>a</sup>	N	<0.5	17/02/2023	<0.5	17/02/2023	7.1	17/02/2023	<0.4	17/02/2023
Chrysene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	0.3	17/02/2023	0.3	17/02/2023	25.6	17/02/2023	1.0	17/02/2023
Coronene	SVOCSW	0.3	mg/kg <sup>a</sup>	N	<0.5	17/02/2023	<0.5	17/02/2023	1.0	17/02/2023	<0.4	17/02/2023
Dibenzo[ <i>a,h</i> ]anthracene	SVOCSW	0.5	mg/kg <sup>a</sup>	U	<0.8* <sub>B</sub>	17/02/2023	<0.8* <sub>B</sub>	17/02/2023	2.8* <sub>B</sub>	17/02/2023	<0.7* <sub>B</sub>	17/02/2023
Dibenzofuran	SVOCSW	0.1	mg/kg <sup>a</sup>	U	0.2	17/02/2023	0.2	17/02/2023	3.0	17/02/2023	0.3	17/02/2023
Diethylphthalate	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	17/02/2023	<0.2	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Benzo[a]anthracene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzo[a]pyrene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzo[b]fluoranthene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U	0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzo[g,h,i]perylene	SVOCSSW	0.5	mg/kg <sup>A</sup>	U	<0.6* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Benzo[k]fluoranthene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzoic Acid	SVOCSSW	0.5	mg/kg <sup>A</sup>	N	<0.6	<0.7	<0.7	<0.6	<0.6	<0.6	<0.6
Benzyl alcohol	SVOCSSW	0.5	mg/kg <sup>A</sup>	U	<0.6* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Biphenyl	SVOCSSW	0.1	mg/kg <sup>A</sup>	U	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroethoxy)methane	SVOCSSW	0.1	mg/kg <sup>A</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroethyl)ether	SVOCSSW	0.1	mg/kg <sup>A</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroisopropyl)ether	SVOCSSW	0.5	mg/kg <sup>A</sup>	U	<0.6	<0.7	<0.7	<0.6	<0.6	<0.6	<0.6
bis(2-Ethylhexyl)phthalate	SVOCSSW	0.2	mg/kg <sup>A</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Butylbenzylphthalate	SVOCSSW	0.2	mg/kg <sup>A</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carbazole	SVOCSSW	0.3	mg/kg <sup>A</sup>	N	<0.3	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chrysene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Coronene	SVOCSSW	0.3	mg/kg <sup>A</sup>	N	<0.3	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Dibenzofuran	SVOCSSW	0.5	mg/kg <sup>A</sup>	U	<0.6* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Dibenzofuran	SVOCSSW	0.1	mg/kg <sup>A</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	SVOCSSW	0.1	mg/kg <sup>A</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Accred.	009		010		011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m			BH03 - 4m
					LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023		
Benzo[a]anthracene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U								
Benzo[a]pyrene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U								
Benzo[b]fluoranthene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U								
Benzo[g,h,i]perylene	SVOCSSW	0.5	mg/kg <sup>A</sup>	U								
Benzo[k]fluoranthene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U								
Benzoic Acid	SVOCSSW	0.5	mg/kg <sup>A</sup>	N								
Benzyl alcohol	SVOCSSW	0.5	mg/kg <sup>A</sup>	U								
Biphenyl	SVOCSSW	0.1	mg/kg <sup>A</sup>	U								
bis(2-Chloroethoxy)methane	SVOCSSW	0.1	mg/kg <sup>A</sup>	U								
bis(2-Chloroethyl)ether	SVOCSSW	0.1	mg/kg <sup>A</sup>	U								
bis(2-Chloroisopropyl)ether	SVOCSSW	0.5	mg/kg <sup>A</sup>	U								
bis(2-Ethylhexyl)phthalate	SVOCSSW	0.2	mg/kg <sup>A</sup>	U								
Butylbenzylphthalate	SVOCSSW	0.2	mg/kg <sup>A</sup>	U								
Carbazole	SVOCSSW	0.3	mg/kg <sup>A</sup>	N								
Chrysene	SVOCSSW	0.2	mg/kg <sup>A</sup>	U								
Coronene	SVOCSSW	0.3	mg/kg <sup>A</sup>	N								
Dibenzofuran	SVOCSSW	0.5	mg/kg <sup>A</sup>	U								
Dibenzofuran	SVOCSSW	0.1	mg/kg <sup>A</sup>	U								
Diethylphthalate	SVOCSSW	0.1	mg/kg <sup>A</sup>	U								

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Accred.	012		013		014		015		016	
					BH03 - 4m		BH03 - 2m		BH03 - 1-3m - Asbestos		BH03 - 1m		BH02A - 4m	
					SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023
Benzo[a]anthracene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[a]pyrene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[b]fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo[g,h,i]perylene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Benzo[k]fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzoic Acid	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Benzyl alcohol	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Biphenyl	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroethoxy)methane	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroethyl)ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroisopropyl)ether	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
bis(2-Ethylhexyl)phthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Butylbenzylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbazole	SVOCSSW	0.3	mg/kg <sup>a</sup>	N	<0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chrysene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Coronene	SVOCSSW	0.3	mg/kg <sup>a</sup>	N	<0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Dibenz[a,h]anthracene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Dibenzofuran	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Accred.	016		017		018		019	020		
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos			
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Benzo[a]anthracene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
Benzo[a]pyrene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
Benzo[b]fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
Benzo[g,h,i]perylene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>				
Benzo[k]fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
Benzoic Acid	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7				
Benzyl alcohol	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>				
Biphenyl	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
bis(2-Chloroethoxy)methane	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
bis(2-Chloroethyl)ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
bis(2-Chloroisopropyl)ether	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7				
bis(2-Ethylhexyl)phthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
Butylbenzylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
Carbazole	SVOCSSW	0.3	mg/kg <sup>a</sup>	N	<0.3	<0.4	<0.4	<0.4	<0.4	<0.4				
Chrysene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3				
Coronene	SVOCSSW	0.3	mg/kg <sup>a</sup>	N	<0.3	<0.4	<0.4	<0.4	<0.4	<0.4				
Dibenz[a,h]anthracene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>				
Dibenzofuran	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
Diethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Accred.	020		021		022		023		024	
					BH02A - 1m		BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Benzo[a]anthracene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzo[a]pyrene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzo[b]fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzo[g,h,i]perylene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Benzo[k]fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Benzoic Acid	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Benzyl alcohol	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Biphenyl	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroethoxy)methane	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroethyl)ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
bis(2-Chloroisopropyl)ether	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
bis(2-Ethylhexyl)phthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Butylbenzylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carbazole	SVOCSSW	0.3	mg/kg <sup>a</sup>	N	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chrysene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Coronene	SVOCSSW	0.3	mg/kg <sup>a</sup>	N	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Dibenz[a,h]anthracene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>
Dibenzofuran	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		Units	Accred.	024	025	
			Customer ID	Sample Type				024	025
				BH01 - 5m			BH01 - 5m	BH01 - 7m	
				SOLID			17/02/2023	17/02/2023	
Benzo[a]anthracene	SVOCSSW	0.2	U	0.3	mg/kg <sup>A</sup>	U		<0.2	
Benzo[a]pyrene	SVOCSSW	0.2	U	0.3	mg/kg <sup>A</sup>	U		<0.2	
Benzo[b]fluoranthene	SVOCSSW	0.2	U	0.4	mg/kg <sup>A</sup>	U		<0.2	
Benzo[g,h,i]perylene	SVOCSSW	0.5	U	<0.6* <sup>B</sup>	mg/kg <sup>A</sup>	U		<0.6* <sup>B</sup>	
Benzo[k]fluoranthene	SVOCSSW	0.2	U	<0.2	mg/kg <sup>A</sup>	U		<0.2	
Benzoic Acid	SVOCSSW	0.5	N	<0.6	mg/kg <sup>A</sup>	N		<0.6	
Benzyl alcohol	SVOCSSW	0.5	U	<0.6* <sup>B</sup>	mg/kg <sup>A</sup>	U		<0.6* <sup>B</sup>	
Biphenyl	SVOCSSW	0.1	U	<0.1	mg/kg <sup>A</sup>	U		<0.1	
bis(2-Chloroethoxy)methane	SVOCSSW	0.1	U	<0.1	mg/kg <sup>A</sup>	U		<0.1	
bis(2-Chloroethyl)ether	SVOCSSW	0.1	U	<0.1	mg/kg <sup>A</sup>	U		<0.1	
bis(2-Chloroisopropyl)ether	SVOCSSW	0.5	U	<0.6	mg/kg <sup>A</sup>	U		<0.6	
bis(2-Ethylhexyl)phthalate	SVOCSSW	0.2	U	<0.2	mg/kg <sup>A</sup>	U		<0.2	
Butylbenzylphthalate	SVOCSSW	0.2	U	<0.2	mg/kg <sup>A</sup>	U		<0.2	
Carbazole	SVOCSSW	0.3	N	<0.4	mg/kg <sup>A</sup>	N		<0.4	
Chrysene	SVOCSSW	0.2	U	0.3	mg/kg <sup>A</sup>	U		<0.2	
Coronene	SVOCSSW	0.3	N	<0.4	mg/kg <sup>A</sup>	N		<0.4	
Dibenzofuran	SVOCSSW	0.5	U	<0.6* <sup>B</sup>	mg/kg <sup>A</sup>	U		<0.6* <sup>B</sup>	
Dibenzofuran	SVOCSSW	0.1	U	<0.1	mg/kg <sup>A</sup>	U		<0.1	
Diethylphthalate	SVOCSSW	0.1	U	<0.1	mg/kg <sup>A</sup>	U		<0.1	



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
Sample Type	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	Sampling Date	
Dimethylphthalate	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Di-n-butylphthalate	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Di-n-octylphthalate	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
Diphenyl ether	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Fluoranthene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	0.8	51.5	7.6	51.5	2.3	2.3	2.3	
Fluorene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Hexachlorobenzene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Hexachlorobutadiene	SVOCSW	0.1	mg/kg <sup>a</sup>	N	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Hexachlorocyclopentadiene	SVOCSW	0.1	mg/kg <sup>a</sup>	N	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Hexachloroethane	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Indeno[1,2,3-cd]pyrene	SVOCSW	0.5	mg/kg <sup>a</sup>	U	<0.8* <sub>B</sub>	7.0* <sub>B</sub>	<0.8* <sub>B</sub>	<0.8* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	
Isophorone	SVOCSW	0.1	mg/kg <sup>a</sup>	N	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Naphthalene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	0.4	0.9	<0.6* <sub>B</sub>	0.4	0.4	0.4	0.4	
Nitrobenzene	SVOCSW	0.5	mg/kg <sup>a</sup>	U	<0.8* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	<0.6* <sub>B</sub>	
N-Nitroso-di-n-propylamine	SVOCSW	0.9	mg/kg <sup>a</sup>	N	<1.5	<1.2	<1.2	<1.2	<1.3	<1.3	<1.3	
N-Nitrosodiphenylamine	SVOCSW	0.1	mg/kg <sup>a</sup>	N	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Pentachlorophenol	SVOCSW	0.5	mg/kg <sup>a</sup>	N	<0.8	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7	
Phenanthrene	SVOCSW	0.1	mg/kg <sup>a</sup>	U	0.7	55.2	1.9	55.2	1.9	1.9	1.9	
Phenol	SVOCSW	0.1	mg/kg <sup>a</sup>	U	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008	
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos	
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID
Dimethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1*	17/02/2023	<0.1*
Di-n-butylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1*	17/02/2023	<0.1*
Di-n-octylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	17/02/2023	<0.2	17/02/2023	<0.3	17/02/2023	<0.3*	17/02/2023	<0.3*
Diphenyl ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1*	17/02/2023	<0.1*
Fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	17/02/2023	0.3	17/02/2023	<0.3	17/02/2023	0.3*	17/02/2023	0.3*
Fluorene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	17/02/2023	<0.2	17/02/2023	<0.3	17/02/2023	<0.3*	17/02/2023	<0.3*
Hexachlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1*	17/02/2023	<0.1*
Hexachlorobutadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1
Hexachlorocyclopentadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1
Hexachloroethane	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1*	17/02/2023	<0.1*
Indeno[1,2,3-cd]pyrene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	17/02/2023	<0.6* <sub>B</sub>	17/02/2023	<0.7* <sub>B</sub>	17/02/2023	<0.6* <sub>B</sub>	17/02/2023	<0.6* <sub>B</sub>
Isophorone	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1
Naphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	0.2	17/02/2023	<0.1	17/02/2023	<0.1*	17/02/2023	<0.1*
Nitrobenzene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	17/02/2023	<0.6* <sub>B</sub>	17/02/2023	<0.7* <sub>B</sub>	17/02/2023	<0.6* <sub>B</sub>	17/02/2023	<0.6* <sub>B</sub>
N-Nitrosodi-n-propylamine	SVOCSSW	0.9	mg/kg <sup>a</sup>	N	17/02/2023	<1.0	17/02/2023	<1.3	17/02/2023	<1.1	17/02/2023	<1.1
N-Nitrosodiphenylamine	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1
Pentachlorophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	17/02/2023	<0.6	17/02/2023	<0.7	17/02/2023	<0.6	17/02/2023	<0.6
Phenanthrene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	0.4	17/02/2023	<0.1	17/02/2023	0.3*	17/02/2023	0.3*
Phenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	17/02/2023	<0.1	17/02/2023	<0.1	17/02/2023	<0.1*	17/02/2023	<0.1*

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009		010		011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m			BH03 - 4m
					LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023		
Dimethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Di-n-butylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Di-n-octylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
Diphenyl ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	0.8	0.4	0.4	<0.3	<0.3	<0.3		
Fluorene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
Hexachlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Hexachlorobutadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Hexachlorocyclopentadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Hexachloroethane	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Indeno[1,2,3-cd]pyrene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.8* <sub>B</sub>	<0.8* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>		
Isophorone	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1		
Naphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	0.2	0.2	0.2	<0.1	<0.1	<0.1		
Nitrobenzene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sub>B</sub>	<0.8* <sub>B</sub>	<0.8* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>	<0.7* <sub>B</sub>		
N-Nitrosodi-n-propylamine	SVOCSSW	0.9	mg/kg <sup>a</sup>	N	<1.2	<1.4	<1.4	<1.3	<1.3	<1.3		
N-Nitrosodiphenylamine	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		
Pentachlorophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.8	<0.8	<0.7	<0.7	<0.7		
Phenanthrene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	0.6	0.4	0.4	<0.1	<0.1	<0.1		
Phenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Accred.	012		013		014		015		016	
					BH03 - 4m		BH03 - 2m		BH03 - 1-3m - Asbestos		BH03 - 1m		BH02A - 4m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Dimethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Diphenyl ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluorene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Hexachlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>
Hexachlorobutadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno[1,2,3-cd]pyrene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>
Isophorone	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nitrobenzene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.7* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>
N-Nitroso-di-n-propylamine	SVOCSSW	0.9	mg/kg <sup>a</sup>	N	<1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
N-Nitrosodiphenylamine	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.7	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Phenanthrene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Phenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019	020
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos	BH02A - 1m
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Dimethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Di-n-butylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Di-n-octylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3		
Diphenyl ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	0.4	<0.3	<0.3	0.5	<0.3	<0.3		
Fluorene	SVOCSSW	0.2	mg/kg <sup>a</sup>	U	<0.2	<0.3	<0.3	<0.3	<0.3	<0.3		
Hexachlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>	<0.1* <sup>B</sup>		
Hexachlorobutadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Hexachlorocyclopentadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Hexachloroethane	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Indeno[1,2,3-cd]pyrene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>		
Isophorone	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Naphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	0.2	<0.1	<0.1		
Nitrobenzene	SVOCSSW	0.5	mg/kg <sup>a</sup>	U	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.6* <sup>B</sup>	<0.7* <sup>B</sup>	<0.7* <sup>B</sup>		
N-Nitrosodi-n-propylamine	SVOCSSW	0.9	mg/kg <sup>a</sup>	N	<1.0	<1.2	<1.2	<1.3	<1.3	<1.3		
N-Nitrosodiphenylamine	SVOCSSW	0.1	mg/kg <sup>a</sup>	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Pentachlorophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	N	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7		
Phenanthrene	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	0.3	<0.1	<0.1	0.4	<0.1	<0.1		
Phenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	IMDL	Units	Sample ID									
				020		021		022		023		024	
				BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m					
Sample Type	Sampling Date	Accred.	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL			
Dimethylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Di-n-butylphthalate	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Di-n-octylphthalate	SVOCSSW	0.2	mg/kg <sup>a</sup>	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
Diphenyl ether	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Fluoranthene	SVOCSSW	0.2	mg/kg <sup>a</sup>	0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
Fluorene	SVOCSSW	0.2	mg/kg <sup>a</sup>	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
Hexachlorobenzene	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1* <sup>b</sup>	<0.1* <sup>b</sup>	<0.1* <sup>b</sup>	<0.1* <sup>b</sup>	<0.1* <sup>b</sup>	<0.1* <sup>b</sup>	<0.1* <sup>b</sup>	<0.1* <sup>b</sup>		
Hexachlorobutadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Hexachlorocyclopentadiene	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Hexachloroethane	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Indeno[1,2,3-cd]pyrene	SVOCSSW	0.5	mg/kg <sup>a</sup>	<0.7* <sup>b</sup>	<0.6* <sup>b</sup>	<0.6* <sup>b</sup>	<0.6* <sup>b</sup>	<0.6* <sup>b</sup>	<0.7* <sup>b</sup>	<0.7* <sup>b</sup>	<0.7* <sup>b</sup>		
Isophorone	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Naphthalene	SVOCSSW	0.1	mg/kg <sup>a</sup>	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Nitrobenzene	SVOCSSW	0.5	mg/kg <sup>a</sup>	<0.7* <sup>b</sup>	<0.6* <sup>b</sup>	<0.6* <sup>b</sup>	<0.6* <sup>b</sup>	<0.6* <sup>b</sup>	<0.7* <sup>b</sup>	<0.7* <sup>b</sup>	<0.7* <sup>b</sup>		
N-Nitroso-di-n-propylamine	SVOCSSW	0.9	mg/kg <sup>a</sup>	<1.3	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2	<1.2		
N-Nitrosodiphenylamine	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Pentachlorophenol	SVOCSSW	0.5	mg/kg <sup>a</sup>	<0.7	<0.6	<0.6	<0.6	<0.6	<0.7	<0.7	<0.7		
Phenanthrene	SVOCSSW	0.1	mg/kg <sup>a</sup>	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Phenol	SVOCSSW	0.1	mg/kg <sup>a</sup>	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



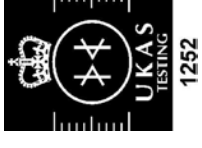
[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		Units	Accred.	024	025	
			Customer ID	Customer ID				LPL	SOLID
			BH01 - 5m	BH01 - 7m					
			SOLID	17/02/2023			17/02/2023	17/02/2023	
Dimethylphthalate	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		<0.1		<0.1	
Di-n-butylphthalate	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		<0.1		<0.1	
Di-n-octylphthalate	SVOC <sub>SW</sub>	0.2	mg/kg <sup>A</sup>	U		<0.2		<0.2	
Diphenyl ether	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		<0.1		<0.1	
Fluoranthene	SVOC <sub>SW</sub>	0.2	mg/kg <sup>A</sup>	U		0.8		<0.2	
Fluorene	SVOC <sub>SW</sub>	0.2	mg/kg <sup>A</sup>	U		<0.2		<0.2	
Hexachlorobenzene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		<0.1* <sup>B</sup>		<0.1* <sup>B</sup>	
Hexachlorobutadiene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	N		<0.1		<0.1	
Hexachlorocyclopentadiene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	N		<0.1		<0.1	
Hexachloroethane	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		<0.1		<0.1	
Indeno[1,2,3-cd]pyrene	SVOC <sub>SW</sub>	0.5	mg/kg <sup>A</sup>	U		<0.6* <sup>B</sup>		<0.6* <sup>B</sup>	
Isophorone	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	N		<0.1		<0.1	
Naphthalene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		<0.1		<0.1	
Nitrobenzene	SVOC <sub>SW</sub>	0.5	mg/kg <sup>A</sup>	U		<0.6* <sup>B</sup>		<0.6* <sup>B</sup>	
N-Nitroso-di-n-propylamine	SVOC <sub>SW</sub>	0.9	mg/kg <sup>A</sup>	N		<1.1		<1.1	
N-Nitrosodiphenylamine	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	N		<0.1		<0.1	
Pentachlorophenol	SVOC <sub>SW</sub>	0.5	mg/kg <sup>A</sup>	N		<0.6		<0.6	
Phenanthrene	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		0.6		<0.1	
Phenol	SVOC <sub>SW</sub>	0.1	mg/kg <sup>A</sup>	U		<0.1		<0.1	

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001			002			003			004			
					BH05 - 7m			BH05 - 3m			BH05 - 2.5-3m - Asbestos			BH05 - 5m			
					LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023	LPL	SOLID	17/02/2023	LPL
Pyrene	SVOCSW	0.2	mg/kg <sup>a</sup>	U		0.6				29.8							1.5
>C10-C12 (Aliphatic) EHL <sub>CU</sub> _TD <sub>AL</sub>	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U		<6.59				<5.10							<5.73
>C12-C16 (Aliphatic) EHL <sub>CU</sub> _TD <sub>AL</sub>	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U		<6.59				8.97							<5.73
>C16-C21 (Aliphatic) EHL <sub>CU</sub> _TD <sub>AL</sub>	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U		<6.59				5.52							<5.73
>C21-C35 (Aliphatic) EHL <sub>CU</sub> _TD <sub>AL</sub>	TPHFIDUS (Aliphatic)	10	mg/kg <sup>a</sup>	U		18.9				27.8							<14.3
Total TPH >C8-C40 (Aliphatic) EHL <sub>CU</sub> _TD <sub>AL</sub>	TPHFIDUS (Aliphatic)	20	mg/kg <sup>a</sup>	U		36.3				50.0							<28.7
>C10-C12 (Aromatic) EHL <sub>CU</sub> _TD <sub>AR</sub>	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U		<6.59				9.00							7.78
>C12-C16 (Aromatic) EHL <sub>CU</sub> _TD <sub>AR</sub>	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U		<6.59				18.3							9.55
>C16-C21 (Aromatic) EHL <sub>CU</sub> _TD <sub>AR</sub>	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U		7.06				62.5							19.7
>C21-C35 (Aromatic) EHL <sub>CU</sub> _TD <sub>AR</sub>	TPHFIDUS (Aromatic)	10	mg/kg <sup>a</sup>	U		18.1				155							36.9
Total TPH >C8-C40 (Aromatic) EHL <sub>CU</sub> _TD <sub>AR</sub>	TPHFIDUS (Aromatic)	20	mg/kg <sup>a</sup>	U		37.0				276							88.0
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM		<2				<1							<1
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM		<2				<1							<1
1,1,2,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	N		<2				<1							<1
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM		<2				<1							<1
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM		<2				<1							<1
1,1-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U		<2				<1							<1
1,1-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM		<2				<1							<1
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	UM		<5				<4							<4

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008	
					BH05 - 1m		BH04 - 5m		BH04 - 3m			Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID		
Pyrene	SVOCSW	0.2	mg/kg <sup>a</sup>	U								
>C10-C12 (Aliphatic) EH_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<4.47	<5.83	<5.83	<5.08*	<5.08*			
>C12-C16 (Aliphatic) EH_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	11.9	<5.83	<5.83	<5.08*	<5.08*			
>C16-C21 (Aliphatic) EH_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<4.47	<5.83	<5.83	<5.08*	<5.08*			
>C21-C35 (Aliphatic) EH_COU_ID_AL	TPHFIDUS (Aliphatic)	10	mg/kg <sup>a</sup>	U	40.0	<14.6	<14.6	<12.7*	<12.7*			
Total TPH >C6-C40 (Aliphatic) EH_COU_ID_AL	TPHFIDUS (Aliphatic)	20	mg/kg <sup>a</sup>	U	65.0	<29.2	<29.2	<25.4*	<25.4*			
>C10-C12 (Aromatic) EH_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	6.06	10.3	10.3	<5.08*	<5.08*			
>C12-C16 (Aromatic) EH_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	6.01	12.0	12.0	<5.08*	<5.08*			
>C16-C21 (Aromatic) EH_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	7.66	8.69	8.69	9.24*	9.24*			
>C21-C35 (Aromatic) EH_COU_ID_AR	TPHFIDUS (Aromatic)	10	mg/kg <sup>a</sup>	U	27.9	<14.6	<14.6	23.4*	23.4*			
Total TPH >C6-C40 (Aromatic) EH_COU_ID_AR	TPHFIDUS (Aromatic)	20	mg/kg <sup>a</sup>	U	63.5	52.8	52.8	46.7*	46.7*			
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1*	<1*			
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1*	<1*			
1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<1	<1	<1	<1	<1			
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1*	<1*			
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1*	<1*			
1,1-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1	<1	<1	<1*	<1*			
1,1-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1*	<1*			
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<4	<4	<4	<4*	<4*			

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)



Analysis	Method Code	MDL	Units	Accred.	009		010		011		012
					BH04 - 1m		BH04 - 7m		BH03 - 5m		BH03 - 4m
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Pyrene	SVOCSW	0.2	mg/kg <sup>a</sup>	U							
>C10-C12 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<0.6	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
>C12-C16 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<5.33	<6.10	<6.10	<6.10	<5.72	<5.72	<5.72
>C16-C21 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	12.9	<6.10	<6.10	<6.10	8.84	8.84	8.84
>C21-C35 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	10.7	<6.10	<6.10	<6.10	9.04	9.04	9.04
Total TPH >C8-C40 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	10	mg/kg <sup>a</sup>	U	32.9	<15.2	<15.2	<15.2	22.0	22.0	22.0
>C10-C12 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	70.9	31.2	31.2	31.2	54.8	54.8	54.8
>C12-C16 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	7.18	6.99	6.99	6.99	6.84	6.84	6.84
>C16-C21 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	7.75	8.41	8.41	8.41	6.64	6.64	6.64
>C21-C35 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	14.9	13.3	13.3	13.3	10.8	10.8	10.8
Total TPH >C8-C40 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	10	mg/kg <sup>a</sup>	U	42.1	26.3	26.3	26.3	22.8	22.8	22.8
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2	<2
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2	<2
1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<1 c	<2	<2	<2	<2	<2	<2
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1 c	<2	<2	<2	<2	<2	<2
1,1-Dichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2	<2
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<4 c	<5	<5	<5	<5	<5	<5

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID													
					012		013		014		015		016					
					Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units		
Pyrene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	BH03 - 4m	SOLID	<0.3	BH03 - 2m	LPL	17/02/2023	<0.2	BH03 - 1-3m - Asbestos	SOLID	17/02/2023	0.3	BH02A - 4m	LPL	17/02/2023
>C10-C12 (Aliphatic) EHL_GU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U			<5.28				<4.56				<4.73			
>C12-C16 (Aliphatic) EHL_GU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U			<5.28				6.39				6.98			
>C16-C21 (Aliphatic) EHL_GU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U			<5.28				11.5				7.25			
>C21-C35 (Aliphatic) EHL_GU_ID_AL	TPHFIDUS (Aliphatic)	10	mg/kg <sup>a</sup>	U			<13.2				18.6				30.7			
Total TPH >C5-C40 (Aliphatic) EHL_GU_ID_AL	TPHFIDUS (Aliphatic)	20	mg/kg <sup>a</sup>	U			<26.4				47.0				61.0			
>C10-C12 (Aromatic) EHL_GU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U			7.70				6.16				<4.73			
>C12-C16 (Aromatic) EHL_GU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U			9.28				9.38				5.14			
>C16-C21 (Aromatic) EHL_GU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U			11.1				19.5				7.94			
>C21-C35 (Aromatic) EHL_GU_ID_AR	TPHFIDUS (Aromatic)	10	mg/kg <sup>a</sup>	U			23.1				26.0				21.5			
Total TPH >C5-C40 (Aromatic) EHL_GU_ID_AR	TPHFIDUS (Aromatic)	20	mg/kg <sup>a</sup>	U			67.3				73.0				46.9			
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM			<1				<1				<1			
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM			<1				<1				<1			
1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	N			<1				<1				<1			
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM			<1				<1				<1			
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM			<1				<1				<1			
1,1-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U			<1				<1				<1			
1,1-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM			<1				<1				<1			
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	UM			<4				<4				4			

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019		020				
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos		BH02A - 1m				
					Sample ID	Customer ID	Sample Type	Sampling Date	Sample ID	Customer ID	Sample Type	Sampling Date	Sample ID	Customer ID	Sample Type	Sampling Date	Sample ID
Pyrene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	0.3												
>C10-C12 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<4.62												
>C12-C16 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<4.62												
>C16-C21 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	5.02												
>C21-C35 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	10	mg/kg <sup>a</sup>	U	11.7												
Total TPH >C8-C40 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	20	mg/kg <sup>a</sup>	U	26.1												
>C10-C12 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	6.59												
>C12-C16 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	12.5												
>C16-C21 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	14.6												
>C21-C35 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	10	mg/kg <sup>a</sup>	U	25.6												
Total TPH >C8-C40 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	20	mg/kg <sup>a</sup>	U	71.9												
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1												
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1												
1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<1												
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1												
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1												
1,1-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1												
1,1-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1												
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<3												

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID									
					020		021		022		023		024	
					Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type	Sampling Date	Units	Customer ID	Sample Type
Pyrene	SVOCSW	0.2	mg/kg <sup>a</sup>	U	BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m					
>C10-C12 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<0.3	<0.3	<0.3	<0.3	<0.3					
>C12-C16 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	<5.83	<4.99	<4.99	<5.25	<5.25					
>C16-C21 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	6.57	<4.99	<4.99	<5.25	<5.25					
>C16-C21 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	mg/kg <sup>a</sup>	U	11.0	<4.99	<4.99	<5.25	<5.25					
>C21-C35 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	10	mg/kg <sup>a</sup>	U	28.9	<12.5	<12.5	<13.1	<13.1					
Total TPH >C6-C40 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	20	mg/kg <sup>a</sup>	U	61.3	28.7	28.7	<26.2	<26.2					
>C10-C12 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	5.91	<4.99	<4.99	<5.25	<5.25					
>C12-C16 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	11.3	5.79	5.79	6.67	6.67					
>C16-C21 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	mg/kg <sup>a</sup>	U	23.7	8.59	8.59	11.8	11.8					
>C21-C35 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	10	mg/kg <sup>a</sup>	U	56.7	18.4	18.4	25.0	25.0					
Total TPH >C6-C40 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	20	mg/kg <sup>a</sup>	U	117	47.1	47.1	59.7	59.7					
1,1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1					
1,1,1-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1					
1,1,2-Tetrachloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<2	<1	<1	<1	<1					
1,1,2-Trichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1					
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1					
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	U	<2	<1	<1	<1	<1					
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1					
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	U	<2	<1	<1	<1	<1					
1,1-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1					
1,2,3-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<5	<4	<4	<4	<4					

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023

[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		Units	Accred.
			024	025		
			Customer ID	Customer ID		
			Sample Type	Sample Type		
			Sampling Date	Sampling Date		
			17/02/2023	17/02/2023		
			SOLID	LPL		SOLID
			17/02/2023	17/02/2023		17/02/2023
Pyrene	SVOCSW	0.2	U	0.7	mg/kg <sup>a</sup>	<0.2
>C10-C12 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	U	<4.72	mg/kg <sup>a</sup>	<4.84
>C12-C16 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	U	7.11	mg/kg <sup>a</sup>	<4.84
>C16-C21 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	4	U	7.98	mg/kg <sup>a</sup>	<4.84
>C21-C35 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	10	U	16.7	mg/kg <sup>a</sup>	14.3
Total TPH >C8-C40 (Aliphatic) EHL_COU_ID_AL	TPHFIDUS (Aliphatic)	20	U	40.0	mg/kg <sup>a</sup>	25.2
>C10-C12 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	U	<4.72	mg/kg <sup>a</sup>	<4.84
>C12-C16 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	U	11.0	mg/kg <sup>a</sup>	<4.84
>C16-C21 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	4	U	13.7	mg/kg <sup>a</sup>	5.16
>C21-C35 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	10	U	32.0	mg/kg <sup>a</sup>	14.5
Total TPH >C8-C40 (Aromatic) EHL_COU_ID_AR	TPHFIDUS (Aromatic)	20	U	68.0	mg/kg <sup>a</sup>	30.1
1,1,1,2-Tetrachloroethane	VOCHSAS	1	UM	<1	µg/kg <sup>a</sup>	<1
1,1,1-Trichloroethane	VOCHSAS	1	UM	<1	µg/kg <sup>a</sup>	<1
1,1,2-Tetrachloroethane	VOCHSAS	1	N	<1	µg/kg <sup>a</sup>	<1
1,1,2-Trichloroethane	VOCHSAS	1	UM	<1	µg/kg <sup>a</sup>	<1
1,1-Dichloroethane	VOCHSAS	1	UM	<1	µg/kg <sup>a</sup>	<1
1,1-Dichloroethene	VOCHSAS	1	U	<1	µg/kg <sup>a</sup>	<1
1,1-Dichloropropene	VOCHSAS	1	UM	<1	µg/kg <sup>a</sup>	<1
1,2,3-Trichlorobenzene	VOCHSAS	3	UM	<4	µg/kg <sup>a</sup>	<4



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
Sample Type	Sampling Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	N	<5	<4	<4	<4	<4	<4	<4	<4
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	12* B	2* B	2* B	2* B	2* B	2* B	2* B	<1* B
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	U	<2	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	4	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<4	<3	<3	<3	<3	<3	<3	<3
2-Chlorotoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
Benzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	2	5	5	5	5	5	5	2
Bromobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					LPL	SOLID	LPL	SOLID	LPL	SOLID	
Sample ID	Customer ID	Sample Type	Sampling Date	Sample Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>^</sup>	N	<4	<4	<4	<4	<4	<4	<4
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	1* B	<1* B	<1* B	<1* B	<1* B	<1* B	1* B
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg <sup>^</sup>	U	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	VOCHSAS	2	µg/kg <sup>^</sup>	UM	<2	<3	<3	<3	<2	<2	<2
2-Chlorotoluene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
Benzene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	5	2	2	2	20*	20*	20*
Bromobenzene	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1
Bromodibromomethane	VOCHSAS	1	µg/kg <sup>^</sup>	UM	<1	<1	<1	<1	<1	<1	<1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009		010		011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m			BH03 - 4m
					LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023		
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	N	<4 c							
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	4* B,C							
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1 c							
1,2-Dibromoethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,2-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,2-Dichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,3-Dichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
2,2-Dichloropropane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<3 c							
2-Chlorotoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
4-Chlorotoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
Benzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	12 c							
Bromobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
Bromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							
Bromodibromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c							



Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019		020	
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos		BH02A - 1m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>a</sup>	N	<3	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>	1* <sub>B</sub>
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichloropropane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2-Dichloropropane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-Chlorotoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorotoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	1	11	11	5	5	5	5	5	5	5
Bromobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodibromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 14/03/2023  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	020		021		022		023		024	
					BH02A - 1m		BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
1,2,3-Trichloropropane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,2,4-Trichlorobenzene	VOCHSAS	3	µg/kg <sup>A</sup>	N	<5									
1,2,4-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2* B									
1,2-Dibromo-3-chloropropane	VOCHSAS	1	µg/kg <sup>A</sup>	U	<2									
1,2-Dibromoethane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,2-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,2-Dichloroethane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,2-Dichloropropane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,3,5-Trimethylbenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,3-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,3-Dichloropropane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
1,4-Dichlorobenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
2,2-Dichloropropane	VOCHSAS	2	µg/kg <sup>A</sup>	UM	<3									
2-Chlorotoluene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
4-Chlorotoluene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Benzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	4									
Bromobenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Bromochloromethane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Bromodibromomethane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		Units	Accred.
			024	025		
			BH01 - 5m	BH01 - 7m		
Sample Type	Sample Date	Sample Date	LPL	SOLID		
			17/02/2023	17/02/2023	17/02/2023	
1,2,3-Trichloropropane	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,2,4-Trichlorobenzene	VOCHSAS	3			µg/kg <sup>A</sup>	N
					<4	<4
1,2,4-Trimethylbenzene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1* B	<1* B
1,2-Dibromo-3-chloropropane	VOCHSAS	1			µg/kg <sup>A</sup>	U
					<1	<1
1,2-Dibromoethane	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,2-Dichlorobenzene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,2-Dichloroethane	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,2-Dichloropropane	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,3,5-Trimethylbenzene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,3-Dichlorobenzene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,3-Dichloropropane	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
1,4-Dichlorobenzene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
2,2-Dichloropropane	VOCHSAS	2			µg/kg <sup>A</sup>	UM
					<3	<3
2-Chlorotoluene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
4-Chlorotoluene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
Benzene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
Bromobenzene	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
Bromochloromethane	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1
Bromodichloromethane	VOCHSAS	1			µg/kg <sup>A</sup>	UM
					<1	<1

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
Sample Type	Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	
Bromoform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Bromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Carbon Tetrachloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Chlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Chloroethane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<4	<3	<3	<3	<3	<3	<3	
Chloroform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Chloromethane	VOCHSAS	3	µg/kg <sup>a</sup>	U	<5	<4	<4	<4	<4	<4	<4	
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<9	<7	<7	<7	<7	<7	<7	
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Dibromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<2	<1	<1	<1	<1	<1	<1	
Ethylbenzene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<4	<3	<3	<3	<3	<3	<3	
Hexachlorobutadiene	VOCHSAS	2	µg/kg <sup>a</sup>	N	<4	<3	<3	<3	<3	<3	<3	
iso-Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
m and p-Xylene	VOCHSAS	4	µg/kg <sup>a</sup>	UM	<7	<5	<5	<5	<5	<5	<5	
MTBE	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Naphthalene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<9	11	11	11	11	9	9	
n-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<2	<1	<1	<1	<1	<1	<1	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008	
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos	
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID
Bromoform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Bromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Carbon Tetrachloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Chlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Chloroethane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	17/02/2023	<2	17/02/2023	<3	17/02/2023	<2*	17/02/2023	<2*
Chloroform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Chloromethane	VOCHSAS	3	µg/kg <sup>a</sup>	U	17/02/2023	<4	17/02/2023	<4	17/02/2023	<4*	17/02/2023	<4*
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	17/02/2023	<6	17/02/2023	<7	17/02/2023	<6*	17/02/2023	<6*
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Dibromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Dibromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Dichlorodifluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1
Ethylbenzene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	17/02/2023	<2	17/02/2023	<3	17/02/2023	<2*	17/02/2023	<2*
Hexachlorobutadiene	VOCHSAS	2	µg/kg <sup>a</sup>	N	17/02/2023	<2	17/02/2023	<3	17/02/2023	<2	17/02/2023	<2
iso-Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
m and p-Xylene	VOCHSAS	4	µg/kg <sup>a</sup>	UM	17/02/2023	8	17/02/2023	<6	17/02/2023	11*	17/02/2023	11*
MTBE	VOCHSAS	1	µg/kg <sup>a</sup>	UM	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*
Naphthalene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	17/02/2023	<6	17/02/2023	<7	17/02/2023	<6*	17/02/2023	<6*
n-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	U	17/02/2023	<1	17/02/2023	<1	17/02/2023	<1*	17/02/2023	<1*

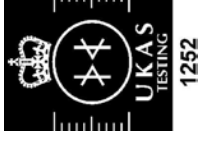
Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009		010		011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m			BH03 - 4m
					LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023		
Bromoform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Bromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Carbon Tetrachloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Chlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Chloroethane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<3 c	<3	<3	<3	<3	<3		
Chloroform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Chloromethane	VOCHSAS	3	µg/kg <sup>a</sup>	U	<4 c	<5	<5	<5	<5	<5		
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<7 c	<8	<8	<8	<8	<8		
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Dibromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Dibromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Dichlorodifluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<1 c	<2	<2	<2	<2	<2		
Ethylbenzene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<3 c	<3	<3	<3	<3	<3		
Hexachlorobutadiene	VOCHSAS	2	µg/kg <sup>a</sup>	N	<3 c	<3	<3	<3	<3	<3		
iso-Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
m and p-Xylene	VOCHSAS	4	µg/kg <sup>a</sup>	UM	18 c	<7	<7	<7	<6	<6		
MTBE	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2	<2		
Naphthalene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	15 c	<8	<8	<8	<8	<8		
n-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1 c	<2	<2	<2	<2	<2		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID								
					012		013		014		015		016
					BH03 - 4m	BH03 - 2m	BH03 - 1-3m - Asbestos	BH03 - 1m	BH02A - 4m				
Sample Type	Sampling Date	Sample Type	Sampling Date	Sample Type	Sampling Date	Sample Type	Sampling Date	Sample Type	Sampling Date				
Bromoform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Bromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Carbon Tetrachloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Chlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Chloroethane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2	<2	<2	<2					
Chloroform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Chloromethane	VOCHSAS	3	µg/kg <sup>a</sup>	U	<4	<4	<4	<3* <sub>B</sub>					
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<6	<6	<6	<5					
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Dibromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Dibromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Dichlorodifluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<1	<1	<1	<1					
Ethylbenzene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2	3	<2	<2					
Hexachlorobutadiene	VOCHSAS	2	µg/kg <sup>a</sup>	N	<2	<2	<2	<2					
iso-Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
m and p-Xylene	VOCHSAS	4	µg/kg <sup>a</sup>	UM	<5	42	<5	18					
MTBE	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1					
Naphthalene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<6	<6	<6	7					
n-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1	<1	<1	<1					

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019		020	
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos		BH02A - 1m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Bromoform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	VOCHSAS	3	µg/kg <sup>a</sup>	U	<3* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>	<4* <sub>B</sub>
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<5	<6	<6	<6	<6	<6	<6	<6	<6	<6
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	N	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Hexachlorobutadiene	VOCHSAS	2	µg/kg <sup>a</sup>	N	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
iso-Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m and p-Xylene	VOCHSAS	4	µg/kg <sup>a</sup>	UM	<4	11	11	11	8	8	8	8	8	8
MTBE	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<5	<6	<6	<6	<6	<6	<6	<6	<6	<6
n-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	020		021		022		023		024	
					BH02A - 1m		BH01 - 1m		BH01 - 1-3m - Asbestos		BH01 - 3m		BH01 - 5m	
					SOLID	17/02/2023	LPL	17/02/2023	SOLID	17/02/2023	SOLID	17/02/2023	LPL	17/02/2023
Bromoform	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Bromomethane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Carbon Tetrachloride	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Chlorobenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Chloroethane	VOCHSAS	2	µg/kg <sup>A</sup>	UM	<3									
Chloroform	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Chloromethane	VOCHSAS	3	µg/kg <sup>A</sup>	U	<5* <sub>B</sub>									
cis 1,2-Dichloroethene	VOCHSAS	5	µg/kg <sup>A</sup>	UM	<8									
cis 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Dibromochloromethane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Dibromomethane	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Dichlorodifluoromethane	VOCHSAS	1	µg/kg <sup>A</sup>	N	<2									
Ethylbenzene	VOCHSAS	2	µg/kg <sup>A</sup>	UM	<3									
Hexachlorobutadiene	VOCHSAS	2	µg/kg <sup>A</sup>	N	<3									
iso-Propylbenzene	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
m and p-Xylene	VOCHSAS	4	µg/kg <sup>A</sup>	UM	<6									
MTBE	VOCHSAS	1	µg/kg <sup>A</sup>	UM	<2									
Naphthalene	VOCHSAS	5	µg/kg <sup>A</sup>	UM	<8									
n-Butylbenzene	VOCHSAS	1	µg/kg <sup>A</sup>	U	<2									

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Sample ID		Units	Accred.	Limits
			024	025			
			Customer ID	Customer ID			
Bromoform	VOCHSAS	1	BH01 - 5m	BH01 - 7m	UM		<1
Bromomethane	VOCHSAS	1			UM		<1
Carbon Tetrachloride	VOCHSAS	1			UM		<1
Chlorobenzene	VOCHSAS	1			UM		<1
Chloroethane	VOCHSAS	2			UM		<3
Chloroform	VOCHSAS	1			UM		<1
Chloromethane	VOCHSAS	3			U		<4* B
cis 1,2-Dichloroethene	VOCHSAS	5			UM		<6
cis 1,3-Dichloropropene	VOCHSAS	1			UM		<1
Dibromochloromethane	VOCHSAS	1			UM		<1
Dibromomethane	VOCHSAS	1			UM		<1
Dichlorodifluoromethane	VOCHSAS	1			N		<1
Ethylbenzene	VOCHSAS	2			UM		<3
Hexachlorobutadiene	VOCHSAS	2			N		<3
iso-Propylbenzene	VOCHSAS	1			UM		<1
m and p-Xylene	VOCHSAS	4			UM		<5
MTBE	VOCHSAS	1			UM		<1
Naphthalene	VOCHSAS	5			UM		<6
n-Butylbenzene	VOCHSAS	1			U		<1

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	001		002		003		004	
					BH05 - 7m		BH05 - 3m		BH05 - 2.5-3m - Asbestos		BH05 - 5m	
					LPL	SOLID	LPL	SOLID	SOLID	SOLID	LPL	SOLID
Sample Type	Sampling Date	Sample ID	Customer ID	Sample ID	Customer ID	Sample ID	Customer ID	Sample ID	Customer ID	Sample ID	Customer ID	
o-Xylene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	5	<3	<3	<3	<3	<3	<3	
p-Isopropyltoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
sec-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Styrene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
ter-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<5	<4	<4	<4	<4	<4	<4	
Toluene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<9	<7	<7	<7	<7	<7	<7	
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Trichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<2	<1	<1	<1	<1	<1	<1	
Trichlorofluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	
Total Moisture at 35°C	CLANDPREP	0.1	%	N	39.3	21.5	21.5	21.5	21.5	30.2	30.2	
Description of Solid Material	CLANDPREP		-	N	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N	0.250	0.250	0.250	0.250	0.250	0.250	0.250	
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N	0	0	0	0	0	0	0	
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N	0	0	0	0	0	0	0	
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N	0.358	0.411	0.411	0.411	0.411	0.399	0.399	

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	005		006		007		008
					BH05 - 1m		BH04 - 5m		BH04 - 3m		BH04 - 1-2m - Asbestos
					LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Sample ID	Customer ID	Sample Type	Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	
o-Xylene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2	<3	<2*	<2*			
p-Isopropyltoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
sec-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
Styrene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
tert-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
Tetrachloroethene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<4	<4	<4*	<4*			
Toluene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	8	<7	17*	17*			
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
Trichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1	<1	<1*	<1*			
Trichlorofluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
Vinyl Chloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1	<1*	<1*			
Total Moisture at 35°C	CLANDPREP	0,1	%	N	10.6	31.4	21.3	21.3			
Description of Solid Material	CLANDPREP		-	N	SAND	CLAY	GRAVEL	GRAVEL			
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N	0.250	0.250	0.250	0.250			
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N	100	0	0	0			
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N	0	0	0	0			
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N	0.470	0.361	0.408	0.408			

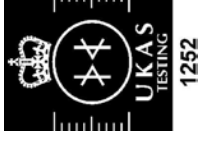
Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	009		010		011		012	
					BH04 - 1m		BH04 - 7m		BH03 - 5m			BH03 - 4m
					LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023	LPL 17/02/2023	SOLID 17/02/2023		
o-Xylene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	4 c	<3	<3	<3	<3			
p-Isopropyltoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
sec-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
Styrene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	2 c	<2	<2	<2	<2			
tert-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
Tetrachloroethene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<4 c	<5	<5	<5	<5			
Toluene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	22 c	<8	<8	<8	<8			
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
Trichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1 c	<2	<2	<2	<2			
Trichlorofluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
Vinyl Chloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1 c	<2	<2	<2	<2			
Total Moisture at 35°C	CLANDPREP	0,1	%	N	24.9	34.4	34.4	34.4	30.1			
Description of Solid Material	CLANDPREP		-	N	CLAY	CLAY	CLAY	CLAY	CLAY			
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N	0.250	0.250	0.250	0.250	0.250			
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N	0	0	0	0	0			
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N	0	0	0	0	0			
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N	0.413	0.386	0.386	0.387	0.387			

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 14/03/2023  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	012		013		014		015		016	
					BH03 - 4m		BH03 - 2m		BH03 - 1-3m - Asbestos		BH03 - 1m		BH02A - 4m	
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Sample ID	Customer ID	Sample Type	Sampling Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
o-Xylene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2	6								
p-Isopropyltoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
sec-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
Styrene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
tert-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
Tetrachloroethene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<4	<4								
Toluene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<6	49								
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
Trichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1	<1								
Trichlorofluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
Vinyl Chloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1	<1								
Total Moisture at 35°C	CLANDPREP	0,1	%	N	24,3	12,3								15,4
Description of Solid Material	CLANDPREP		-	N	CLAY	SAND								SAND
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N	0,250	0,250								0,250
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N	0	0								100
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N	0	0								0
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N	0,421	0,468								0,476

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	016		017		018		019	020		
					BH02A - 4m		BH02A - 3m		BH02A - 2m		BH02A - 1-2m - Asbestos			
					SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
o-Xylene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<2		<2							
p-Isopropyltoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
sec-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
Styrene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
tert-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
Tetrachloroethene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<3		<4							
Toluene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<5		12							
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
Trichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<1		<1							
Trichlorofluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
Vinyl Chloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<1		<1							
Total Moisture at 35°C	CLANDPREP	0,1	%	N	13.4		22.0					28.2		
Description of Solid Material	CLANDPREP		-	N	SAND		CLAY					CLAY		
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N	0.250		0.250					0.250		
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N	0		0					0		
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N	0		0					0		
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N	0.456		0.409					0.375		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	020		021		022		023		024	
					BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m					
Sample ID	Customer ID	Sample Type	Sampling Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
o-Xylene	VOCHSAS	2	µg/kg <sup>a</sup>	UM	<3	<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Propylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
tert-Butylbenzene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	VOCHSAS	3	µg/kg <sup>a</sup>	UM	<5	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	VOCHSAS	5	µg/kg <sup>a</sup>	UM	<8	<6	<6	<6	<6	<6	<6	<6	<6	<6
trans 1,2-Dichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans 1,3-Dichloropropene	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	VOCHSAS	1	µg/kg <sup>a</sup>	U	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	VOCHSAS	1	µg/kg <sup>a</sup>	UM	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Moisture at 35°C	CLANDPREP	0,1	%	N	31.4	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
Description of Solid Material	CLANDPREP		-	N	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY
Equivalent Weight of Dry Material (kg)	Leachate Prep CEN 2:1		kg	N	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
Fraction above 4 mm (%)	Leachate Prep CEN 2:1		%	N	0	0	0	0	0	0	0	0	0	0
Fraction of non-crushable material (%)	Leachate Prep CEN 2:1		%	N	0	0	0	0	0	0	0	0	0	0
Volume of Water for 2:1 Leach (ltr)	Leachate Prep CEN 2:1		l	N	0.393	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432





Client: ExCAL Limited  
 Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Sample ID	001		002		003		004	
	Customer ID	BH05 - 7m	Customer ID	BH05 - 3m	Customer ID	BH05 - 2.5-3m - Asbestos	Customer ID	BH05 - 5m
Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID
Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Units								
Method Code								
IMDL								
Accred.								
Method Code								
Leachate Prep CEN 2:1								
Substrate								
Weight of Sample Leached (kg)		0.392		0.339				0.351
Asbestos Identification						NAIS		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Sample ID	005	006	007	008
Customer ID	BH05 - 1m	BH04 - 5m	BH04 - 3m	BH04 - 1-2m - Asbestos
Sample Type	LPL	LPL	LPL	SOLID
Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Units	kg	kg	kg	kg
Method Code	Leachate Prep CEN 2:1	Leachate Prep CEN 2:1	Leachate Prep CEN 2:1	Leachate Prep CEN 2:1
Weight of Sample Leached (kg)	0.280	0.389	0.342	0.342
Asbestos Identification	-	-	-	NAIIS

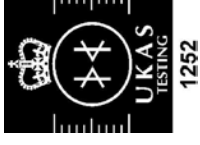
Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Sample ID	009		010		011		012
	BH04 - 1m		BH04 - 7m		BH03 - 5m		BH03 - 4m
Customer ID							
Sample Type	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Units							
Method Code	Leachate Prep CEN 2:1						
Analysis							
Weight of Sample Leached (kg)		0.337		0.364		0.363	
Asbestos Identification							

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Sample ID	012	013	014	015	016
Customer ID	BH03 - 4m	BH03 - 2m	BH03 - 1-3m - Asbestos	BH03 - 1m	BH02A - 4m
Sample Type	SOLID	LPL	SOLID	LPL	LPL
Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Units	kg				
Method Code	IMDL				
Leachate Prep CEN 2:1					
Substrate					
Weight of Sample Leached (kg)	0.329	0.282		0.274	
Asbestos Identification			NAIS		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Sample ID	016		017		018		019		020	
	Customer ID	BH02A - 4m	BH02A - 3m	BH02A - 2m	BH02A - 1-2m - Asbestos	BH02A - 1m				
Sample Type	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL
Sampling Date	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Units	kg	N	kg	N	kg	N	kg	N	kg	N
Method Code	Leachate Prep CEN 2:1									
IMDL										
Weight of Sample Leached (kg)	0.294		0.341		0.375					
Asbestos Identification								NAIS		

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Sample ID	020		021		022		023		024	
	Customer ID	BH02A - 1m	BH01 - 1m	BH01 - 1-3m - Asbestos	BH01 - 3m	BH01 - 5m	Customer ID	BH01 - 1m	BH01 - 3m	BH01 - 5m
Sample Type		SOLID	LPL	SOLID	LPL	SOLID	LPL	SOLID	LPL	LPL
Sampling Date		17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Units		kg	N	kg	N	kg	N	kg	N	kg
Method Code		Leachate Prep CEN 2:1								
IMDL										
Analysis										
Weight of Sample Leached (kg)		0.357		0.318		0.334				
Asbestos Identification										

Client: ExCAL Limited  
 Project Name: 23030224  
 Project No: 23030224  
 Date Issued: 14/03/2023



[Analysis Results](#)

Sample ID	024	025
Customer ID	BH01 - 5m	BH01 - 7m
Sample Type	SOLID	LPL
Sampling Date	17/02/2023	17/02/2023
Units		
Accred.		
Method Code		
IMDL		
Leachate Prep CEN 2:1	0.308	0.300
Weight of Sample Leached (kg)	kg	N
Asbestos Identification	-	N

## CERTIFICATE OF ANALYSIS

**ANALYSIS REQUESTED BY:** SOCOTEC UK Ltd  
Environmental Chemistry  
PO Box 100  
Burton upon Trent  
Staffordshire  
DE15 0XD

**CONTRACT NO:** S31370-8

**DATE OF ISSUE:** 10.03.23

**DATE SAMPLES RECEIVED:** 03.03.23

**DATE ANALYSIS COMPLETED:** 10.03.23

**DESCRIPTION:** Five soil/loose aggregate samples.

**ANALYSIS REQUESTED:** Qualitative analysis of samples for determination of presence/type of asbestos.

### METHODS:

Our method involves initial examination of the samples followed by detailed analysis of representative sub-samples. The sub-samples are analysed qualitatively for asbestos by polarised light and dispersion staining as described by the Health and Safety Executive in HSG 248.

### RESULTS:

#### Initial Screening

No asbestos was detected in any of soil samples by stereo-binocular and polarised light microscopy.

A summary of the results is given in Table 1.



**CONTRACT NO:** S31370-8  
**DATE OF ISSUE:** 10.03.23

**RESULTS: (cont.)**

**Table 1: Qualitative Results**

**SOCOTEC Job I.D:** 23030224

IOM sample number	SOCOTEC Sample ID	Client Sample ID	ACM type detected	PLM result
S31370-30	23030224-003	BH05 - 2.5-3m - Asbestos	-	No Asbestos Detected
S31370-31	23030224-008	BH04 - 1-2m - Asbestos	-	No Asbestos Detected
S31370-32	23030224-014	BH03 - 1-3m - Asbestos	-	No Asbestos Detected
S31370-33	23030224-019	BH02A - 1-2m - Asbestos	-	No Asbestos Detected
S31370-34	23030224-022	BH01 - 1-3m - Asbestos	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

**COMMENTS:**

IOM Consulting cannot accept responsibility for samples that have been incorrectly collected or despatched by external clients.

Any opinions and interpretations expressed herein are out with the scope of our UKAS accreditation.

AUTHORISED BY: .....

**J Simpson**  
*Senior Laboratory Analyst*



Client: ExCAL Limited  
 Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
 Project No: 23030224  
 Date Issued: 14/03/2023

**Deviating Sample Report**

<u>Sample Reference</u>	<u>Text ID</u>	<u>Method Code</u>	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
BH05 - 7m	23030224-001	BTEXHSA						✓
BH05 - 7m	23030224-001	GROHSA/BTEXHSA						✓
BH05 - 7m	23030224-001	PHSOIL						✓
BH05 - 7m	23030224-001	SFAPI						✓
BH05 - 7m	23030224-001	SFAPI						✓
BH05 - 7m	23030224-001	SFAPI						✓
BH05 - 7m	23030224-001	SFAPI						✓
BH05 - 7m	23030224-001	SFAPI						✓
BH05 - 7m	23030224-001	SVOCSW						✓
BH05 - 3m	23030224-002	BTEXHSA						✓
BH05 - 3m	23030224-002	GROHSA/BTEXHSA						✓
BH05 - 3m	23030224-002	PHSOIL						✓
BH05 - 3m	23030224-002	SFAPI						✓
BH05 - 3m	23030224-002	SFAPI						✓
BH05 - 3m	23030224-002	SFAPI						✓
BH05 - 3m	23030224-002	SFAPI						✓
BH05 - 3m	23030224-002	SFAPI						✓
BH05 - 3m	23030224-002	SVOCSW						✓
BH05 - 5m	23030224-004	BTEXHSA						✓
BH05 - 5m	23030224-004	GROHSA/BTEXHSA						✓
BH05 - 5m	23030224-004	PHSOIL						✓
BH05 - 5m	23030224-004	SFAPI						✓
BH05 - 5m	23030224-004	SFAPI						✓
BH05 - 5m	23030224-004	SFAPI						✓
BH05 - 5m	23030224-004	SFAPI						✓
BH05 - 5m	23030224-004	SFAPI						✓
BH05 - 5m	23030224-004	SVOCSW						✓
BH05 - 1m	23030224-005	BTEXHSA						✓
BH05 - 1m	23030224-005	GROHSA/BTEXHSA						✓
BH05 - 1m	23030224-005	PHSOIL						✓
BH05 - 1m	23030224-005	SFAPI						✓
BH05 - 1m	23030224-005	SFAPI						✓
BH05 - 1m	23030224-005	SFAPI						✓
BH05 - 1m	23030224-005	SFAPI						✓
BH05 - 1m	23030224-005	SFAPI						✓
BH05 - 1m	23030224-005	SVOCSW						✓
BH04 - 5m	23030224-006	BTEXHSA						✓







Client: ExCAL Limited  
 Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
 Project No: 23030224  
 Date Issued: 14/03/2023

BH02A - 2m	23030224-018	SFAPI							✓
BH02A - 2m	23030224-018	SFAPI							✓
BH02A - 2m	23030224-018	SFAPI							✓
BH02A - 2m	23030224-018	SFAPI							✓
BH02A - 2m	23030224-018	SVOCSW							✓
BH02A - 1m	23030224-020	BTEXHSA							✓
BH02A - 1m	23030224-020	GROHSA/BTEXHSA							✓
BH02A - 1m	23030224-020	PHSOIL							✓
BH02A - 1m	23030224-020	SFAPI							✓
BH02A - 1m	23030224-020	SFAPI							✓
BH02A - 1m	23030224-020	SFAPI							✓
BH02A - 1m	23030224-020	SFAPI							✓
BH02A - 1m	23030224-020	SVOCSW							✓
BH02A - 1m	23030224-020	VOCHSAS				✓			
BH01 - 1m	23030224-021	BTEXHSA							✓
BH01 - 1m	23030224-021	GROHSA/BTEXHSA							✓
BH01 - 1m	23030224-021	PHSOIL							✓
BH01 - 1m	23030224-021	SFAPI							✓
BH01 - 1m	23030224-021	SFAPI							✓
BH01 - 1m	23030224-021	SFAPI							✓
BH01 - 1m	23030224-021	SFAPI							✓
BH01 - 1m	23030224-021	SFAPI							✓
BH01 - 1m	23030224-021	SVOCSW							✓
BH01 - 1m	23030224-021	VOCHSAS				✓			
BH01 - 3m	23030224-023	BTEXHSA							✓
BH01 - 3m	23030224-023	GROHSA/BTEXHSA							✓
BH01 - 3m	23030224-023	PHSOIL							✓
BH01 - 3m	23030224-023	SFAPI							✓
BH01 - 3m	23030224-023	SFAPI							✓
BH01 - 3m	23030224-023	SFAPI							✓
BH01 - 3m	23030224-023	SFAPI							✓
BH01 - 3m	23030224-023	SFAPI							✓
BH01 - 3m	23030224-023	SVOCSW							✓
BH01 - 5m	23030224-024	BTEXHSA							✓
BH01 - 5m	23030224-024	GROHSA/BTEXHSA							✓
BH01 - 5m	23030224-024	PHSOIL							✓
BH01 - 5m	23030224-024	SFAPI							✓
BH01 - 5m	23030224-024	SFAPI							✓
BH01 - 5m	23030224-024	SFAPI							✓
BH01 - 5m	23030224-024	SFAPI							✓
BH01 - 5m	23030224-024	SFAPI							✓
BH01 - 5m	23030224-024	SVOCSW							✓
BH01 - 7m	23030224-025	BTEXHSA							✓
BH01 - 7m	23030224-025	GROHSA/BTEXHSA							✓



Client: ExCAL Limited  
Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
Project No: 23030224  
Date Issued: 14/03/2023

BH01 - 7m	23030224-025	PHSOIL							✓
BH01 - 7m	23030224-025	SFAPI							✓
BH01 - 7m	23030224-025	SFAPI							✓
BH01 - 7m	23030224-025	SFAPI							✓
BH01 - 7m	23030224-025	SFAPI							✓
BH01 - 7m	23030224-025	SFAPI							✓
BH01 - 7m	23030224-025	SVOCSW							✓



Client: ExCAL Limited  
 Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
 Project No: 23030224  
 Date Issued: 14/03/2023

Analysis Method

<u>Method Code</u>	<u>Method Description</u>	<u>Analysis Method</u>
BTEXHSA	BTEX by GCFID	As Received
CLANDPREP	Basic Solid Description	As Received
CLANDPREP	DW35 - CLand Prep and Dry Weight Correction to 35°C	As Received
GROHSA/BTEXHSA	GRO CWG (C5-C10) Ali/Aro Split	As Received
ICPMSS	Antimony in Solids by ICPMS	Air Dried & Ground
ICPMSS	Arsenic in Solids by ICPMS	Air Dried & Ground
ICPMSS	Cadmium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Chromium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Copper in Solids by ICPMS	Air Dried & Ground
ICPMSS	Lead in Solids by ICPMS	Air Dried & Ground
ICPMSS	Manganese in Solids by ICPMS	Air Dried & Ground
ICPMSS	Mercury in Solids by ICPMS	Air Dried & Ground
ICPMSS	Molybdenum in Solids by ICPMS	Air Dried & Ground
ICPMSS	Nickel in Solids by ICPMS	Air Dried & Ground
ICPMSS	Selenium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Vanadium in Solids by ICPMS	Air Dried & Ground
ICPMSS	Zinc in Solids by ICPMS	Air Dried & Ground
ICPMSW (Dissolved)	Antimony (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Arsenic (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Cadmium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Chromium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Copper (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Lead (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Manganese (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Mercury (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Molybdenum (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Nickel (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Selenium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Vanadium (Diss.) in Lab Leachate by ICPMS	Filtered
ICPMSW (Dissolved)	Zinc (Diss.) in Lab Leachate by ICPMS	Filtered
ICPSOIL	Aluminium in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Barium in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Beryllium in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Boron in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Iron in Solids by ICPOES	Air Dried & Ground
ICPSOIL	Titanium in Solids by ICPOES	Air Dried & Ground
ICPWATVAR (Dissolved)	Aluminium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Barium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Beryllium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Boron (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Iron (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWATVAR (Dissolved)	Titanium (Diss.) in Lab Leachate by ICPOES	Filtered
ICPWSS	Sulphate as SO4 (Water Soluble)	Air Dried & Ground
KONENS	Chromium VI (Hexavalent) by Colorimetry	Air Dried & Ground
Leachate Prep CEN 2:1	Leachate Prep, 1-Stage 2:1 (BSEN 12457-1)	As Received
PAHMSUS	16 PAHs by GCMS	As Received
PCBECD	PCBs, ICES 7 Congeners	As Received
PHSOIL	pH (2.5:1)	As Received
SFAPI	Cyanide (Complex) by SFA	As Received
SFAPI	Cyanide (Free) by SFA	As Received



Client: ExCAL Limited  
 Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
 Project No: 23030224  
 Date Issued: 14/03/2023

SFAPI	Cyanide (Total) by SFA	As Received
SFAPI	Phenol Index (Total) by SFA	As Received
SUB020	Asbestos Stage 1: Screen & ID	
SVOCs	SVOCs (Target List) by GCMS	As Received
TPHFIDUS (Aliphatic)	TPH (CWG) Aliphatic Split with Carbon Banding	As Received
TPHFIDUS (Aromatic)	TPH (CWG) Aromatic Split with Carbon Banding	As Received
VOCHSAS	VOCs (Target List) by GCMS	As Received

**Result Report Notes**

Letters alongside results signify that the result has associated report notes.  
 The report notes are as follows:

<u>Letter</u>	<u>Note</u>
A	Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.
B	The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.
C	Due to matrix interference, the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.
D	A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.
E	Due to the parameter value being beyond our calibration range (and following the maximum size of dilution allowed, where applicable), the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only.
F	Based on the sample history, appearance and smell a dilution was applied prior to testing. Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.
G	The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.

**HWOL Acronym Key**

<u>Acronym</u>	<u>Description</u>
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e everything extracted by the solvent(s)
CU	Clean up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
+	Operator to indicate cumulative e.g. EH_CU+HS_1D_Total



Client: ExCAL Limited  
Project Name: 238-02-07-South Side, Queens Alexandra Dock - Cardiff  
Project No: 23030224  
Date Issued: 14/03/2023

### Additional Information

This report refers to samples as received. SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

The accreditation codes are as follows:

- U = UKAS accredited analysis
- M = MCERT accredited analysis
- N = Unaccredited analysis

Any units marked with ^ signify results are reported on a dry weight basis of 35° c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35° c.

This report shall not be reproduced except in full, without written approval of the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any samples marked with \* are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following ( Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with ‡ have had MCERTS accreditation removed for this result

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

- IS = Insufficient Sample to complete analysis
- NA = Sample is not amenable for the required analysis
- ND = Results cannot be determined

Items listed with a 'SUB' method code prefix have been carried out by an external subcontracted laboratory.

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the subcontracted lab for information regarding any deviancies for this analysis.

Summaries of analysis methods are available upon request.

## **End of Certificate of Analysis**



Environmental  
Chemistry

## Certificate of Analysis

**Client:** ExCAL Limited

**Project:** 23030308

**Quote:** BEC230228922 V1.2

**Project Ref:** 238-02-07

**Site:** South Side Queen Alexandra Dock - ABP Cardiff

**Contact:** Stephen Owen

**Address:** Capel Hendre Industrial Estate  
Ammanford  
Carmarthenshire  
SA18 3SJ

**E-Mail:** [stephen.owen@excaluk.com](mailto:stephen.owen@excaluk.com)

**Phone:** +44(0)1269 831606

**No. Samples Received:** 5

**Date Received:** 03/03/2023

**Analysis Date:** 17/03/2023

**Date Issued:** 17/03/2023

**Report Type:** Final Version 01

This report supersedes any versions previously issued by the laboratory

A handwritten signature in black ink, appearing to read 'A. M. Kirby', with a horizontal line underneath.

Reported by Customer Service Co-Ordinator  
Angela Kirby



Client: ExCAL Limited  
Project Name: 238-02-07-South Side Queen Alexandra Dock - ABP Cardiff  
Project No: 23030308  
Date Issued: 17/03/2023

**Samples Analysed**

<b><u>Text ID</u></b>	<b><u>Sample Reference</u></b>	<b><u>Sampling Date</u></b>	<b><u>Sample Type</u></b>	<b><u>Sample Description</u></b>
23030308-001	BH05 8m	17/02/2023 08:30:00	WATER	Ground Water
23030308-002	BH04 8m	17/02/2023 10:15:00	WATER	Ground Water
23030308-003	BH03 5m	17/02/2023 10:30:00	WATER	Ground Water
23030308-004	BH01 7m	17/02/2023 11:30:00	WATER	Ground Water
23030308-005	BH02A 4m	17/02/2023 11:45:00	WATER	Ground Water

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Sample Type	Sampling Date	Accred.				
				001	002				003	004	005	
>C6-C7 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.1	mg/l	BH05 8m 17/02/2023	BH04 8m 17/02/2023	WATER	17/02/2023	<0.100	<0.100	BH03 5m 17/02/2023	BH01 7m 17/02/2023	BH02A 4m 17/02/2023
>C7-C8 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.1	mg/l	<0.100 B	<0.100 B	WATER		<0.100	<0.100	<0.100 a	<0.100 B	<0.100
>C7-C8 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.005	mg/l	<0.005* B	<0.005* B	WATER		<0.005* B	<0.005* B	<0.005* B	<0.005* B	<0.005
>C8-C10 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.1	mg/l	<0.100	<0.100	WATER		<0.100	<0.100	<0.100	<0.100	<0.100
>C8-C10 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.02	mg/l	<0.020	<0.020	WATER		<0.020	<0.020	<0.020	<0.020	<0.020
C5-C6 Aliphatic HS_ID_AL	GROHSA/BTEXHSA	0.1	mg/l	<0.100	<0.100	WATER		<0.100	<0.100	<0.100	<0.100	<0.100
C5-C7 Aromatic HS_ID_AR	GROHSA/BTEXHSA	0.005	mg/l	<0.005	<0.005	WATER		<0.005	<0.005	<0.005	<0.005	<0.005
Total GRO C5-C10 HS_ID_Total	GROHSA/BTEXHSA	0.1	mg/l	<0.100	<0.100	WATER		<0.100	<0.100	<0.100	<0.100	<0.100
pH	PHCONDW	1	pH units	7.5	7.8			7.5	7.8	7.9	8.1	7.6
Chromium (VI) as Cr	KONENS	0.003	mg/l	0.006	<0.003			0.006	<0.003	<0.003	<0.003	<0.003
Complex Cyanide	SFAP1	0.02	mg/l	<0.02	NA*			<0.02	NA*	<0.02	<0.02	<0.02
Free Cyanide	SFAP1	0.02	mg/l	<0.02	NA*			<0.02	NA*	<0.02	<0.02	<0.02
Phenol Index	SFAP1	0.05	mg/l	<0.05	NA*			<0.05	NA*	<0.05	<0.05	<0.05
Total Cyanide	SFAP1	0.02	mg/l	<0.02	NA*			<0.02	NA*	<0.02	<0.02	<0.02
Antimony as Sb	ICPMSWT (Total)	0.001	mg/l	<0.001	<0.010 D			<0.001	<0.010 D	<0.010 D	0.003	0.012
Arsenic as As	ICPMSWT (Total)	0.001	mg/l	0.002	0.198			0.002	0.198	0.030	0.007	0.784
Cadmium as Cd	ICPMSWT (Total)	0.00002	mg/l	<0.00002	0.00928			<0.00002	0.00928	0.00051	<0.00002	<0.00002
Total Chromium as Cr	ICPMSWT (Total)	0.001	mg/l	0.004	0.063			0.004	0.063	<0.010 D	<0.001	<0.001
Copper as Cu	ICPMSWT (Total)	0.001	mg/l	0.002	0.014			0.002	0.014	<0.010 D	0.001	0.005

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Sample Type	Sampling Date	Accred.
				001	002			
Lead as Pb	ICPMSWT (Total)	0.001	mg/l	BH05 8m	BH04 8m	WATER	17/02/2023	U
Manganese as Mn	ICPMSWT (Total)	0.002	mg/l		BH03 5m	WATER	17/02/2023	U
Molybdenum as Mo	ICPMSWT (Total)	0.001	mg/l		BH01 7m	WATER	17/02/2023	U
Nickel as Ni	ICPMSWT (Total)	0.001	mg/l			WATER	17/02/2023	U
Selenium as Se	ICPMSWT (Total)	0.001	mg/l			WATER	17/02/2023	U
Mercury as Hg	ICPMSWT (Total)	0.00003	mg/l			WATER	17/02/2023	U
Vanadium as V	ICPMSWT (Total)	0.001	mg/l			WATER	17/02/2023	U
Zinc as Zn	ICPMSWT (Total)	0.002	mg/l			WATER	17/02/2023	U
Aluminium as Al	ICPWATVART (Total)	0.01	mg/l			WATER	17/02/2023	U
Barium as Ba	ICPWATVART (Total)	0.01	mg/l			WATER	17/02/2023	U
Beryllium as Be	ICPWATVART (Total)	0.01	mg/l			WATER	17/02/2023	N
Boron as B	ICPWATVART (Total)	0.01	mg/l			WATER	17/02/2023	U
Iron as Fe	ICPWATVART (Total)	0.01	mg/l			WATER	17/02/2023	U
Total Sulphur as SO4	ICPWATVART (Total)	3	mg/l			WATER	17/02/2023	U
Titanium as Ti	ICPWATVART (Total)	0.01	mg/l			WATER	17/02/2023	N
Benzene HS_ID_AR	BTEXHSA	5	µg/l			WATER	17/02/2023	U
Ethylbenzene HS_ID_AR	BTEXHSA	5	µg/l			WATER	17/02/2023	U
m/p-Xylene HS_ID_AR	BTEXHSA	10	µg/l			WATER	17/02/2023	U
o-Xylene HS_ID_AR	BTEXHSA	5	µg/l			WATER	17/02/2023	U

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Accred.
				001	002	
Toluene HS_ID_AR	BTEXHSA	5	µg/l	<5* B	<5* B	<5
Acenaphthene	PAHMSW	0.01	µg/l	0.05	28.0	<0.20 b
Acenaphthylene	PAHMSW	0.01	µg/l	0.03	<4.00 b	<0.20 b
Anthracene	PAHMSW	0.01	µg/l	0.03	41.3	0.30
Benzo[a]anthracene	PAHMSW	0.01	µg/l	<0.01	83.5	1.50
Benzo[e]pyrene	PAHMSW	0.01	µg/l	<0.01	82.1	2.51
Benzo[b]fluoranthene	PAHMSW	0.01	µg/l	<0.01	110	2.92
Benzo[g,h,i]perylene	PAHMSW	0.01	µg/l	<0.01	45.9	1.76
Benzo[k]fluoranthene	PAHMSW	0.01	µg/l	<0.01	46.2	1.24
Chrysene	PAHMSW	0.01	µg/l	0.01	96.5	1.84
Dibenzo[a,h]anthracene	PAHMSW	0.01	µg/l	<0.01	12.0	0.38
Fluoranthene	PAHMSW	0.01	µg/l	0.14	224	2.95
Fluorene	PAHMSW	0.01	µg/l	0.07	33.0	<0.20 b
Indeno[1,2,3-cd]pyrene	PAHMSW	0.01	µg/l	<0.01	51.1	1.72
Naphthalene	PAHMSW	0.01	µg/l	0.03	24.7	0.43
Phenanthrene	PAHMSW	0.01	µg/l	0.20	169	1.39
Pyrene	PAHMSW	0.01	µg/l	0.10	183	3.17
Total PAH 16	PAHMSW	0.16	µg/l	0.73	1230	22.7
PCB 101	PCBECD	0.01	µg/l	<0.01	<0.01	<0.01

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Sample Date	Accred.
				001	002		
PCB 118	PCBECD	0.01	µg/l	BH05 8m	BH04 8m	17/02/2023	N
				WATER	WATER	WATER	
PCB 138	PCBECD	0.01	µg/l				
PCB 153	PCBECD	0.01	µg/l				
PCB 180	PCBECD	0.01	µg/l				
PCB 28	PCBECD	0.01	µg/l				
PCB 52	PCBECD	0.01	µg/l				
1,2,4-Trichlorobenzene	SVOCSSW	0.005	mg/l				
1,2-Dichlorobenzene	SVOCSSW	0.005	mg/l				
1,3-Dichlorobenzene	SVOCSSW	0.005	mg/l				
1,4-Dichlorobenzene	SVOCSSW	0.005	mg/l				
1-Methylnaphthalene	SVOCSSW	0.002	mg/l				
2,4,5-Trichlorophenol	SVOCSSW	0.02	mg/l				
2,4,6-Trichlorophenol	SVOCSSW	0.02	mg/l				
2,4-Dichlorophenol	SVOCSSW	0.02	mg/l				
2,4-Dimethylphenol	SVOCSSW	0.02	mg/l				
2,4-Dinitrophenol	SVOCSSW	0.01	mg/l				
2,4-Dinitrotoluene	SVOCSSW	0.005	mg/l				
2,6-Dinitrotoluene	SVOCSSW	0.005	mg/l				
2-Chloronaphthalene	SVOCSSW	0.002	mg/l				

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Accred.		
				001	002		003	004
2-Chlorophenol	SVOCSSW	0.02	mg/l	BH05 8m 17/02/2023 WATER	BH04 8m 17/02/2023 WATER	BH03 5m 17/02/2023 WATER	BH01 7m 17/02/2023 WATER	BH02A 4m 17/02/2023 WATER
2-Methylnaphthalene	SVOCSSW	0.002	mg/l	<0.100 D	<0.200 D	<0.100 D	<0.100 D	<0.100 D
2-Methylphenol	SVOCSSW	0.005	mg/l	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
2-Nitroaniline	SVOCSSW	0.005	mg/l	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
2-Nitrophenol	SVOCSSW	0.02	mg/l	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
3- & 4-Methylphenol	SVOCSSW	0.02	mg/l	<0.100 D	<0.200 D	<0.100 D	<0.100 D	<0.100 D
3-Nitroaniline	SVOCSSW	0.005	mg/l	<0.100 D	<0.200 D	<0.100 D	<0.100 D	<0.100 D
4,6-Dinitro-2-methylphenol	SVOCSSW	0.05	mg/l	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
4-Bromophenyl-phenylether	SVOCSSW	0.005	mg/l	<0.250 D	<0.500 D	<0.250 D	<0.250 D	<0.250 D
4-Chloro-3-methylphenol	SVOCSSW	0.005	mg/l	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
4-Chloroaniline	SVOCSSW	0.005	mg/l	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
4-Chlorophenol	SVOCSSW	0.02	mg/l	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
4-Chlorophenyl-phenylether	SVOCSSW	0.005	mg/l	<0.100 D	<0.200 D	<0.100 D	<0.100 D	<0.100 D
4-Nitroaniline	SVOCSSW	0.005	mg/l	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
4-Nitrophenol	SVOCSSW	0.05	mg/l	<0.250 D	<0.500 D	<0.250 D	<0.250 D	<0.250 D
Acenaphthene	SVOCSSW	0.002	mg/l	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Acenaphthylene	SVOCSSW	0.002	mg/l	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Anthracene	SVOCSSW	0.002	mg/l	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Azobenzene	SVOCSSW	0.01	mg/l	<0.050 D	<0.100 D	<0.050 D	<0.050 D	<0.050 D

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID				
				001	002	003	004	005
Benzo[a]anthracene	SVOC <sub>SW</sub>	0.002	mg/l	BH05 8m WATER 17/02/2023	BH04 8m WATER 17/02/2023	BH03 5m WATER 17/02/2023	BH01 7m WATER 17/02/2023	BH02A 4m WATER 17/02/2023
Benzo[a]pyrene	SVOC <sub>SW</sub>	0.002	mg/l	<0.010 <sub>D</sub>	<0.020 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>
Benzo[b]fluoranthene	SVOC <sub>SW</sub>	0.002	mg/l	<0.010 <sub>D</sub>	<0.020 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>
Benzo[g,h,i]perylene	SVOC <sub>SW</sub>	0.002	mg/l	<0.010 <sub>D</sub>	<0.020 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>
Benzo[k]fluoranthene	SVOC <sub>SW</sub>	0.002	mg/l	<0.010 <sub>D</sub>	<0.020 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>
Benzoic Acid	SVOC <sub>SW</sub>	0.1	mg/l	<0.500 <sub>D</sub>	<1.00 <sub>D</sub>	<0.500 <sub>D</sub>	<0.500 <sub>D</sub>	<0.500 <sub>D</sub>
Benzyl alcohol	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>
Biphenyl	SVOC <sub>SW</sub>	0.002	mg/l	<0.010 <sub>D</sub>	<0.020 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>
bis(2-Chloroethoxy)methane	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>
bis(2-Chloroethyl)ether	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>
bis(2-Chloroisopropyl)ether	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>
bis(2-Ethylhexyl)phthalate	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>
Butylbenzylphthalate	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>
Carbazole	SVOC <sub>SW</sub>	0.01	mg/l	<0.050 <sub>D</sub>	<0.100 <sub>D</sub>	<0.050 <sub>D</sub>	<0.050 <sub>D</sub>	<0.050 <sub>D</sub>
Chrysene	SVOC <sub>SW</sub>	0.002	mg/l	<0.010 <sub>D</sub>	<0.020 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>
Coronene	SVOC <sub>SW</sub>	0.05	mg/l	<0.250 <sub>D</sub>	<0.500 <sub>D</sub>	<0.250 <sub>D</sub>	<0.250 <sub>D</sub>	<0.250 <sub>D</sub>
Dibenzo[a,h]anthracene	SVOC <sub>SW</sub>	0.002	mg/l	<0.010 <sub>D</sub>	<0.020 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>	<0.010 <sub>D</sub>
Dibenzofuran	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>
Diethylphthalate	SVOC <sub>SW</sub>	0.005	mg/l	<0.025 <sub>D</sub>	<0.050 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>	<0.025 <sub>D</sub>

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Sample Type	Sampling Date	Accred.	
				001	002				003
Dimethylphthalate	SVOCSSW	0.005	mg/l	N	BH05 8m	BH04 8m	BH03 5m	BH01 7m	BH02A 4m
Di-n-butylphthalate	SVOCSSW	0.005	mg/l	N	WATER	WATER	WATER	WATER	WATER
Di-n-octylphthalate	SVOCSSW	0.002	mg/l	N	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Diphenyl ether	SVOCSSW	0.002	mg/l	N	<0.025 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Fluoranthene	SVOCSSW	0.002	mg/l	N	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Fluorene	SVOCSSW	0.002	mg/l	N	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Hexachlorobenzene	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
Hexachlorobutadiene	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
Hexachlorocyclopentadiene	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
Hexachloroethane	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
Indeno[1,2,3-cd]pyrene	SVOCSSW	0.002	mg/l	N	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Isophorone	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
Naphthalene	SVOCSSW	0.002	mg/l	N	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Nitrobenzene	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
N-Nitroso-di-n-propylamine	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
N-Nitrosodiphenylamine	SVOCSSW	0.005	mg/l	N	<0.025 D	<0.050 D	<0.025 D	<0.025 D	<0.025 D
Pentachlorophenol	SVOCSSW	0.05	mg/l	N	<0.250 D	<0.500 D	<0.250 D	<0.250 D	<0.250 D
Phenanthrene	SVOCSSW	0.002	mg/l	N	<0.010 D	<0.020 D	<0.010 D	<0.010 D	<0.010 D
Phenol	SVOCSSW	0.02	mg/l	N	<0.100 D	<0.200 D	<0.100 D	<0.100 D	<0.100 D

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Sample Type	Sampling Date	Accred.
				001	002			
Pyrene	SVOCSW	0.002	mg/l	N	BH05 8m	WATER	17/02/2023	
>C10-C12 (Aliphatic) EHL_CU_TD_AL	TPHFID (Aliphatic)	0.01	mg/l	U	BH04 8m	WATER	17/02/2023	BH02A 4m
>C12-C16 (Aliphatic) EHL_CU_TD_AL	TPHFID (Aliphatic)	0.01	mg/l	U	BH03 5m	WATER	17/02/2023	BH01 7m
>C16-C21 (Aliphatic) EHL_CU_TD_AL	TPHFID (Aliphatic)	0.01	mg/l	U	WATER	WATER	17/02/2023	WATER
>C21-C35 (Aliphatic) EHL_CU_TD_AL	TPHFID (Aliphatic)	0.01	mg/l	U	<0.010 <sup>d</sup>	WATER	17/02/2023	17/02/2023
Total TPH >C8-C40 (Aliphatic) EHL_CU_TD_AL	TPHFID (Aliphatic)	0.01	mg/l	U	<0.020 <sup>d</sup>	WATER	17/02/2023	<0.010 <sup>d</sup>
>C10-C12 (Aromatic) EHL_CU_TD_AR	TPHFID (Aromatic)	0.01	mg/l	U	<4.00 <sup>b</sup>	WATER	17/02/2023	<0.01
>C12-C16 (Aromatic) EHL_CU_TD_AR	TPHFID (Aromatic)	0.01	mg/l	U	<4.00 <sup>b</sup>	WATER	17/02/2023	<0.01
>C16-C21 (Aromatic) EHL_CU_TD_AR	TPHFID (Aromatic)	0.01	mg/l	U	<4.00* <sup>b,d</sup>	WATER	17/02/2023	<0.01
>C21-C35 (Aromatic) EHL_CU_TD_AR	TPHFID (Aromatic)	0.01	mg/l	U	6.30	WATER	17/02/2023	<0.01* <sup>b</sup>
Total TPH >C8-C40 (Aromatic) EHL_CU_TD_AR	TPHFID (Aromatic)	0.01	mg/l	U	10.8	WATER	17/02/2023	<0.01
1,1,1,2-Tetrachloroethane	VOCHSAW	1	µg/l	U	<4.00* <sup>b,d</sup>	WATER	17/02/2023	<0.01* <sup>b</sup>
1,1,1-Trichloroethane	VOCHSAW	1	µg/l	U	<4.00 <sup>b</sup>	WATER	17/02/2023	<0.01
1,1,2-Tetrachloroethane	VOCHSAW	1	µg/l	N	<4.00 <sup>b</sup>	WATER	17/02/2023	<0.01
1,1,2-Trichloroethane	VOCHSAW	1	µg/l	U	<4.00 <sup>b</sup>	WATER	17/02/2023	<0.01
1,1-Dichloroethane	VOCHSAW	1	µg/l	U	5.63	WATER	17/02/2023	<0.01
1,1-Dichloroethene	VOCHSAW	1	µg/l	U	19.4	WATER	17/02/2023	0.03
1,1-Dichloropropene	VOCHSAW	1	µg/l	U	<100 <sup>b</sup>	WATER	17/02/2023	<1
1,2,3-Trichlorobenzene	VOCHSAW	5	µg/l	U	<100 <sup>b</sup>	WATER	17/02/2023	<1

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Accred.
				001	002	
				Customer ID		
				Sample Type		
				Sampling Date		
1,2,3-Trichloropropane	VOCHSAW	1	µg/l	BH05 8m	BH04 8m	BH02A 4m
				WATER	WATER	WATER
				17/02/2023	17/02/2023	17/02/2023
1,2,4-Trichlorobenzene	VOCHSAW	5	µg/l	<1	<100 d	<1
1,2,4-Trimethylbenzene	VOCHSAW	1	µg/l	<5	<500 d	<5
1,2-Dibromo-3-chloropropane	VOCHSAW	5	µg/l	<1	<100 d	<1
1,2-Dibromoethane	VOCHSAW	1	µg/l	<5	<500 d	<5
1,2-Dichlorobenzene	VOCHSAW	5	µg/l	<1	<100 d	<1
1,2-Dichloroethane	VOCHSAW	1	µg/l	<5	<500 d	<5
1,2-Dichloropropane	VOCHSAW	1	µg/l	<1	<100 d	<1
1,3,5-Trimethylbenzene	VOCHSAW	0.6	µg/l	<1	<100 d	<0.6
1,3-Dichlorobenzene	VOCHSAW	1	µg/l	<0.6	<60.0 d	<0.6
1,3-Dichloropropane	VOCHSAW	1	µg/l	<1	<100 d	<1
1,4-Dichlorobenzene	VOCHSAW	1	µg/l	<1	<100 d	<1
2,2-Dichloropropane	VOCHSAW	1	µg/l	<1	<100 d	<1
2-Chlorotoluene	VOCHSAW	1	µg/l	<1	<100 d	<1
4-Chlorotoluene	VOCHSAW	1	µg/l	<1	<100 d	<1
Benzene	VOCHSAW	1	µg/l	<1	<100 d	<1
Bromobenzene	VOCHSAW	1	µg/l	<1	<100 d	<1
Bromochloromethane	VOCHSAW	1	µg/l	<1	<100 d	<1
Bromodichloromethane	VOCHSAW	1	µg/l	<1	<100 d	<1

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Sample ID		Customer ID		Sample Type		Sampling Date		Accred.		
				001	002	003	004	005	001	002	003	004	005	001
Bromoform	VOCHSAW	1	µg/l	<1* <sub>B</sub>	<100* <sub>B,D</sub>	<1* <sub>B</sub>	<1* <sub>B</sub>	<1* <sub>B</sub>	<1* <sub>B</sub>	<1* <sub>B</sub>	<1* <sub>B</sub>	<1* <sub>B</sub>	<1* <sub>B</sub>	
Bromomethane	VOCHSAW	5	µg/l	<5	<500 <sub>D</sub>	<5	<5	<5	<5	<5	<5	<5	<5	
Carbon Tetrachloride	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
Chlorobenzene	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	VOCHSAW	5	µg/l	<5	<500 <sub>D</sub>	<5	<5	<5	<5	<5	<5	<5	<5	
Chloroform	VOCHSAW	5	µg/l	<5	<500 <sub>D</sub>	<5	<5	<5	<5	<5	<5	<5	<5	
Chloromethane	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
cis 1,2-Dichloroethene	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
cis 1,3-Dichloropropene	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromomethane	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	VOCHSAW	0.5	µg/l	<0.5	<50.0 <sub>D</sub>	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Hexachlorobutadiene	VOCHSAW	5	µg/l	<5	<500 <sub>D</sub>	<5	<5	<5	<5	<5	<5	<5	<5	
iso-Propylbenzene	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
m and p-Xylene	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
MTBE	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	
Naphthalene	VOCHSAW	5	µg/l	<5	<500 <sub>D</sub>	<5	<5	<5	<5	<5	<5	<5	<5	
n-Butylbenzene	VOCHSAW	1	µg/l	<1	<100 <sub>D</sub>	<1	<1	<1	<1	<1	<1	<1	<1	

[Analysis Results](#)

Analysis	Method Code	MDL	Units	Accred.	Sample ID		Customer ID		Sample Type	
					001	002	003	004	005	004
o-Xylene	VOCHSAW	1	µg/l	U	<1	<100 <sup>d</sup>	<1	<1	<1	<1
p-Isopropyltoluene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
Propylbenzene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
sec-Butylbenzene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
Styrene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
ter-Butylbenzene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
Tetrachloroethene	VOCHSAW	5	µg/l	U	<5	<500 <sup>b</sup>	<5	<5	<5	<5
Toluene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
trans 1,2-Dichloroethene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
trans 1,3-Dichloropropene	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
Trichloroethene	VOCHSAW	5	µg/l	U	<5	<500 <sup>b</sup>	<5	<5	<5	<5
Trichlorofluoromethane	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1
Vinyl Chloride	VOCHSAW	1	µg/l	U	<1	<100 <sup>b</sup>	<1	<1	<1	<1



Client: ExCAL Limited  
 Project Name: 238-02-07-South Side Queen Alexandra Dock - ABP Cardiff  
 Project No: 23030308  
 Date Issued: 17/03/2023

**Deviating Sample Report**

<u>Sample Reference</u>	<u>Text ID</u>	<u>Method Code</u>	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
BH05 8m	23030308-001	BTEXHSA						✓
BH05 8m	23030308-001	GROHSA/BTEXHSA						✓
BH05 8m	23030308-001	KONENS						✓
BH05 8m	23030308-001	PAHMSW						✓
BH05 8m	23030308-001	PHCONDW						✓
BH05 8m	23030308-001	SFAPI						✓
BH05 8m	23030308-001	SFAPI						✓
BH05 8m	23030308-001	SFAPI						✓
BH05 8m	23030308-001	SFAPI						✓
BH05 8m	23030308-001	TPHFID (Aliphatic)						✓
BH05 8m	23030308-001	TPHFID (Aromatic)						✓
BH05 8m	23030308-001	VOCHSAW						✓
BH04 8m	23030308-002	BTEXHSA						✓
BH04 8m	23030308-002	GROHSA/BTEXHSA						✓
BH04 8m	23030308-002	KONENS						✓
BH04 8m	23030308-002	PAHMSW						✓
BH04 8m	23030308-002	PHCONDW						✓
BH04 8m	23030308-002	SFAPI	✓					
BH04 8m	23030308-002	SFAPI	✓					
BH04 8m	23030308-002	SFAPI	✓					
BH04 8m	23030308-002	SFAPI	✓					
BH04 8m	23030308-002	TPHFID (Aliphatic)						✓
BH04 8m	23030308-002	TPHFID (Aromatic)						✓
BH04 8m	23030308-002	VOCHSAW						✓
BH03 5m	23030308-003	BTEXHSA						✓
BH03 5m	23030308-003	GROHSA/BTEXHSA						✓
BH03 5m	23030308-003	KONENS						✓
BH03 5m	23030308-003	PAHMSW						✓
BH03 5m	23030308-003	PHCONDW						✓
BH03 5m	23030308-003	SFAPI						✓
BH03 5m	23030308-003	SFAPI						✓
BH03 5m	23030308-003	SFAPI						✓
BH03 5m	23030308-003	SFAPI						✓



Client: ExCAL Limited  
 Project Name: 238-02-07-South Side Queen Alexandra Dock - ABP Cardiff  
 Project No: 23030308  
 Date Issued: 17/03/2023

BH03 5m	23030308-003	TPHFID (Aliphatic)								✓
BH03 5m	23030308-003	TPHFID (Aromatic)								✓
BH03 5m	23030308-003	VOCHSAW								✓
BH01 7m	23030308-004	BTEXHSA								✓
BH01 7m	23030308-004	GROHSA/BTEXHSA								✓
BH01 7m	23030308-004	KONENS								✓
BH01 7m	23030308-004	PAHMSW								✓
BH01 7m	23030308-004	PHCONDW								✓
BH01 7m	23030308-004	SFAPI								✓
BH01 7m	23030308-004	SFAPI								✓
BH01 7m	23030308-004	SFAPI								✓
BH01 7m	23030308-004	SFAPI								✓
BH01 7m	23030308-004	TPHFID (Aliphatic)								✓
BH01 7m	23030308-004	TPHFID (Aromatic)								✓
BH01 7m	23030308-004	VOCHSAW								✓
BH02A 4m	23030308-005	BTEXHSA								✓
BH02A 4m	23030308-005	GROHSA/BTEXHSA								✓
BH02A 4m	23030308-005	KONENS								✓
BH02A 4m	23030308-005	PAHMSW								✓
BH02A 4m	23030308-005	PHCONDW								✓
BH02A 4m	23030308-005	SFAPI								✓
BH02A 4m	23030308-005	SFAPI								✓
BH02A 4m	23030308-005	SFAPI								✓
BH02A 4m	23030308-005	SFAPI								✓
BH02A 4m	23030308-005	TPHFID (Aliphatic)								✓
BH02A 4m	23030308-005	TPHFID (Aromatic)								✓
BH02A 4m	23030308-005	VOCHSAW								✓



Client: ExCAL Limited  
 Project Name: 238-02-07-South Side Queen Alexandra Dock - ABP Cardiff  
 Project No: 23030308  
 Date Issued: 17/03/2023

Analysis Method

<u>Method Code</u>	<u>Method Description</u>	<u>Analysis Method</u>
BTEXHSA	BTEX by GCFID	Unfiltered
GROHSA/BTEXHSA	GRO CWG (C5-C10) Ali/Aro Split	Unfiltered
ICPMSWT (Total)	Antimony (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Arsenic (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Cadmium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Chromium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Copper (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Lead (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Manganese (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Mercury (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Molybdenum (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Nickel (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Selenium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Vanadium (Tot.) in Water by ICPMS	Unfiltered
ICPMSWT (Total)	Zinc (Tot.) in Water by ICPMS	Unfiltered
ICPWATVART (Total)	Aluminium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Barium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Beryllium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Boron (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Iron (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Titanium (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Total Sulphur as SO4 (Tot.) in Water	Unfiltered
KONENS	Chromium VI (Hexavalent) by Colorimetry	Filtered
PAHMSW	16 PAHs by GCMS	Unfiltered
PCBECD	PCBs, ICES 7 Congeners	Unfiltered
PHCONDW	pH	Unfiltered
SFAPI	Cyanide (Complex) by SFA	Unfiltered
SFAPI	Cyanide (Free) by SFA	Unfiltered
SFAPI	Cyanide (Total) by SFA	Unfiltered
SFAPI	Phenol Index (Total) by SFA	Unfiltered
SVOCSW	SVOCs (Target List) by GCMS	Unfiltered
TPHFID (Aliphatic)	TPH (CWG) Aliphatic Split with Carbon Banding	Unfiltered
TPHFID (Aromatic)	TPH (CWG) Aromatic Split with Carbon Banding	Unfiltered
VOCHSAW	VOCs (Target List) by GCMS	Unfiltered



Client: ExCAL Limited  
Project Name: 238-02-07-South Side Queen Alexandra Dock - ABP Cardiff  
Project No: 23030308  
Date Issued: 17/03/2023

### Result Report Notes

Letters alongside results signify that the result has associated report notes.  
The report notes are as follows:

<u>Letter</u>	<u>Note</u>
A	Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.
B	The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.
C	Due to matrix interference, the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.
D	A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.
E	Due to the parameter value being beyond our calibration range (and following the maximum size of dilution allowed, where applicable), the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only.
F	Based on the sample history, appearance and smell a dilution was applied prior to testing. Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.
G	The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.

### HWOL Acronym Key

<u>Acronym</u>	<u>Description</u>
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e everything extracted by the solvent(s)
CU	Clean up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
+	Operator to indicate cumulative e.g. EH_CU+HS_1D_Total



Client: ExCAL Limited  
Project Name: 238-02-07-South Side Queen Alexandra Dock - ABP Cardiff  
Project No: 23030308  
Date Issued: 17/03/2023

### Additional Information

This report refers to samples as received. SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

The accreditation codes are as follows:

- U = UKAS accredited analysis
- M = MCERT accredited analysis
- N = Unaccredited analysis

Any units marked with ^ signify results are reported on a dry weight basis of 105° c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35° c.

This report shall not be reproduced except in full, without written approval of the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any samples marked with \* are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following ( Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with ‡ have had MCERTS accreditation removed for this result

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

- IS = Insufficient Sample to complete analysis
- NA = Sample is not amenable for the required analysis
- ND = Results cannot be determined

Items listed with a 'SUB' method code prefix have been carried out by an external subcontracted laboratory.

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the subcontracted lab for information regarding any deviancies for this analysis.

Summaries of analysis methods are available upon request.

## **End of Certificate of Analysis**