



Trammell Crow Company

Former Heywood Stores, Heywood

Phase 2 Environmental Site Investigation

323173 R02(01)

RSK GENERAL NOTES

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

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1 INTRODUCTION

1.1 Commissioning

RSK Environment Limited (RSK) were engaged by Trammell Crow Company, (35 Portman Square, 4th Floor, London, W1H 6LR) herein referred to as the 'Client' to carry out a supplementary environmental assessment of the site at the Former Heywood Stores, Manchester Road, Heywood, OL10 2PX.

The works were undertaken by means of fee proposal 323173TL03(03) dated 20 October 2025, including RSK Standard Terms and Conditions, which forms the appointment between ourselves and the Client.

References in this report to 'we', 'us', or 'our' shall mean RSK Geosciences as a trading name of RSK Environment Limited (company no.SC115530) at registered address 65 Sussex Street, Glasgow, G41 1DX.

The site location is provided in **Figure 1** and the site layout boundary to which this report refers is presented in **Figure 2**.

The report should be read and used in accordance with the limitations and constraints identified in the report text, and at **Appendix A – Service Constraints**.

1.2 Objectives

RSK understand that the site is to be redeveloped with a commercial facility, and the proposed layout is included in **Appendix C**.

The objective of the work is:

- to fill in data gaps in relation to soil contamination, due to parts of the site being inaccessible during previous investigations
- identify contamination constraints to the proposed development and, where relevant, to support discharge of planning conditions and building control requirements
- to identify based on risk assessment whether additional investigation or remediation works may be required to support safe development to make the site suitable for use.

1.3 Scope of works

The scope of works has been developed in accordance with relevant British Standards and authoritative technical guidance as referenced through the report. The assessment of the contamination status of the site is in line with the technical approach presented in Land Contamination Risk Management (LCRM) (Environment Agency, 2023) and in general accordance with BS 10175: 2011 + A2 2017 (BSI, 2017). It is also compliant with relevant planning policy and guidance, i.e. national planning frameworks and policies.

The scope of the intrusive investigation has been designed in line with the recommendations of BS5930:2015+A1:2020 Code of practice for ground investigations (BSI, 2020), which maintains

compliance with BS EN 1997-1 and 1997-2 and their related standards. It has also been developed in general accordance with BS 10175: 2011 + A2 2017.

The scope of works for the assessment has included the following:

Intrusive investigation:

Intrusive investigation works comprising:

- buried service detection and avoidance
- four days of trial pitting with the excavation of 21 pits
- laboratory analysis of samples for an appropriate scope of chemical analysis
- completion of a generic quantitative risk assessment (GQRA) of relevant contaminant linkages
- preparation of this factual and interpretative report.

1.4 Existing reports

The following reports detailing previous works at the site were made available for review:

- RSK, Heywood Stores, Ge-environmental Site Investigation, ref 323173-R01(02) dated November 2023
- RSK, Heywood Stores, Coal Mining Risk Assessment, ref 322834-R2(00) dated October 2021
- RSK, Heywood Stores, geo-environmental Site Investigation, ref 322834-R1(01) dated November 2021.

Pertinent information from these reports has been summarised in Section 3.

1.5 Sustainability considerations

One of RSK's guiding principles is 'promoting the concept of sustainability in all that we do'. The RSK Group Second Nature 2030 Sustainability Strategy (RSK, 2023) confirms our commitment to embedding sustainability throughout our business and creating lasting positive impact for our planet and its people by delivering sustainability in all that we do.

This is supported by RSK Geosciences' Sustainability Policy, which sets our aspiration to provide industry-leading site assessment services to our clients to achieve more sustainable and climate resilient development and to support circular economy, decarbonisation and nature-based solutions. We also recognise that we have a responsibility to reduce our own business-related emissions. In this way our business activities are aligned with and contribute to meeting several of the UN Sustainable Development Goals (SDGs), as well as supporting pathways to net zero and circular economy.

Sustainability considerations have therefore been taken into account during the design, planning and implementation stages of the project as described in this report. Our approach prioritises sustainability by integrating Sustainable Management Practices (SMPs) across the project lifecycle, to reduce our project-related emissions and help our client achieve more sustainable outcomes for their projects. SMPs were originally published by CL:AIRE (CL:AIRE, 2021a) and further developed by RSK Geosciences as an in-house tool. Further detail is provided in **Appendix B**.

Where applicable, consideration has been made throughout this report to align the recommendations with circular economy, sustainable development and climate resilience. The following specific aspects have been identified to be relevant for this report: [delete any that are not applicable or add others with the first four being applicable to most projects]

Site investigation:

- effective and targeted site investigation to inform site-specific assessment and mitigation of geo-based risks
- evaluation of impacts of projected future climate change and extreme weather effects on relevant geo-based risks
- consideration of soil and excavated materials as a valuable resource and potential for retention and reuse on or off-site
- evaluation of soil conditions to support biodiversity enhancement.

These sustainability-related aspects are considered where appropriate throughout this report. In addition, we seek to reduce our own emissions by:

- measuring, monitoring and reducing our carbon emissions
- applying the waste hierarchy to reduce waste generation and increase recycling
- optimising intrusive site investigation projects and associated emissions
- engaging with our supply chain on sustainability.

1.6 Limitations

This report is subject to the RSK service constraints given in **Appendix A** and limitations that may be described below and throughout this document.

This report was prepared in accordance with good practice guidance and available datasets at the time of issue. Consideration should be given to changes in legislation, statutory requirements, or industry practices after the date of issue.

In particular, it should be noted that there may be areas of made ground and potential contamination not detected due to the limited nature of the investigations or the thickness and quality of made ground and concentrations of contamination across the site may be variable.

2 SITE DETAILS

2.1 Site location

Site location details are presented in Table 1 and a site location plan is provided on **Figure 1**.

Table 1 Site location details

Site name	Heywood Stores
Full site address and Post code	Heywood Stores, Manchester Road, Heywood OL10 2PX
National Grid reference (centre of site)	Grid Ref 385560 409190

2.2 Site description

The site boundary and current site layout are shown on **Figure 2**. The site covers an area of approximately 11.19 hectares. It is currently unoccupied following recent demolition works on the former warehouses. The site is roughly “L shaped” and now comprises former road ways and slabs associated with the former structures.

A slight elevation change is noted with the lower part of the site located in the south eastern corner and the highest elevation in the northern part of the site.

2.3 Surrounding land uses

The site is located in a mixed residential and commercial setting. Immediate surrounding land uses are described in Table 2.

Table 2 Surrounding land uses

North	School playing fields are present immediately to the north of the site which are part of Newhouse Academy.
East	Residential properties are present to the east of the northern part of the site. Manchester Road forms the eastern site boundary with open fields further to the east.
South	A new highway (Queen Elizabeth Highway) has been constructed to the immediate south of the site, with the M62 motorway noted 430m so the south east of the site.
West	Agricultural land noted further to the west.

2.4 Proposed development plans

RSK understand that the site will be redeveloped for a commercial end use. The development plan provided by the client included in **Appendix C** indicates that the development will involve the construction of three warehouses with areas of hardstanding, and a limited area of landscaping.

3 SUMMARY OF PREVIOUS REPORTS

The following provides a summary of the pertinent information identified from the completion of the desk-based assessment, coal mining risk assessment and intrusive investigation by RSK:

- the historical maps show that the site remained undeveloped until the first buildings are shown on site in 1969
- information available from <http://www.lancashireatwar.co.uk/barrage-balloons/4586812401> indicates that the site was a large RAF site which was mainly civilian, used for maintenance, storage and repair, which was closed in 1967
- the site lies within a low risk area in terms of UXO risk
- site geology comprised superficial soils of Devensian Till (sandy clay and clayey sands), overlying bedrock of the Pennine Coal Measures
- the site lies within a coal mining area as defined by the Coal Authority, but not within a Development High Risk Area
- shallow underground mining has been carried out to the east of the site, with workings extending away from the site
- the closest historical mineshaft is 50m east of the site and no recorded shafts or workings are present on site or close enough to the site to cause potential ground stability issues
- superficial soils are defined as a secondary B Aquifer, whilst bedrock defined as a secondary undifferentiated aquifer
- the site does not lie within an area at risk from flooding.
- potentially complete contaminant linkages with a potential risk of moderate to low or higher identified by the preliminary risk assessment comprise:
 - risk to future site users, adjacent site users, proposed structures, potable water supply, underlying aquifers and surface waters from on site contamination
 - risk to future site users and potable water supplies from contamination from substations on site
 - risk to future occupants/structures from ground gases associated with made ground and mine gases.
- site investigation subsequently completed by RSK confirmed no exceedances of human health screening criteria (using residential assessment scenario) and no asbestos containing materials have been identified. Gas monitoring has identified a maximum steady state methane concentration of <0.1 % and a maximum carbon dioxide concentration of 7.0 %, combined with a maximum flow rate of 0.1 litres per hours. Based on the ground gas monitoring data, the site would be classified as characteristic situation CS1, where no protective measures are required
- the contamination assessment completed by RSK concluded that the contaminant linkages were absent based on the available data

- clay soils underlying the site were proven to have a low to medium volume change potential, and a localised area of deep made ground was encountered at borehole WS15
- chemical and geotechnical test data, and ground gas monitoring results from the previous investigation in 2021 have been used to support the conclusions and recommendations of the current investigation.

4 SITE RECONNAISSANCE FINDINGS

A site reconnaissance survey was completed on 30 October 2025 by RSK. The key findings from the site reconnaissance survey were as follows:

- the site was accessed from Manchester Road to the east of the site and through security gates
- demolition works on the former warehouses had recently been completed
- the site comprised former road ways, parking areas and concrete slabs associated with the former use
- during the walkover, the demolition contractor was in the process of demobilisation
- slabs had been broken out to allow trial pits to commence.

A site plan is provided in **Figure 2** and photographic records are included in **Appendix D**.

5 SITE INVESTIGATION STRATEGY & METHODOLOGY

5.1 Introduction

RSK carried out intrusive investigation works between 3 and 7 November 2025. No supplementary monitoring works were required as part of this assessment.

5.2 Selection of investigation methods

The techniques adopted for the investigation were chosen with consideration of the objectives and site constraints, which are described below. As part of implementing sustainability-related considerations for this project, the site investigation was designed to optimise the value of the data collected and to inform site-specific geo-environmental site assessment (see **Appendix B** for further information).

Machine-excavated trial pits were used to provide site wide coverage in areas that were previously inaccessible due to the site's previous use.

Prior to conducting intrusive works, utility service plans were obtained and buried service clearance undertaken in line with RSK's health and safety procedures. Copies of statutory service records can be made available on request.

5.3 Investigation strategy

The ground investigation was carried out using intrusive ground investigation techniques in general accordance with the recommendations of BS5930:2015+A1:2020, which maintains compliance with BS EN 1997-1 and 1997-2 and their related standards. Whilst every attempt was made to record full details of the strata encountered in the trial pits, techniques of hole formation and sampling will inevitably lead to disturbance, mixing or loss of material in some soils.

The investigation strategy involved the use of trial pits to target areas of site that were previously inaccessible due to the sites previous use, and focused primarily on areas underneath existing floor slabs.

The constraints to the investigation were as follows:

- presence of concrete slab over the majority of the working area
- presence of potential service identified in trial pits that restricted the full depth of the investigation.

Details of the investigation locations and rationale are presented in Table 3. A total of 21 machine-excavated trial pits were dug to a maximum depth of 2.7m below ground level (bgl) before being backfilled with arisings. An exploratory hole location plan is shown on **Figure 3**.

Table 3 Exploratory hole and monitoring well location rationale

Investigation type	Number	Designation	Monitoring well installation	Rationale
Trial-pits excavated by mechanical excavator	21	TP201 to TP221.	n/a	To accurately log the upper strata and natural soils underneath former warehouse buildings, and obtain samples for chemical testing.

5.3.1 Implementation of investigation works

The site investigation works were carried out in general accordance with the UK Specification for Ground Investigation (UKSGI), third edition (AGS, 2022).

The exploratory holes were logged by an engineer in general accordance with the recommendations of BS5930:2015+A1:2020 (which incorporates the requirements of BS EN ISO 14688-1, 14688-2 and 14689-1).

The soil sampling and analysis strategy was designed to characterise each encountered soil strata and allow an assessment of the potential contaminant linkages identified.

Soils collected for laboratory analysis were placed in a variety of containers appropriate to the anticipated testing suite required. They were dispatched to the laboratory in cool boxes under chain of custody documentation. Samples were stored in accordance with the RSK quality procedures to maintain sample integrity and preservation and to minimise the chance of cross contamination.

5.4 Laboratory testing

Laboratory testing was undertaken at a UKAS accredited laboratory with ISO17025 and MCERTS accredited test methods were specified where applicable for contamination testing and as shown in the laboratory test certificates appended.

5.4.1 Chemical analysis of soil samples

The soil sampling strategy was designed to characterise both made ground and underlying natural strata in the footprint of the former warehouses that were previously inaccessible. Typically, within the top 2m of the ground profile, whilst assessing the potential for contaminant migration from relevant sources of identified within the preliminary CSM completed previously.

The programme of chemical tests undertaken on soil samples obtained from the intrusive investigation is presented in Table 4 with the laboratory testing results contained in **Appendix E**.

Table 4 Summary of chemical testing of soil samples

Stratum	Tests undertaken	No. of tests
Made ground	Asbestos screening and ID	27
	PCBs WHO12	7
	TPH CWG	9
	Speciated PAH USEPA16	19

Stratum	Tests undertaken	No. of tests
	Metals	18
	VOCs	1
Devensian Till	Asbestos screening and ID	0
	PCBs WHO12	1
	TPH CWG	4
	Speciated PAH USEPA16	14
	Metals	2
	VOCs	

6 SITE INVESTIGATION FACTUAL FINDINGS

The results of the intrusive investigation and subsequent environmental laboratory analysis undertaken are detailed below.

6.1 Ground conditions encountered

The descriptions of the strata encountered, notes regarding visual or olfactory evidence of contamination, list of samples taken, field observations of soil and groundwater are included on the exploratory hole records presented in **Appendix F**. The information provided below is a summary of ground conditions encountered in this phase of work, and does not include any previous phases of investigation completed by RSK.

The exploratory holes revealed that the site is underlain by a variable thickness of made ground over firm to stiff clay. These ground conditions are consistent with those identified during previous phases of work.

For the purpose of discussion, the ground conditions encountered during the fieldworks are summarised in Table 5 with the strata discussed in subsequent subsections.

Table 5 General succession of strata encountered

Stratum	Exploratory holes encountered	Depth to top of stratum m bgl	Proven thickness (m)
Concrete /Asphalt	All except TP203 and TP204	0	0.3
Made ground	All	0	0.25 – 1.3
Devensian Till	All except TP206 and TP211	0.25 – 1.3	Unconfirmed

6.1.1 Concrete

Concrete was encountered in all but two of the trial pits and was noted to be reinforced to a maximum depth of 0.3m.

6.1.2 Made ground

The made ground encountered under the slabs generally comprised a granular soil with a slight cohesive content and ranged in thickness from 0.25m to 1.3m. The made ground was generally described as a slightly sandy, gravel and cobbles, with gravel of concrete, glass, clinker, sandstone and occasional coal, and was consistent in nature across the site.

6.1.3 Devensian Till

This stratum was encountered beneath the made ground and described as a firm to stiff, slightly sandy, slightly gravelly clay. The gravel content was noted to be fine to coarse of sandstone, siltstone and occasional coal fragments. A layer of dark grey, sandy silt was encountered in TP215 and TP216.

6.1.4 Visual/olfactory evidence of soil contamination

During the intrusive works, olfactory evidence of contamination was noted in two trial pits (TP215 and TP216), described as an organic odour, and was associated with the silt horizon between the made ground and clay soils.

PID readings were obtained at regular intervals throughout the trial pitting and returned maximum values of 0.8ppm, associated with organic odour described above.

6.2 Chemical laboratory results

A summary of the soil testing completed during the investigation is provided above in Table 4 with results are presented in **Appendix E**. Screening for asbestos containing materials was completed on 27 samples, with results confirming detections of asbestos cement in TP204, and chrysotile loose fibres in the sample of made ground from TP210. Further analysis of the asbestos identified a % w/w of 0.006%.

7 GEO-ENVIRONMENTAL ASSESSMENT

7.1 Refinement of initial CSM

The original CSM for the site, completed at the PRA stage identified potential risks to future site occupants associated with:

- risk to future site users, adjacent site users, proposed structures, potable water supply, underlying aquifers and surface waters from on site contamination
- risk to future site users and potable water supplies from contamination from substations on site
- risk to future occupants/structures from ground gases associated with made ground and mine gases.

However, these linkages were assessed in the previous site investigation completed by RSK, (report ref 323173-R01(02) dated November 2023). The assessment below discusses the human health risk from soil samples recovered from underneath floor slabs and the potential risks associated with the presence of asbestos.

7.2 Methodology and assessment of human health linkages

RSK understand that the proposed redevelopment of the site involves the construction of commercial properties. The linkages pertaining to human exposure to chemical contamination are as follows:

- H1. Oral, dermal and inhalation exposure with impacted soil, soil vapour and dust by future residents
- H2. Inhalation exposure of future residents to asbestos fibres.

7.2.1 H1. Oral, dermal and inhalation exposure with impacted soil by future occupants/site users

In order to assess the potential risk to human health from direct contact with contamination within the underlying soils, the soil results have been compared to the RSK GAC for a commercial end use, presented in **Appendix G**. The data recovered from the site investigation identified two exceedances of the assessment criteria for Benzo(b)fluoranthene (58.2 mg/kg against the GAC of 44 mg/kg), and Dibenzo(ah)anthracene (6.7mg/kg against the GAC of 3.5 mg/kg), both of which were from TP210 in the sample of made ground at 0.3m to 0.4m. A full summary of the screened data is included in **Appendix H**.

Testing of underlying natural soils confirmed that the exceedances were limited to the made ground soil and had not impacted natural soils.

Given that the development involves the construction of two smaller units and a single large unit on a concrete slab, surrounded mainly by hardstanding, and limited areas of landscaping, this linkage is not likely to be present. Risk to construction workers would be managed by CDM regulations.

7.2.2 H2. Inhalation exposure of future users to asbestos

The laboratory screening for asbestos identified detectable asbestos fibres in two of the 27 samples of made ground screened for asbestos (TP204 0-0.1m bgl, and TP210 at 0.3-0.4m bgl). However, due to the site history, asbestos may be present in discreet locations across the site.

The linkage associated with asbestos is deemed to be incomplete as the development will involve the construction of three warehouses units with the concrete slab and areas of hardstanding breaking the pathway between asbestos impacted soils and future users. A theoretical risk to ground workers exists, but this should be appropriately managed during any redevelopment works with appropriate methods of work agreed under CDM regulations.

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Geo-environmental assessment

RSK have undertaken intrusive site investigation works to fill in data gaps from previous phases of site investigation at the former Heywood Stores site. The data gaps existed previously due to the presence of warehouse buildings and concrete slabs and therefore, no intrusive works could be completed in these areas. The RSK investigation involved the excavation of 21 trial pits to a maximum depth of 2.7m, and laboratory testing of both made ground and natural soils.

The chemical test results were compared to the RSK human health assessment criteria for a commercial end use and confirmed no exceedances with the exception of Benzo(b)fluoranthene, and Dibenzo(ah)anthracene at a single location. Screening for asbestos on 27 samples of made ground identified two positive results at in TP204 and TP210. Given the development involves the construction of three warehouse units with areas of hardstanding and limited landscaping, the risk to future site occupants is considered low. Any risks to groundworkers undertaking redevelopment works should be managed through the requirements of CDM regulations.

8.2 Recommendations

Data obtained from the two phases of site investigation completed by RSK indicate that the site is suitable for the proposed development. However, if any unexpected contamination is identified during redevelopment works, works should stop and advice be sought from an appropriately trained environmental consultant, where further testing to characterise soils may be required.

REFERENCES

Standards and guidance

AGS (2021a), 'Assessment and Control of Asbestos Risk in Soil- Part 1: Protection of personnel working on Ground Investigations'.

AGS (May 2021b), 'Assessment and Control of Asbestos Risk in Soil- Part 2: Protection of Personnel working in Geotechnical and Geoenvironmental Laboratories.

AGS (2022), UK Specification for Ground Investigation (UKSGI), third edition, 2022.

Baker, K., Hayward, H., Potter, L., Bradley, D. and McLeod, C. (2009), CIRIA Report C682. The VOCs Handbook. Investigating, assessing and managing risks from inhalation of VOCs at land affected by contamination.

BGS GeoClimate UKCP18 dataset (bgs.ac.uk)

Boyle, R. A. and Witherington, P. J. (2007), 'Guidance on Evaluation of Development Proposals on Sites where Methane and Carbon Dioxide are Present', National House-Building Council and RSK Group.

BRE (2023). Radon – Guidance on protective measures for new buildings, Chris Scivyer, BRE Report BRE 211. BRE Group, 2023.

British Standard Institution (BSI) (2014), 'BS EN ISO 17892:2014. Geotechnical investigation and testing. Laboratory testing of soil'.

British Standard Institution (BSI) (2018), 'BS EN ISO 146881:2018. Geotechnical investigation and testing. Identification and classification of soil: Identification and description'.

British Standard Institution (BSI) (2018), 'BS EN ISO 14688-2:2018. Geotechnical investigation and testing. Identification and classification of soil: Principles for a classification'.

British Standard Institution (BSI) (2018), 'BS EN ISO 14689:2018. Geotechnical investigation and testing. Identification, description and classification of rock'.

British Standard Institution (BSI) (2019), 'BS 8485:2015+A1:2019. Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings'.

British Standards Institution (BSI) (1990), 'BS 1377:1990. Methods of test for soils for civil engineering purposes'.

British Standards Institution (BSI) (2004), 'BS EN 1997-1:2004. Geotechnical Design – Part 1: General rules'.

British Standards Institution (BSI) (2009), 'BS EN ISO 5667-11. Water Quality. Sampling – Guidance on sampling of groundwaters'.

British Standards Institution (BSI) (2013), 'BS EN 1997-2:2004+A1:2013. Geotechnical Design – Part 2: Ground investigation and testing'.

British Standards Institution (BSI) (2013), BS 8576:2013. Guidance on investigations for ground gas – permanent gases and volatile organic compounds (VOCs).

British Standards Institution (BSI) (2017), 'BS 10175:2011 + A2:2017. Investigation of potentially contaminated sites: Code of practice'.

British Standards Institution (BSI) (2018), 'BS EN ISO 18400-104-2018. Soil Quality. Sampling - Strategies'.

British Standards Institution (BSI) (2018), 'BS EN ISO 18400-202-2018. Soil Quality. Sampling – Preliminary Investigations'.

British Standards Institution (BSI) (2018), 'BS EN ISO 18400-203-2018. Soil Quality. Sampling – Investigation of potentially contaminated sites'.

British Standards Institution (BSI) (2020), 'BS 5930:2015+A1:2020. Code of practice for ground investigations'.

British Standards Institution (BSI) (2023), 'BS EN ISO 5667-1. Water Quality. Sampling – Guidance on the design of sampling programmes and sampling techniques'.

Building Research Establishment (2005), BRE Special Digest 1: Concrete in aggressive ground.

Card G, Wilson S, Mortimer S, (2012). A Pragmatic Approach to Ground Gas Risk Assessment. CL:AIRE Research Bulletin RB17. CL:AIRE, London, UK. ISSN 2047- 6450 (Online).

Chartered Institute of Environmental Health (CIEH), (2008), The Local Authority Guide to Ground Gas. Wilson, Card and Haines, September 2008.

CIRIA (1999). Piled foundations in weak rock. Report 181.

CIRIA (2014). Good practice on the testing and verification of protection systems for buildings against hazardous ground gases.

CIRIA (2019), 'C758 D. Abandoned Mine Workings Manual'.

CL:AIRE (2007), Climate Change, Pollutant Linkage and Brownfield Regeneration, March 2007.

CL:AIRE, SuRF-UK (2021a), Sustainable Management Practices for Management of Land Contamination, September 2021, <https://claire.co.uk/projects-and-initiatives/surf-uk/21-executing-sustainable-remediation/84-sustainable-management-practices>

CL:AIRE (2021b), Good practice for risk assessment for coal mine gas emissions. CL:AIRE, November 2021.

The Contaminated Land Regulations (England) 2006, <https://www.legislation.gov.uk/>

The Contaminated Land (England) (Amendment) Regulations 2012, <https://www.legislation.gov.uk/>

Defra (2009), Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, <https://assets.publishing.service.gov.uk/media/5b2264ff40f0b634cfb50650/pb13298-code-of-practice-090910.pdf>, 2011.

Defra (2012), Part IIA of the Environmental Protection Act 1990, Contaminated Land Statutory Guidance, April 2012.

Defra (2011), Guidance on applying the Waste Hierarchy, 2011, <https://assets.publishing.service.gov.uk/media/5a795abde5274a2acd18c223/pb13530-waste-hierarchy-guidance.pdf>

Environment Agency (2010), Managing and reducing land contamination: guiding principles (GPLC2) FAQ 8, Environment Agency, 2010.

Environment Agency (2023), Land contamination risk management, <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>, 2023.

Environment Agency (2021), 'Technical Guidance WM3. Guidance on the classification of and assessment of waste, v.1.2, 2021.

Chc Highways England (2020). Design for new pavement foundations. Design Manual for Road and Bridges. CD225, Revision 1.

National House Building Council (NHBC) (2016), Technical Extra, April 2016.

National House Building Council (NHBC) (2023a), NF93 – Foundation solutions: future proofing against climate change, February 2023.

National House Building Council (NHBC) (2023b), NF94 – Hazardous Ground Gas. An essential guide for housebuilders.

National House Building Council (NHBC) (2024), NHBC Standard, January 2024

Norbury, D. (2020), Soil and Rock Description in Engineering Practice. Whittles Publishing, 3rd Edition.

Part IIA of the Environmental Protection Act (Contaminated Land Regulations (England)) 2002.

RSK (2023), Second Nature: our 2030 sustainability strategy, 2023, <https://rskgroup.com/second-nature-our-2030-sustainability-strategy/>

Rudland, D. J., Lancefield, R. M. and Mayell, P. N. (2001), CIRIA C552. Contaminated Land Risk Assessment: A Guide to Good Practice.

SoBRA (2022), Guidance on Assessing Risk to Controlled Waters from UK Land Contamination Under Conditions of Future Climate Change, Version 1.0, August 2022.

Stone, K., Murray, A., Cooke, S., Foran, J., Gooderham, L., (2009) CIRIA C681, Unexploded Ordnance (UXO). A guide for the construction industry.

Tomlinson, M.J. (2001) Foundation Design and Construction. 6th Edition.

Transport and Road Research Laboratory, (1970), 'TRRL Road Note 29 (Appendix 1). Road pavement design'.

Transport and Road Research Laboratory (1984), 'TRRL Report LR1132 (Table C1)'.

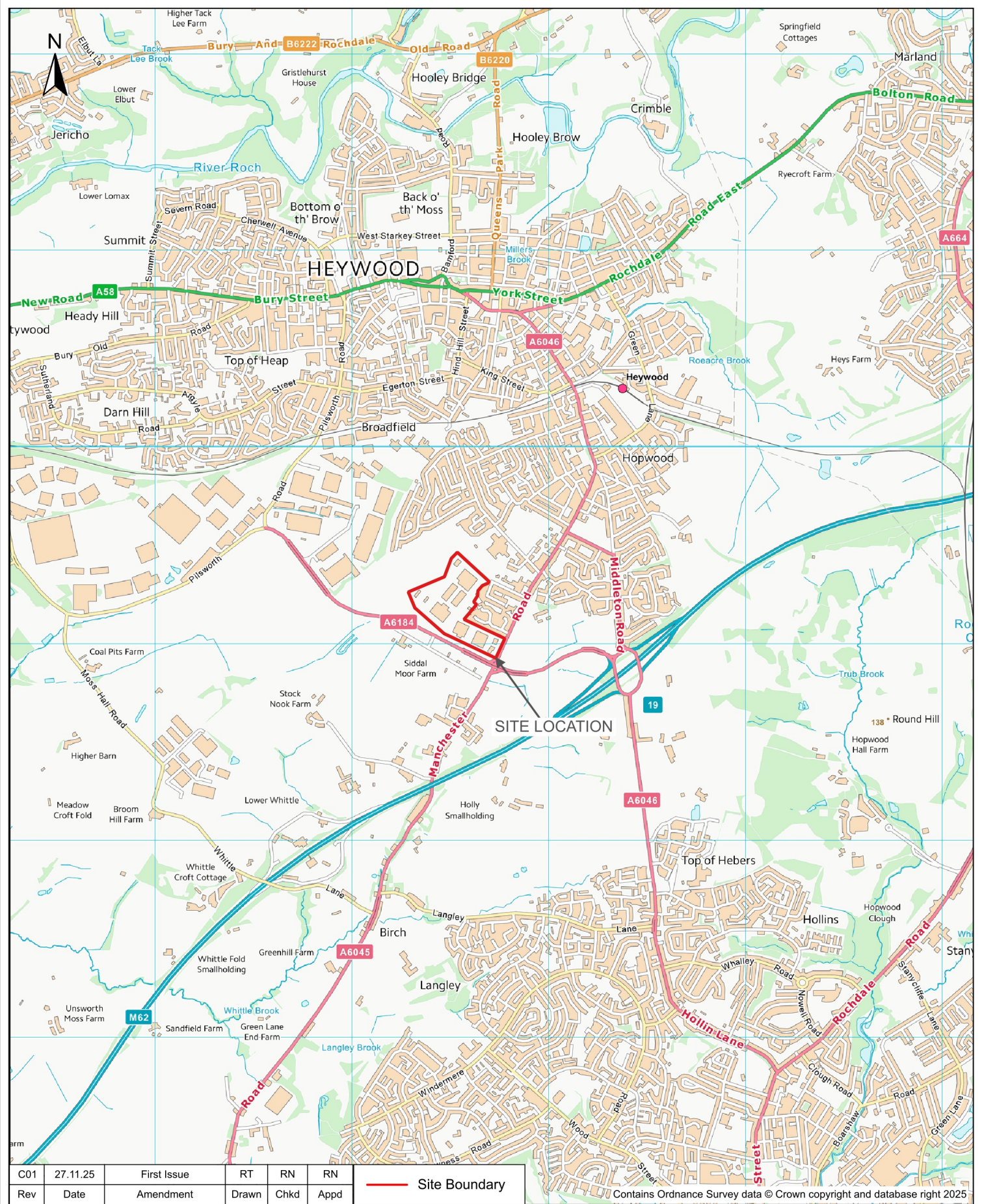
UK Health Security Agency & British Geological Survey (2022), UK Radon Affected Area Map. Accessed from: www.ukradon.org/information/maps.

UK Water Industry Research, (2010), UKWIR Report 10/WM/03/21. Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites.

FIGURES



Figure 1 SITE LOCATION PLAN



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Client

Telford Living

Project Name

Heywood Stores

Description

Site Location Plan

Dimension	Size	Scale	Geolocation	Project ID	Drawing no	Rev	File name
m	A4	1:25,000	385494, 409213	321373	11101	C01	321373-HE-111-XX-D-G-11101-C01



Figure 2 SITE LAYOUT PLAN



DO NOT SCALE FROM THIS DRAWING

LEGEND

 Site Boundary

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Rev	Date	Amendment	Drawn	Chkd	Appd



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Client Telford Living		
Project Name Heywood Stores		
Description Site Layout Plan		
Project ID 321373	Drawing no. 11201	Revision C01
File name 321373-HE-112-XX-D-G-11201-C01		
Dimensions m	Scale 1:2,150	Size A3
020406080100 m		

Figure 3 EXPLORATORY HOLE LOCATION PLAN



DO NOT SCALE FROM THIS DRAWING

LEGEND

-  Site Boundary
-  2025 Additional Samples

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Client
Telford Living

Project Name
Heywood Stores

Description
Exploratory Hole Location Plan

Project ID 321373	Drawing no. 22201	Revision C01
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File name
321373-HE-222-XX-D-G-22201-C01

Dimensions m	Scale 1:2,150	Size A3
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APPENDICES



Appendix A

SERVICE CONSTRAINTS

APPENDIX A

SERVICE CONSTRAINTS

1. Service Constraints

1.1. This Report (the "Report") and any study, inspection, investigation, sampling, testing and or interpretation carried out in connection with the Report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) trading as Leap Environmental or RSK Geosciences, for the Client named in the first paragraph of the Report (the "Client") in accordance with the terms of an RSK Fee Proposal including RSK Environment Standard Terms and Conditions (the "Appointment") between RSK and the Client, unless otherwise stated in the first paragraph of the Report. The Services were performed by RSK with the reasonable skill and care ordinarily exercised by a geo-environmental consultant at the time the Services were performed. Nothing in this Report shall be construed as imposing any fitness for purpose obligation. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the Client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the Client.

1.2 Other than that, expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services. RSK shall not be liable in respect of any action or proceedings arising out of or in connection with this Report whether in contract, in tort, for breach of statutory duty or otherwise after the expiry of six (6) years from either (i) the date of the Report or (ii) such earlier date as prescribed by law, unless varied in the terms of the Appointment.

1.3 Unless otherwise agreed in writing, the Services were performed by RSK exclusively for the purposes of the Client. RSK is not aware of any interest of or reliance by any party other than the Client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent, or condone any party, other than the Client relying upon the Services. Should this Report or any part of this Report, or details of the Services or any part of the Services, be made known to any such party, and such party relies thereon, that party does so wholly at its own and sole risk, and RSK disclaims any liability to such parties. Any such party would be well advised to seek independent advice from a competent geo-environmental consultant and/or lawyer.

1.4 The Client shall not, without the prior written consent of RSK, assign, transfer, charge, mortgage, subcontract, or deal in any other manner with all or any of the benefits provided in this Report. Unless specified in the Appointment, RSK shall not be obliged to assign the benefit of the Report whether by collateral warranty, third party rights pursuant to the Contracts (Rights of Third Parties) Act 1999, letter of reliance or otherwise. If RSK agrees to any assignment of the benefit of this Report, in whatever form, benefits to third parties through collateral warranties, third party rights or letters of reliance shall not be provided unless a fee for each right, warranty or letter is agreed. The form of wording used in the warranty or letter shall be provided by RSK for agreement by the Client. Any reasonable changes to the form of wording will be implemented by mutual agreement, however the terms in the warranty or letter cannot offer the third party any greater benefit than the Appointment offered to the Client.

1.5 It is the understanding of RSK that this Report is to be used for the purpose described in the introduction to the Report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the Report is used, or the proposed use of the site change, this Report may no longer be valid and any further use of or reliance upon the Report in those circumstances by the Client without the review and advice of RSK shall be at the Client's sole and own risk. RSK shall not be liable for any use of this Report for any purpose other than that for which it was provided.

1.6 The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the Report inaccurate or unreliable. The information and conclusions contained in this Report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the Report in the future shall be at the Client's own and sole risk.

1.7 The observations and conclusions described in this Report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out, or required by the Appointment between the Client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this Report, RSK did not seek to evaluate the presence on or off site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas, fuel storage, persistent bio-accumulative or toxic chemicals (including PFAS and related compounds) or other radioactive or hazardous materials, unless specifically identified in the Services.

1.8 The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of desk based publicly available information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services and the limitations below:

- a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.
- b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.
- c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the Client or third parties, including laboratories and information services, during the performance of the Services.
- d. The Client has identified in writing to RSK, the information, reports, findings, surveys and preliminary works RSK may not rely upon when providing the Services.

RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK, and including the doing of any independent investigation of the information provided to RSK, save as otherwise provided in the terms of the Appointment between the Client and RSK.

1.9 Any site drawing(s) provided in this Report is (are) not meant to be an accurate base plan for scale measurement but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for accurate setting out and should be considered indicative only.

1.10 Should RSK be requested to review the Report after the date of issue of this Report, RSK shall be entitled to additional payment at the existing rates, or such other terms as agreed between RSK and the Client.

2. Service Constraints where the Report provides an intrusive assessment of ground conditions:

2.1 The intrusive environmental ground investigation aspects of the Services are a limited sampling of soil from the site, at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this Report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent

of the limited area depends on the properties of the materials adjacent and local conditions, together with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope agreed between the Client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species (not tested) are not present.

2.2 The comments given in this Report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. The extent of the exploratory holes, laboratory testing and monitoring undertaken may have been restricted due to a number of factors including accessibility, the presence of buried or overhead services, current development, site usage, timescales or the Client's specification. The exploratory holes only assess a small proportion of the site area with respect to the site as a whole, and as such may only provide an indicative assessment of ground conditions on site. There may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised. The presence of hotspots of undisclosed contamination or exceptional and unforeseen ground conditions cannot be discounted.

2.3 Where the Services include Investigation of an exploratory nature or relating to physical ground works, any costings and prices provided in the Report are estimated and provided for guidance purposes only. The actual cost and time quantities shall be remeasured and shall be dependent upon the ground or other conditions, constraints present, and number and depth of the investigation locations, which shall influence the number of samples and tests required, and the quantities of soil being classified.

2.4 Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works. However, this Report does not constitute an asbestos survey. On this basis, the presence of asbestos on site cannot be discounted and a full asbestos survey should be undertaken.

2.5 Unless stated otherwise, only preliminary geotechnical recommendations are presented in this Report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed. Eurocode 7 gives guidance on the type of sampling, sample quality, number and spacing of intrusive investigations, and number of laboratory tests required. It is intended that the Geotechnical Information section of this Report will fulfil the general requirements of the Ground Investigation Report as set out in section 6 of Eurocode7, although this is subject to the restrictions imposed on the investigation, as listed above. For geotechnical design, Eurocode 7 requires the Geotechnical Design Report to address both the geotechnical and structural aspects of the geotechnical design for both the limit and serviceability states. The Geotechnical Appraisal section of this Report will not meet the requirements of a Geotechnical Design Report (GDR) and should therefore be used for preliminary guidance only.

3. Service Constraints where the Report relates to Surface Water Management:

3.1 The Surface Water Management Inspection (SWMI) Report, documents provided, observations, actions, and recommendations, with respect to the management of potential pollution issues to surface waters, made during the site Inspection visit, are those present at the time of the visit, and may not represent those recorded by others on the same day.

3.2 The comments given in this Report and the opinions expressed are based on the weather, ground and ground water conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not been disclosed by the inspection and therefore could not be taken into account. In addition, groundwater levels and flows, may vary from those Reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.

3.3 RSK places a degree of dependence upon oral information provided by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this Report was prepared.

3.4 This Report is a live document, to be continually reviewed and updated as the development progresses or other changes occur on site. RSK can only maintain the currency of this Report through the Client requesting support with supplementary site visits or attendance at meetings ahead of key stages of the development in relation to surface water management. Our risk rating assesses a number of risk factors in line with the source-pathway- receptor model and is therefore subject to constant change.

3.5 Standard design drawings are indicative. Material types, dimensions and construction details will need to be adjusted by the Client to suit the specific conditions / flows on Site.

3.6 The full responsibility for implementing the site-specific protection and maintenance measures to protect the surface water system as stated in this Report, remains with the Client and their site management team. Additional control measures may be required to achieve the objectives set out in the Surface Water Management Plan to be implemented and financed by the Client.

4. Service Constraints where the Report relates to Waste Management:

4.1 In accordance with the definition provided in the Waste Framework Directive (WFD), materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded, by the holder'. Naturally occurring soils are not considered waste if re-used on the site of origin for the purposes of development. Soils such as made ground that are not of clean and natural origin (irrespective of whether they are contaminated or not) and other materials such as recycled aggregate, do not necessarily become waste until the criteria above are met. Excavation arisings from the development may therefore be classified as waste if surplus to requirements and/or unsuitable for re-use.

4.2 It is the duty of the waste producer, to ensure that all waste is accurately classified prior to waste disposal. Technical Guidance WM3 (EA, 2018) sets out in its Appendix D requirements for waste sampling. It is a legal requirement to correctly assess and classify waste. The level of sampling should be proportionate to the volume of waste and its heterogeneity. Unless otherwise stated, the waste assessment presented in this Report should be considered as preliminary and further testing and assessment of the waste under the provisions of a Waste Sampling Plan may be required to obtain the necessary level of data required for basic characterisation of the waste in support of disposal.

4.3 Unless stated otherwise in the Report, information relating to historical operations at the site was not reviewed as part of the assessment by RSK. In addition, unless otherwise stated in the Services, RSK was not present during the collection of the samples nor had any input on the chemical testing suite. Therefore, the waste assessment and classification detailed in this Report are based solely on any information that were provided to RSK (e.g., laboratory chemical data, exploratory hole records) and were completed without prejudice for our Client.

4.4 RSK assumes that any ground investigation data, chemical testing results etc., that were provided by the Client to inform the waste assessment and supporting review were carried out in accordance with current best practice and relevant guidance/ standards, where applicable. Thus, the

comments given in this Report and the opinions expressed are based solely on the information provided by the Client. However, it is noted that there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account as part of the RSK assessment.

5. Service Constraints for Construction Environmental Management Plan Reports:

5.1 This Report should be considered in the light of any changes in legislation, statutory requirement or industry practices that may have occurred subsequent to the date of issue.

5.2 The measures and comments outlined in this Report and any opinions expressed are based on the plans provided at the time and discussions with relevant parties. However, there may be conditions pertaining to the site that have not been disclosed by investigations and therefore could not be taken into account.

5.3 This CEMP is a live document and is subject to change throughout the project, as and when necessary, to ensure management of environmental aspects remains relevant, and to ensure continued compliance with legislation and commitments as they may change. RSK understands that this CEMP will be reviewed by the Client every six months and updated as and when necessary.

5.4 It is the full responsibility of the Principal Contractor/ Client to ensure that their works do not contravene legal requirements, and adherence to this CEMP alone cannot be a full defence regarding legal action against the Principal Contractor.

6. Service Constraints where the Report relates to Ground Gas Membrane Verification:

6.1 This Report is limited to the verification of the gas resistant membrane/vapour membrane/radon barrier after installation and no inspections were undertaken of the substrate (i.e. prepared ground). The Report therefore does not constitute as a full verification of ground gas protection system.

6.2 The comments given in this Report and the opinions expressed, are based on the condition of the ground gas membrane as encountered at the time of inspection by suitably qualified personnel. RSK cannot accept liability for any subsequent change to the status of the gas membrane by follow-on trades or other construction activity.

6.3 Where not designed by RSK, the verification of protection measures is carried out with reference to the gas protection design provided by the Client. RSK assume the scope of gas protection measures as determined by third parties to be correct and to have achieved any required approval from authorities.

6.4 The Ground Gas Design Report/Remediation Strategy and Verification Plan contains details of the procedures to be adopted for inspection and validation of the works. However, it should be noted that responsibility for the correct implementation of the strategy lies with the appointed contractor. RSK cannot be held responsible for any remedial works that are carried out without the agreed procedures involving either direct supervision by RSK, or inspection and validation of the works by a representative from RSK.

7. Service Constraints for Environmental Due Diligence (EDD) Reports:

7.1 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the site, therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information.

7.2 This Report describes the results of the EDD exercise. The scope of this EDD Report, where appropriate, covers legal or regulatory compliance with respect to UK or international regulations associated with environmental matters.

7.3 As with any EDD exercise, there is a certain degree of dependence upon information provided by the target company. The EDD does not include a site walkover / visit or liaison with site representatives unless identified in the Services. Therefore, the assessment is based on the available desk study information. Also, there is a certain degree of dependence upon oral information provided by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this EDD exercise was performed.

7.4 This Report, including all supporting data and notes (collectively referred to hereinafter as "information"), was prepared or collected by RSK for the benefit of its Client.

7.5 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment and the site inspection visit. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the Site therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information and observations collected during the site inspection visit.

8. Service Constraints for Ground source heat energy Reports:

8.1 It is understood that this is a desktop survey only and that there are no requirements for a site walkover, service utility survey, or provision of service plans. These services can be provided upon request if required.

8.2 At a later stage, it is possible that a thermal response test (TRT) will need to be completed, for which a test borehole will have to be drilled, and these would be costed at the time. RSK can provide all aspects of subsequent site work for a GSHP system if required.

9. Service Constraints for Water Abstraction Borehole Reports:

9.1 The Report aims principally to only identify and assess the suitability of the site for a water abstraction borehole. This Report should be considered in the light of any changes in legislation, statutory requirements, and industry practices, that have occurred subsequent to the date of the Report.

9.2 Unless stated in the Report, the opinions expressed in this Report including all comments and recommendations provided are on the basis of the information obtained from a desk-based assessment.

Appendix B

PROJECT-RELATED SUSTAINABILITY CONSIDERATIONS

Sustainability considerations have been taken into account during the design, planning and implementation stages of the project. We manage and monitor this using the RSK Geosciences Sustainable Management Practices (SMP) tool. More detail is provided on this below.

Sustainable management practices (SMPs)

The UK Sustainable Remediation Forum (SuRF-UK) was established to develop a sustainable remediation framework that allows assessors to identify remediation strategies and techniques that are more explicitly linked to the goals of sustainable development. However, it was recognised that the same sustainability principles discussed in the framework underpin all aspects of land contaminated management and can be applied across the full range of activities. These include aspects such as site characterisation that would not normally have a formal sustainability assessment, but where sustainability-related benefits may be gained.

SuRF-UK defines Sustainable Management Practices (SMPs) as ‘relatively simple, common sense actions that can be implemented at any stage in a land contamination management project to improve its environmental, social and/or economic performance. SMPs can be used to improve the benefits (e.g. resource efficiency, community satisfaction) or reduce the negative impacts (e.g. spillages, complaints, cost) of a project, leading to project ‘sustainability gains’, without requiring a formal sustainability assessment. SMPs may also be used where sustainability gains are sought at a programme of work level using generic criteria or standards that can apply to a range of project types’ (CL:AIRE, 2021a).

RSK Geosciences has developed these SMPs further to identify those that are relevant to each phase of geo-environmental and geotechnical site assessment, along with methods of measurement and reporting. Some of the SMPs are mandatory as they are an intrinsic requirement of our ISO-certified Safety, Health, Environment and Quality management system (SHEQMS) or of other procedures. In addition, for each project, optional items are selected either to:

- identify opportunities to reduce emissions during project delivery, and/or
- support achievement of more sustainable outcomes for clients.

Further details are available on request.

Sustainability-related considerations relevant to the project

The following sustainability-related considerations have been identified to be relevant to this project. Relevant aspects have been included in the appropriate section of the report.

Effective site investigation

Undertaking effective site investigations in accordance with standards, technical standards and good practice informs a better understanding of below ground issues. Where applicable, RSK recommends the application of geophysical surveys to optimise and supplement data from intrusive investigations. These aspects contribute to the overall sustainability of the development and reductions in associated carbon emissions.

For geo-environmental assessments, effective site investigation informs more site-specific land contamination risk assessment. This means that where remediation is required, it is targeted to

have the greatest benefit in mitigating identified risks to human health and the environment, and avoids emissions and other negative environmental impacts associated with unnecessary remediation. Effective site assessment undertaken in accordance with good practice supports the achievement of wider sustainability goals including:

- supporting the beneficial reuse of brownfield and other degraded land, or the development of nature-based solutions
- reducing risks from historical land contamination or on-going releases to groundwater, surface waters and ecological receptors
- supporting decarbonisation of the energy and other sectors through undertaking effective site assessment and providing advice on mitigation of ground-based risks.

For geotechnical assessments, effective site investigation informs lean, optimal design of foundations and structures ensuring efficient use of materials, long-term performance and stability including climate resilience, and a reduction in community disruption during construction. It also allows for early identification of geotechnical hazards to aid in the prevention of environmentally damaging issues during construction, for example, soil erosion and landslips. In earthworks, site investigations aid in confirming the material types and properties allowing for their reuse in construction. Furthermore, early identification of materials enables better planning and management of site resources, reducing waste and promoting retention and reuse of soils and other excavated materials.

Reuse and disposal of excavated

Reuse and disposal of excavated materials is a key issue on many development or construction projects. In accordance with the definition provided in the Waste Framework Directive (WFD), materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded, by the holder'. Naturally occurring soils are not considered waste if reused on the site of origin for the purposes of development.

Excavated materials that are not of 'clean and natural origin' (irrespective of whether they are contaminated or not), such as made ground and other anthropogenic materials, may be considered waste after excavation. This means that they cannot be reused unless 'recovered' through use of waste licensing controls, such as exemptions, or a waste recovery permit. Alternatively, in limited circumstances, the CL:AIRE Definition of Waste Code of Practice (DoWCoP; CL:AIRE, 2011)) can be applied, in specific scenarios, to support suitable reuse on or off-site using materials management plans (MMPs). Otherwise, disposal is required, typically off-site, under an appropriate landfill permit. This has important implications for the assessment, excavation, temporary storage, reuse and disposal of excavated materials.

In accordance with the waste hierarchy (Ref. Defra, 2011) and circular economy principles, there are a range of approaches to reduce the volume of waste materials created from development projects with the following order of preference:

- prevention – designing out the need for excavation and identifying during the development planning phase the potential for surplus soils to be generated during construction
- minimisation – implementing effective segregation, stockpile and materials management during construction
- reuse – assessing potential for reuse without treatment, either on or off-site
- recycling/ recovery – processing of materials to allow reuse and support waste recovery

- disposal – the last resort, either on or off-site.

The potential for the generation of waste materials through land redevelopment must therefore be considered as part of any construction activity. Reuse of excavated materials, including topsoil, subsoil, aggregates and rock, generated through the works may also offer opportunities to reduce the amount of waste created, diverting it away from landfill, resulting in a more sustainable development. The materials may have reuse potential on the site of origin or at other development sites. In some instances, generated waste materials have the potential for beneficial reuse, with some non-waste materials needing to be disposed of to landfill.

Early consideration, planning and effective implementation are all needed to maximise the reuse of materials. As well as reducing cost for off-site disposal, sustainability-related benefits include reducing the volumes of materials for transport and disposal, quality and import of virgin materials and associated carbon emissions.

Assessment of the potential for reuse materials is essential, with information on the soil quality being collected and understood as part of the intrusive investigation phases where relevant.

Soil as a resource

Soil forms an important sub-category of excavated material. Soil contains approximately three times as much carbon as the atmosphere. As well as avoiding the generation of waste, minimising the disturbance of soils on site minimises the loss of carbon during soil handling and storage. Retaining as much soil as possible without damage also reduces flooding, dust and silt management risks, nutrient retention, and supports biodiversity net gain. Soil is therefore a valuable resource in its own right, requiring careful planning at an early stage in the project lifetime to ensure that it can be successfully retained or reused. Defra has published a Code of Practice for the sustainable use of soil on construction sites (Defra, 2009). This is intended to be a practical guide to assist anyone involved in the construction industry to protect the soil resources with which they work, with a focus on England.

Site-won topsoil should, where possible, be left in situ or handled carefully to prevent damage to the soil structure. Where topsoil is to be stripped, stockpiled and re-used such activities should be undertaken during dry weather (generally June to September). Once stockpiled, topsoil should be kept dry. Significant working of topsoil whilst wet can damage the soil structure, reducing the soils' ability to drain and resulting in anaerobic rather than aerobic soil conditions.

Anaerobic soil conditions can have a negative impact on plants and their roots, which will impact the ability of plants to take root once the soil has been placed for its proposed end use. Machinery tracking over recently placed topsoil should be avoided. Should prolonged poor storage result in degradation of the soil some treatment is likely to be required. This may include sand amelioration to improve the soil structure or the addition of composts to reduce nutrient deficiency.

Where site-won topsoil cannot be reused on site, it may then be classed as a waste and consideration should be given to the donation of this material to another construction site where a deficit of topsoil material has been calculated. This would need to be carried out under an MMP. Alternatively, to prevent a valuable resource from going to landfill, consideration could be given to donating topsoil to a Soil Treatment Facility (STF) where it can be treated, processed and reused on other sites, assuming the STF has an appropriate Environmental Permit.

Where relevant, the presence of topsoil and subsoil is considered in site investigation interpretative reports, and how it may be valuable to retain this within the development. By assessing the quality of soils at the investigation phase, together with the anticipated volumes generated from the project,

the potential for reuse of excavated soils can also be considered. This may include identifying opportunities for the reuse of surplus soils and minimising the generation of materials classified as waste. Where improvements in soil quality are needed or possible, recommendations can be given to assist in the reuse of this valuable resource.

DoWCoP and MMPs

DoWCoP was developed in consultation with the Environment Agency and the development industry to enable the reuse of materials under certain scenarios subject to demonstrating that specific criteria are met. The current re-use scenarios covered by DoWCoP comprise:

- reuse on the site of origin (with or without treatment)
- direct transfer of clean and natural soils between sites
- use in the development of land other than the site of origin following treatment at an authorised Hub site (including a fixed Soil Treatment Facility).

The importation of made ground soils (irrespective of contamination status) or crushed demolition materials is not permitted under the CoP and requires either a standard rules environmental permit or a U1 waste exemption.

In the context of excavated materials used on sites undergoing development, four factors are considered to be of particular relevance in determining if the material is a waste or when it ceases to be waste:

- the aim of the Waste Framework Directive is not undermined, i.e. if the use of the material will create an unacceptable risk of pollution of the environment or harm to human health it is likely to be waste
- the material is certain to be used
- the material is suitable for use both chemically and geotechnically
- only the required quantity of material will be used.

DoWCoP requires the preparation of a MMP that confirms the above factors will be met. This plan needs to be reviewed by a 'Qualified Person' (QP) who will then issue a declaration form to the EA. As the project progresses, data must be collated and on completion a verification report produced that shows the MMP was followed and describes any changes. The MMP establishes whether specific materials are classified as waste and how excavated materials will be treated and/or re-used in line with the CoP. The MMP is likely to form part of the site waste management plan (SWMP), where applicable.

Future climate change considerations

Future global climate change has been numerically modelled by the Intergovernmental Panel on Climate Change (IPCC) to the year 2100 based on potential anthropogenic greenhouse gas emissions scenarios. The modelling output results in projections, which the Met Office has used to determine the potential impacts of climatic change for the UK. 'UKCP18' is the most up to date set of climate projections for the UK and are based on Representative Concentration Pathways (RCP) greenhouse gas emission scenarios. All scenarios project warming with RCP 8.5 being the most extreme scenario with global temperatures increasing by 4.3°C. Typically projections indicate changes will increase in magnitude with time. It is noted that RCPs have been superseded by Shared Socioeconomic Pathways (SSP) which were published by the IPCC in 2021, although the Met Office has yet to publish updated projections based on SSP data.

The Met Office defines climate change as the large-scale, long-term shift in average weather patterns and average temperatures and is assessed by averaging data over a 30-year period. The most recent reference period is 1991-2020. The UKCP18 data indicate that the UK climate is changing resulting in hotter drier summers and warmer wetter winters, with an increase in the frequency and intensity of extreme weather and significant weather events with a higher likelihood of heat waves, flash floods and droughts. Sea level is also rising.

The key pieces of legislation associated with climate change are the Climate Change Act (2008) and the Climate Change (Scotland) Act 2009. They established the Committee on Climate Change (CCC) and require a UK Climate Change Risk Assessment (CCRA) to be published every five years to assess 'the risks for the UK from the current and predicted impacts of climate change', combined with a National Adaptation Programme. The adaptation programmes place requirements on the planning regime to incorporate the effects of climate change within their decision making. This is implemented through national planning frameworks and planning policy.

The need to incorporate the predicted effects of future climate change and associated extreme weather events (EWE) into qualitative and quantitative land contamination risk assessments is set out within Land Contamination Risk Management (LCRM) LCRM Stage 1 risk assessment (Environment Agency, 2023). BS 21365:2020 'Soil Quality: Conceptual site models for potentially contaminated sites' (BSI, 2020) includes the requirement to identify possible foreseeable events that could affect contaminant impacts or create new exposure pathways including potential for flooding (rivers, sea, groundwater), rising groundwater or seawater levels, extreme weather conditions and change of use. While there is currently no statutory guidance detailing how the effects of future climate change should be considered within land contamination assessments, several industry-led publications have been produced which provide details on how this can be incorporated, including:

- CL:AIRE, March 2007. Climate Change, Pollutant Linkage and Brownfield Regeneration (CL:AIRE, 2007)
- CL:AIRE, October 2021. Good Practice for Risk Assessment for Coal Mine Gas Emissions (CL:AIRE, 2021a)
- SoBRA, August 2022. Guidance on Assessing Risk to Controlled Waters from UK Land Contamination Under Conditions of Future Climate Change" version 1.0, (SoBRA, 2022)
- NHBC, 2023. NF94: Hazardous ground gas – an essential guide for housebuilders (NHBC, 2023).

Climate change-related impacts on the CSM and land contamination risk assessment are considered at each stage of the site assessment as per LCRM.

Climate change and EWE also have substantial implications for future geotechnical ground conditions, influencing the stability and durability of geotechnical structures, such as foundations, retaining walls, slopes and pavements to mention but a few. Therefore climate change will significantly impact the design of land development projects going forward over their lifecycle and beyond. Furthermore, climate change will significantly impact the future performance of existing land development projects that have not been designed taking into account these issues. Relevant standards and guidance are referred to in the relevant sections of the report.

Embodied ground carbon assessment

As part of achieving pathways to net zero for the construction sector, there is an urgent need to significantly reduce carbon emissions without compromising suitable and climate resilient

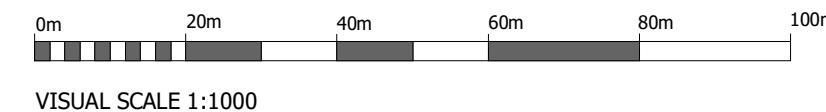
development. Created by Leap Environmental (part of RSK Geosciences) in collaboration with the University of Surrey, CReDiT is a suite of carbon calculator tools designed to assess the embodied carbon in materials and associated transport. The tools provide information on relative embodied carbon for below ground aspects, such as foundations, cover systems, and reuse and disposal of soils and excavated materials. The results are intended to inform discussions with relevant parties about embodied carbon at an early stage in the design process and enable comparison and evaluation of different design options.

Support to biodiversity net gain/ rewilding projects

The quality and condition of soils is a key factor in the establishment or enhancement of flora, which then supports goals of achieving biodiversity net gain (BNG) or rewilding projects. For example, low fertility soils promote the establishment of wildflowers that support insect populations, which would otherwise be outcompeted by grasslands. Where applicable, RSK Geosciences undertakes soil sampling, soil fertility testing and assessments to support nature-positive actions.

Appendix C

PROPOSED DEVELOPMENT PLAN



FINISHES LEGEND

- # 1 PROPOSED SITE LAYOUT

21157

Appendix D

PHOTOGRAPHIC RECORD

PHOTOGRAPHIC LOG

Photo no.	Date:	
1	6.11.2025	
Description: Ground conditions in TP201		

Photo No.	Date:	
2	6.11.2025	
Description: Ground conditions in TP202		

Photo No. 3	Date: 6.11.2025	
Description: Ground conditions in TP204		

Photo No. 4	Date: 6.11.2025	
Description: Ground conditions in TP207		

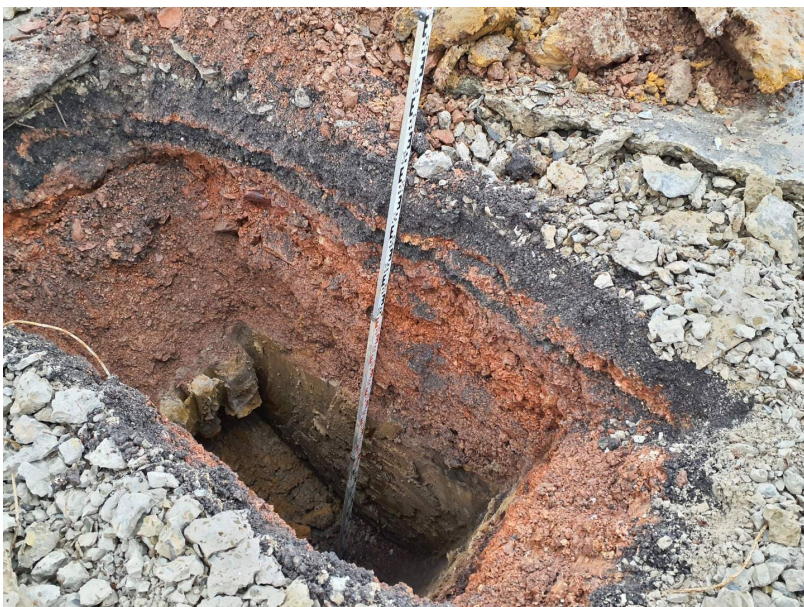
Photo No. 5	Date: 4.11.2025	
Description: Ground conditions in TP209		

Photo No. 6	Date: 4.11.2025	
Description: Ground conditions in TP210		

Photo No. 7	Date: 5.11.2025	
Description: Ground conditions in TP214		

Photo No. 8	Date: 5.11.2025	
Description: Ground conditions in TP216		

Photo No.	Date:	
9	5.11.2025	
Description:		
Ground conditions in TP218		

Photo No. 10	Date: 6.11.2025	
Description: Ground conditions in TP221		

Appendix E

LABORATORY TEST DATA

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 25/12859
Issue Number: 1

Date: 25 November, 2025

Client: RSK Environment Helsby
Spring Lodge
172 Chester Road
Helsby
Cheshire
UK
WA6 0AR

Project Manager: *USE GeoGldata@rsk.co.uk/Rhian Knot/Richard Newber
Project Name: Heywood Stores
Project Ref: 323173
Order No: N/A
Date Samples Received: 07/11/25
Date Instructions Received: 11/11/25
Date Analysis Completed: 25/11/25

Approved by:



Gemma Berrisford
Deputy Client Services Supervisor

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203			
Depth to Top	0.30	0.90	0.20	0.70	0.00	0.30	1.00			
Depth To Bottom	0.40	1.00	0.30	0.80	0.10	0.40	1.10			
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	7	6A	7	6	4A	4AB	3			
% Stones >10mm _A	<0.1	<0.1	<0.1	<0.1	-	11.7	<0.1	% w/w	0.1	A-T-044
pH _D ^{M#}	9.76 ^U	7.94	8.52 ^U	7.77	-	9.76	6.23	pH	0.01	A-T-031s
Total Organic Carbon _D ^{M#}	14.1 ^U	-	-	-	-	-	-	% w/w	0.08	A-T-032s
Arsenic _D ^{M#}	16 ^U	4	16 ^U	2	-	11	3	mg/kg	1	A-T-024s
Cadmium _D	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	mg/kg	1	A-T-024s
Copper _D ^{M#}	100 ^U	26	95 ^U	20	-	64	7	mg/kg	1	A-T-024s
Chromium _D ^{M#}	22 ^U	17	17 ^U	19	-	16	17	mg/kg	1	A-T-024s
Lead _D ^{M#}	51 ^U	10	20 ^U	11	-	63	9	mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	-	<0.17	<0.17	mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	48 ^U	24	47 ^U	26	-	29	12	mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1 ^U	<1	1 ^U	<1	-	<1	<1	mg/kg	1	A-T-024s
Zinc _D ^{M#}	48 ^U	41	26 ^U	45	-	154	18	mg/kg	1	A-T-024s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203			
Depth to Top	0.30	0.90	0.20	0.70	0.00	0.30	1.00			
Depth To Bottom	0.40	1.00	0.30	0.80	0.10	0.40	1.10			
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	7	6A	7	6	4A	4AB	3			
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D ^U	NAD ^U	-	NAD ^U	-	NAD	NAD	-			A-T-045
Asbestos Matrix (visual) _D	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	-	N/A	-	N/A	N/A	-			A-T-045

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203			
Depth to Top	0.30	0.90	0.20	0.70	0.00	0.30	1.00			
Depth To Bottom	0.40	1.00	0.30	0.80	0.10	0.40	1.10			
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	7	6A	7	6	4A	4AB	3			
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01 ^U	<0.01	<0.01 ^U	<0.01	-	0.11	<0.01	mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01 ^U	<0.01	<0.01 ^U	<0.01	-	<0.01	<0.01	mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02 ^U	<0.02	<0.02 ^U	<0.02	-	0.15	<0.02	mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04 ^U	<0.04	<0.04 ^U	<0.04	-	0.52	<0.04	mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04 ^U	<0.04	<0.04 ^U	<0.04	-	0.54	<0.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05 ^U	<0.05	<0.05 ^U	<0.05	-	0.64	<0.05	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05 ^U	<0.05	<0.05 ^U	<0.05	-	0.32	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07 ^U	<0.07	<0.07 ^U	<0.07	-	0.23	<0.07	mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06 ^U	<0.06	<0.06 ^U	<0.06	-	0.69	<0.06	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04 ^U	<0.04	<0.04 ^U	<0.04	-	0.07	<0.04	mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08 ^U	<0.08	<0.08 ^U	<0.08	-	1.43	<0.08	mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01 ^U	<0.01	<0.01 ^U	<0.01	-	0.02	<0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03 ^U	<0.03	<0.03 ^U	<0.03	-	0.34	<0.03	mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	0.10 ^U	<0.03	<0.03 ^U	<0.03	-	0.10	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.11 ^U	<0.03	0.05 ^U	<0.03	-	1.02	<0.03	mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07 ^U	<0.07	<0.07 ^U	<0.07	-	1.15	<0.07	mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.21 ^U	<0.08	<0.08 ^U	<0.08	-	7.33	<0.08	mg/kg	0.01	A-T-019s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203			
Depth to Top	0.30	0.90	0.20	0.70	0.00	0.30	1.00			
Depth To Bottom	0.40	1.00	0.30	0.80	0.10	0.40	1.10			
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	7	6A	7	6	4A	4AB	3			
TPH CWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1 ^U	<1	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1 ^U	<1	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	1 ^U	<1	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	7 ^U	1	-	-	-	-	-	mg/kg	1	A-T-055s
Total Aliphatics _A	9	1	-	-	-	-	-	mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<2	<2	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C10-C12 _A	1	<1	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C12-C16 _A	5	<1	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	4 ^U	<1	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	4 ^U	2	-	-	-	-	-	mg/kg	1	A-T-055s
Total Aromatics _A	14	2	-	-	-	-	-	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	22	4	-	-	-	-	-	mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01 ^U	<0.01	-	-	-	-	-	mg/kg	0.01	A-T-022s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/8	25/12859/9	25/12859/10	25/12859/11	25/12859/13	25/12859/15	25/12859/16	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP204	TP204	TP204	TP205	TP206	TP207	TP207			
Depth to Top	0.00	0.30	0.80	0.40	0.40	0.15	0.90			
Depth To Bottom	0.10	0.40	0.90	0.50	0.50	0.30	1.00			
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	07-Nov-25	07-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOIL - ES	SOIL - ES	SOLID	SOLID	SOLID	SOLID	SOIL - ES			
Sample Matrix Code	4AE	6	7	7	7	7	5			
% Stones >10mm _A	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
pH _D ^{M#}	-	7.37	8.53 ^U	-	9.73 ^U	8.09 ^U	5.67	pH	0.01	A-T-031s
Arsenic _D ^{M#}	-	2	17 ^U	-	<1 ^U	9 ^U	2	mg/kg	1	A-T-024s
Cadmium _D	-	<1.0	<1.0	-	<1.0	<1.0	<1.0	mg/kg	1	A-T-024s
Copper _D ^{M#}	-	21	99 ^U	-	13 ^U	81 ^U	14	mg/kg	1	A-T-024s
Chromium _D ^{M#}	-	19	20 ^U	-	18 ^U	22 ^U	14	mg/kg	1	A-T-024s
Lead _D ^{M#}	-	11	35 ^U	-	10 ^U	14 ^U	8	mg/kg	1	A-T-024s
Mercury _D	-	<0.17	<0.17	-	<0.17	<0.17	<0.17	mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	-	27	51 ^U	-	23 ^U	44 ^U	13	mg/kg	1	A-T-024s
Selenium _D ^{M#}	-	<1	<1 ^U	-	<1 ^U	<1 ^U	<1	mg/kg	1	A-T-024s
Zinc _D ^{M#}	-	42	72 ^U	-	45 ^U	30 ^U	23	mg/kg	1	A-T-024s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/8	25/12859/9	25/12859/10	25/12859/11	25/12859/13	25/12859/15	25/12859/16	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP204	TP204	TP204	TP205	TP206	TP207	TP207			
Depth to Top	0.00	0.30	0.80	0.40	0.40	0.15	0.90			
Depth To Bottom	0.10	0.40	0.90	0.50	0.50	0.30	1.00			
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	07-Nov-25	07-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOIL - ES	SOIL - ES	SOLID	SOLID	SOLID	SOLID	SOIL - ES			
Sample Matrix Code	4AE	6	7	7	7	7	5			
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	NAD	NAD	-	NAD ^U	NAD ^U	NAD ^U	-			A-T-045
Asbestos Matrix (visual) _D	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	-	N/A	N/A	N/A	-			A-T-045

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/8	25/12859/9	25/12859/10	25/12859/11	25/12859/13	25/12859/15	25/12859/16	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP204	TP204	TP204	TP205	TP206	TP207	TP207			
Depth to Top	0.00	0.30	0.80	0.40	0.40	0.15	0.90			
Depth To Bottom	0.10	0.40	0.90	0.50	0.50	0.30	1.00			
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	07-Nov-25	07-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOIL - ES	SOIL - ES	SOLID	SOLID	SOLID	SOLID	SOIL - ES			
Sample Matrix Code	4AE	6	7	7	7	7	5			
PAH-16MS										
Acenaphthene _A ^{M#}	-	<0.01	0.05 ^U	-	<0.01 ^U	<0.01 ^U	<0.01	mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	-	<0.01	0.01 ^U	-	<0.01 ^U	<0.01 ^U	<0.01	mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	-	<0.02	0.12 ^U	-	<0.02 ^U	<0.02 ^U	<0.02	mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	-	<0.04	0.29 ^U	-	0.08 ^U	<0.04 ^U	<0.04	mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	-	<0.04	0.31 ^U	-	0.13 ^U	<0.04 ^U	<0.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	-	<0.05	0.49 ^U	-	0.15 ^U	<0.05 ^U	<0.05	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	-	<0.05	0.19 ^U	-	0.11 ^U	<0.05 ^U	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	-	<0.07	0.15 ^U	-	<0.07 ^U	<0.07 ^U	<0.07	mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	-	<0.06	0.50 ^U	-	0.11 ^U	<0.06 ^U	<0.06	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	-	<0.04	<0.04 ^U	-	<0.04 ^U	<0.04 ^U	<0.04	mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	-	<0.08	0.87 ^U	-	0.13 ^U	<0.08 ^U	<0.08	mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	-	<0.01	0.03 ^U	-	<0.01 ^U	<0.01 ^U	<0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	-	<0.03	0.22 ^U	-	0.11 ^U	<0.03 ^U	<0.03	mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	-	<0.03	0.12 ^U	-	<0.03 ^U	<0.03 ^U	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	-	<0.03	0.31 ^U	-	0.04 ^U	0.06 ^U	<0.03	mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	-	<0.07	0.79 ^U	-	0.14 ^U	<0.07 ^U	<0.07	mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	-	<0.08	4.45 ^U	-	1.00 ^U	<0.08 ^U	<0.08	mg/kg	0.01	A-T-019s

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Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22	25/12859/23	25/12859/25	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP208	TP209	TP209	TP210	TP210	TP211	TP212			
Depth to Top	0.30	0.80	1.30	0.30	1.90	0.15	0.50			
Depth To Bottom	0.40	0.90		0.40	2.00		0.60			
Date Sampled	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	4A	5A	4AB	6	7	4A			
% Stones >10mm _A	<0.1	32.2	<0.1	<0.1	<0.1	<0.1	22.1	% w/w	0.1	A-T-044
pH _D ^{M#}	6.51 ^U	8.29	5.31	8.24	7.23	7.96 ^U	8.56	pH	0.01	A-T-031s
Arsenic _D ^{M#}	10 ^U	12	7	69	6	23 ^U	9	mg/kg	1	A-T-024s
Cadmium _D	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/kg	1	A-T-024s
Copper _D ^{M#}	29 ^U	24	8	103	22	20 ^U	8	mg/kg	1	A-T-024s
Chromium _D ^{M#}	15 ^U	14	15	69	22	14 ^U	9	mg/kg	1	A-T-024s
Lead _D ^{M#}	26 ^U	18	12	1030	12	43 ^U	15	mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	0.23	<0.17	0.21	<0.17	mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	24 ^U	26	10	21	30	15 ^U	10	mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1 ^U	<1	<1	2	<1	<1 ^U	<1	mg/kg	1	A-T-024s
Zinc _D ^{M#}	35 ^U	53	19	1020	43	112 ^U	29	mg/kg	1	A-T-024s

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Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22	25/12859/23	25/12859/25	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP208	TP209	TP209	TP210	TP210	TP211	TP212			
Depth to Top	0.30	0.80	1.30	0.30	1.90	0.15	0.50			
Depth To Bottom	0.40	0.90		0.40	2.00		0.60			
Date Sampled	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	4A	5A	4AB	6	7	4A			
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD ^U	NAD	NAD	Chrysotile	NAD	NAD ^U	NAD			A-T-045
Asbestos Matrix (visual) _D	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) _D	-	-	-	Loose Fibres	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045
Asbestos in Soil Quantification % (Hand Picking & Weighing)										
Asbestos in soil % composition (hand picking and weighing) _D	-	-	-	0.006	-	-	-	% w/w	0.001	A-T-054

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Client Project Ref: 323173

Lab Sample ID	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22	25/12859/23	25/12859/25	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP208	TP209	TP209	TP210	TP210	TP211	TP212			
Depth to Top	0.30	0.80	1.30	0.30	1.90	0.15	0.50			
Depth To Bottom	0.40	0.90		0.40	2.00		0.60			
Date Sampled	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	4A	5A	4AB	6	7	4A			
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01 ^U	<0.01	<0.01	4.03	<0.01	<0.01 ^U	<0.01	mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	0.01 ^U	<0.01	<0.01	1.14	<0.01	<0.01 ^U	<0.01	mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02 ^U	<0.02	<0.02	6.47	<0.02	<0.02 ^U	<0.02	mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	0.08 ^U	<0.04	<0.04	37.6	0.06	<0.04 ^U	<0.04	mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	0.11 ^U	<0.04	<0.04	45.4	0.07	<0.04 ^U	<0.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.15 ^U	<0.05	<0.05	58.2	0.07	<0.05 ^U	<0.05	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	0.06 ^U	<0.05	<0.05	27.1	<0.05	<0.05 ^U	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07 ^U	<0.07	<0.07	18.9	<0.07	<0.07 ^U	<0.07	mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	0.10 ^U	<0.06	<0.06	49.9	0.08	<0.06 ^U	<0.06	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04 ^U	<0.04	<0.04	6.70	<0.04	<0.04 ^U	<0.04	mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	0.10 ^U	<0.08	<0.08	68.4	0.12	<0.08 ^U	<0.08	mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01 ^U	<0.01	<0.01	1.75	<0.01	<0.01 ^U	<0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.07 ^U	<0.03	<0.03	25.6	0.04	<0.03 ^U	<0.03	mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03 ^U	<0.03	<0.03	<0.30	<0.03	<0.03 ^U	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	<0.03 ^U	<0.03	<0.03	27.8	0.07	0.11 ^U	<0.03	mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	0.24 ^U	<0.07	<0.07	70.1	0.13	<0.07 ^U	<0.07	mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.92 ^U	<0.08	<0.08	449	0.64	0.11 ^U	<0.08	mg/kg	0.01	A-T-019s

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Client Project Ref: 323173

Lab Sample ID	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22	25/12859/23	25/12859/25	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP208	TP209	TP209	TP210	TP210	TP211	TP212			
Depth to Top	0.30	0.80	1.30	0.30	1.90	0.15	0.50			
Depth To Bottom	0.40	0.90		0.40	2.00		0.60			
Date Sampled	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	4A	5A	4AB	6	7	4A			
Speciated PCB-WHO12										
PCB BZ 81 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 105 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 114 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 118 _A ^{M#}	-	<0.007	<0.007	<0.007	<0.007	-	-	mg/kg	0.007	A-T-004s
PCB BZ 123 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 126 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 156 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 157 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 167 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 169 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 189 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 77 _A	-	<0.005	<0.005	<0.005	<0.005	-	-	mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12 _A	-	<0.007	<0.007	<0.007	<0.007	-	-	mg/kg	0.005	A-T-004s

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Lab Sample ID	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22	25/12859/23	25/12859/25	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP208	TP209	TP209	TP210	TP210	TP211	TP212			
Depth to Top	0.30	0.80	1.30	0.30	1.90	0.15	0.50			
Depth To Bottom	0.40	0.90		0.40	2.00		0.60			
Date Sampled	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25	04-Nov-25			
Sample Type	SOLID	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	4A	5A	4AB	6	7	4A			
TPH CWG with Clean Up										
Ali >C5-C6 _A	-	<0.01	<0.01	<0.01	-	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	-	<0.01	<0.01	<0.01	-	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	-	<1	<1	<50	-	<1	<1	mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	-	<1	<1	<50	-	<1 ^U	<1	mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	-	<1	<1	<50	-	2 ^U	<1	mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	-	<1	<1	89	-	4 ^U	<1	mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	-	<1	<1	240	-	8 ^U	<1	mg/kg	1	A-T-055s
Total Aliphatics _A	-	<1	<1	329	-	15	<1	mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	-	<2	<2	175	-	3	<2	mg/kg	1	A-T-055s
Aro >C10-C12 _A	-	<1	<1	<50	-	<1	<1	mg/kg	1	A-T-055s
Aro >C12-C16 _A	-	<1	<1	576	-	6	<1	mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	-	<1	<1	1710	-	7 ^U	<1	mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	-	<1	<1	4050	-	4 ^U	<1	mg/kg	1	A-T-055s
Total Aromatics _A	-	<2	<2	6510	-	20	<2	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	-	<2	<2	6840	-	35	<2	mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s
MTBE _A [#]	-	<0.01	<0.01	<0.01	-	<0.01 ^U	<0.01	mg/kg	0.01	A-T-022s

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Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
% Stones >10mm _A	<0.1	<0.1	-	<0.1	<0.1	-	1.7	% w/w	0.1	A-T-044
pH _D ^{M#}	7.48 ^U	4.94	-	-	6.10	-	5.89	pH	0.01	A-T-031s
Arsenic _D ^{M#}	37 ^U	7	-	-	16	-	9	mg/kg	1	A-T-024s
Cadmium _D	<1.0	<1.0	-	-	<1.0	-	<1.0	mg/kg	1	A-T-024s
Copper _D ^{M#}	39 ^U	15	-	-	44	-	23	mg/kg	1	A-T-024s
Chromium _D ^{M#}	19 ^U	18	-	-	19	-	12	mg/kg	1	A-T-024s
Lead _D ^{M#}	46 ^U	10	-	-	45	-	42	mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	-	-	<0.17	-	<0.17	mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	29 ^U	13	-	-	19	-	12	mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1 ^U	<1	-	-	<1	-	<1	mg/kg	1	A-T-024s
Zinc _D ^{M#}	36 ^U	22	-	-	29	-	37	mg/kg	1	A-T-024s

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Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	NAD ^U	-	NAD ^U	NAD ^U	NAD	NAD ^U	-			A-T-045
Asbestos Matrix (visual) _D	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	-	N/A	N/A	N/A	N/A	-			A-T-045

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Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01 ^U	<0.01	-	<0.01 ^U	<0.01	-	<0.01	mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01 ^U	<0.01	-	<0.01 ^U	<0.01	-	<0.01	mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02 ^U	<0.02	-	<0.02 ^U	<0.02	-	<0.02	mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04 ^U	<0.04	-	<0.04 ^U	<0.04	-	<0.04	mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04 ^U	<0.04	-	<0.04 ^U	<0.04	-	<0.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05 ^U	<0.05	-	<0.05 ^U	<0.05	-	<0.05	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05 ^U	<0.05	-	<0.05 ^U	<0.05	-	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07 ^U	<0.07	-	<0.07 ^U	<0.07	-	<0.07	mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06 ^U	<0.06	-	<0.06 ^U	<0.06	-	<0.06	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04 ^U	<0.04	-	<0.04 ^U	<0.04	-	<0.04	mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08 ^U	<0.08	-	<0.08 ^U	<0.08	-	<0.08	mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01 ^U	<0.01	-	<0.01 ^U	<0.01	-	<0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03 ^U	<0.03	-	<0.03 ^U	<0.03	-	<0.03	mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03 ^U	<0.03	-	<0.03 ^U	<0.03	-	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.09 ^U	<0.03	-	<0.03 ^U	0.06	-	<0.03	mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07 ^U	<0.07	-	<0.07 ^U	<0.07	-	<0.07	mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.09 ^U	<0.08	-	<0.08 ^U	<0.08	-	<0.08	mg/kg	0.01	A-T-019s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
Speciated PCB-WHO12										
PCB BZ 81 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 105 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 114 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 118 _A ^{M#}	-	-	-	-	<0.007	-	-	mg/kg	0.007	A-T-004s
PCB BZ 123 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 126 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 156 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 157 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 167 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 169 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 189 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
PCB BZ 77 _A	-	-	-	-	<0.005	-	-	mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12 _A	-	-	-	-	<0.007	-	-	mg/kg	0.005	A-T-004s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
SVOC excluding PAH-16										
4-Bromophenyl phenyl ether _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Hexachlorobenzene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Diethyl phthalate _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Dimethyl phthalate _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Dibenzofuran _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Carbazole _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Butylbenzyl phthalate _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Bis(2-ethylhexyl)phthalate _A	-	-	-	-	<500	-	-	µg/kg	500	A-T-052s
Bis(2-chloroethoxy)methane _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Bis(2-chloroethyl)ether _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
4-Nitrophenol _A	-	-	-	-	<200	-	-	µg/kg	100	A-T-052s
3+4-Methylphenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
4-Chloro-3-methylphenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2-Nitrophenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2-Methylphenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
1,2,4-Trichlorobenzene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2-Chlorophenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2,6-Dinitrotoluene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2,4-Dinitrotoluene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2,4-Dimethylphenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2,4-Dichlorophenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2,4,6-Trichlorophenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2,4,5-Trichlorophenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
1,4-Dichlorobenzene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
1,3-Dichlorobenzene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
1,2-Dichlorobenzene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2-Chloronaphthalene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
2-Methylnaphthalene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Bis(2-chloroisopropyl)ether _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Phenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Pentachlorophenol _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
n-Nitroso-n-dipropylamine _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
n-Diethylphthalate _A	-	-	-	-	<500	-	-	µg/kg	500	A-T-052s
n-Dibutylphthalate _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Nitrobenzene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Isophorone _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Hexachloroethane _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Hexachlorobutadiene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s
Perylene _A	-	-	-	-	<100	-	-	µg/kg	100	A-T-052s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
VOC										
Dichlorodifluoromethane _A	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Chloromethane _A	-	-	-	-	<10	-	<10	µg/kg	10	A-T-006s
Vinyl Chloride (Chloroethene) _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Bromomethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Chloroethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Trichlorofluoromethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,1-Dichloroethene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Carbon Disulphide _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Dichloromethane _A	-	-	-	-	<5	-	<5	µg/kg	5	A-T-006s
trans 1,2-Dichloroethene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,1-Dichloroethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
cis 1,2-Dichloroethene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
2,2-Dichloropropane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Bromochloromethane _A [#]	-	-	-	-	<5	-	<5	µg/kg	5	A-T-006s
Chloroform _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,1,1-Trichloroethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,1-Dichloropropene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Carbon Tetrachloride _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,2-Dichloroethane _A [#]	-	-	-	-	<2	-	<2	µg/kg	2	A-T-006s
Benzene _A [#]	-	-	-	-	<1	-	-	µg/kg	1	A-T-006s
Trichloroethene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,2-Dichloropropane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Dibromomethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Bromodichloromethane _A [#]	-	-	-	-	<10	-	<10	µg/kg	10	A-T-006s
cis 1,3-Dichloropropene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Toluene _A [#]	-	-	-	-	<1	-	-	µg/kg	1	A-T-006s
trans 1,3-Dichloropropene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,1,2-Trichloroethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,3-Dichloropropane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Tetrachloroethene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Dibromochloromethane _A [#]	-	-	-	-	<3	-	<3	µg/kg	3	A-T-006s
1,2-Dibromoethane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
Chlorobenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,1,1,2-Tetrachloroethane _A	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Ethylbenzene _A [#]	-	-	-	-	<1	-	-	µg/kg	1	A-T-006s
m & p Xylene _A [#]	-	-	-	-	<1	-	-	µg/kg	1	A-T-006s
o-Xylene _A [#]	-	-	-	-	<1	-	-	µg/kg	1	A-T-006s
Styrene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Bromoform _A [#]	-	-	-	-	<3	-	<3	µg/kg	3	A-T-006s
Isopropylbenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,1,2,2-Tetrachloroethane _A	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,2,3-Trichloropropane _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
Bromobenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
n-Propylbenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
2-Chlorotoluene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,3,5-Trimethylbenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
4-Chlorotoluene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
tert-Butylbenzene _A [#]	-	-	-	-	<2	-	<2	µg/kg	2	A-T-006s
1,2,4-Trimethylbenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
sec-Butylbenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
4-Isopropyltoluene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,3-Dichlorobenzene _A	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,4-Dichlorobenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
n-Butylbenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,2-Dichlorobenzene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,2-Dibromo-3-chloropropane (DCBP) _A	-	-	-	-	<2	-	<2	µg/kg	2	A-T-006s
1,2,4-Trichlorobenzene _A	-	-	-	-	<3	-	<3	µg/kg	3	A-T-006s
Hexachlorobutadiene _A [#]	-	-	-	-	<1	-	<1	µg/kg	1	A-T-006s
1,2,3-Trichlorobenzene _A	-	-	-	-	<3	-	<3	µg/kg	3	A-T-006s

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Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP213	TP213	TP214	TP215	TP215	TP216	TP216			
Depth to Top	0.20	0.60	0.40	0.70	1.80	0.60	1.00			
Depth To Bottom	0.30	0.70	0.50	0.80	1.90	0.70	1.10			
Date Sampled	04-Nov-25	04-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOLID	SOIL - ES	SOLID	SOLID	SOIL - ES	SOLID	SOIL - ES			
Sample Matrix Code	7	5	7	7	4	7	4A			
TPH CWG with Clean Up										
Ali >C5-C6 _A	<0.01	-	-	<0.01	-	-	<0.01	mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	-	-	<0.01	-	-	<0.01	mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	-	-	<1	-	-	<1	mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1 ^U	-	-	<1 ^U	-	-	<1	mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1 ^U	-	-	<1 ^U	-	-	<1	mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	2 ^U	-	-	1 ^U	-	-	1	mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	10 ^U	-	-	6 ^U	-	-	14	mg/kg	1	A-T-055s
Total Aliphatics _A	12	-	-	7	-	-	16	mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<2	-	-	<2	-	-	<2	mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	-	-	<1	-	-	<1	mg/kg	1	A-T-055s
Aro >C12-C16 _A	3	-	-	2	-	-	3	mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	3 ^U	-	-	2 ^U	-	-	3	mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	3 ^U	-	-	3 ^U	-	-	8	mg/kg	1	A-T-055s
Total Aromatics _A	10	-	-	8	-	-	13	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	23	-	-	15	-	-	29	mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01 ^U	-	-	<0.01 ^U	-	-	<0.01	mg/kg	0.01	A-T-022s

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Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/34	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP216	TP217	TP217	TP217	TP218	TP218	TP219			
Depth to Top	1.80	0.20	0.50	0.30	0.50	0.80	0.15			
Depth To Bottom	1.90	0.30	0.60	0.40	0.60	0.90	0.25			
Date Sampled	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOLID			
Sample Matrix Code	6	7	3	6A	7	5	7			
% Stones >10mm _A	<0.1	-	<0.1	12.5	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
pH _D ^{M#}	-	-	6.39	7.40	10.92 ^U	4.67	6.26 ^U	pH	0.01	A-T-031s
Arsenic _D ^{M#}	-	-	6	20	12 ^U	8	44 ^U	mg/kg	1	A-T-024s
Cadmium _D	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	mg/kg	1	A-T-024s
Copper _D ^{M#}	-	-	16	25	17 ^U	13	57 ^U	mg/kg	1	A-T-024s
Chromium _D ^{M#}	-	-	17	12	13 ^U	16	23 ^U	mg/kg	1	A-T-024s
Lead _D ^{M#}	-	-	10	33	19 ^U	11	63 ^U	mg/kg	1	A-T-024s
Mercury _D	-	-	<0.17	0.41	<0.17	<0.17	<0.17	mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	-	-	13	18	17 ^U	9	41 ^U	mg/kg	1	A-T-024s
Selenium _D ^{M#}	-	-	<1	<1	<1 ^U	<1	1 ^U	mg/kg	1	A-T-024s
Zinc _D ^{M#}	-	-	27	34	42 ^U	19	71 ^U	mg/kg	1	A-T-024s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/34	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP216	TP217	TP217	TP217	TP218	TP218	TP219			
Depth to Top	1.80	0.20	0.50	0.30	0.50	0.80	0.15			
Depth To Bottom	1.90	0.30	0.60	0.40	0.60	0.90	0.25			
Date Sampled	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOLID			
Sample Matrix Code	6	7	3	6A	7	5	7			
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	-	NAD ^U	-	NAD	NAD ^U	-	NAD ^U			A-T-045
Asbestos Matrix (visual) _D	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	-	N/A	-	N/A	N/A	-	N/A			A-T-045

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/34	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP216	TP217	TP217	TP217	TP218	TP218	TP219			
Depth to Top	1.80	0.20	0.50	0.30	0.50	0.80	0.15			
Depth To Bottom	1.90	0.30	0.60	0.40	0.60	0.90	0.25			
Date Sampled	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOLID			
Sample Matrix Code	6	7	3	6A	7	5	7			
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	-	<0.01	<0.01	<0.01 ^U	<0.01	<0.01 ^U	mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	-	<0.01	<0.01	<0.01 ^U	<0.01	<0.01 ^U	mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02	-	<0.02	<0.02	<0.02 ^U	<0.02	<0.02 ^U	mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	-	<0.04	<0.04	<0.04 ^U	<0.04	<0.04 ^U	mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	-	<0.04	<0.04	<0.04 ^U	<0.04	<0.04 ^U	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	-	<0.05	<0.05	<0.05 ^U	<0.05	<0.05 ^U	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	-	<0.05	<0.05	<0.05 ^U	<0.05	<0.05 ^U	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	-	<0.07	<0.07	<0.07 ^U	<0.07	<0.07 ^U	mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06	-	<0.06	<0.06	<0.06 ^U	<0.06	<0.06 ^U	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	-	<0.04	<0.04	<0.04 ^U	<0.04	<0.04 ^U	mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08	-	<0.08	<0.08	<0.08 ^U	<0.08	<0.08 ^U	mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	-	<0.01	<0.01	<0.01 ^U	<0.01	<0.01 ^U	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	-	<0.03	<0.03	<0.03 ^U	<0.03	<0.03 ^U	mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	-	<0.03	0.06	<0.03 ^U	<0.03	<0.03 ^U	mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	<0.03	-	<0.03	0.08	0.03 ^U	<0.03	<0.03 ^U	mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07	-	<0.07	<0.07	<0.07 ^U	<0.07	<0.07 ^U	mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	<0.08	-	<0.08	0.14	<0.08 ^U	<0.08	<0.08 ^U	mg/kg	0.01	A-T-019s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/34	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP216	TP217	TP217	TP217	TP218	TP218	TP219			
Depth to Top	1.80	0.20	0.50	0.30	0.50	0.80	0.15			
Depth To Bottom	1.90	0.30	0.60	0.40	0.60	0.90	0.25			
Date Sampled	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOLID			
Sample Matrix Code	6	7	3	6A	7	5	7			
VOC										
Dichlorodifluoromethane _A	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Chloromethane _A	<10	-	-	-	-	-	-	µg/kg	10	A-T-006s
Vinyl Chloride (Chloroethene) _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromomethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Chloroethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Trichlorofluoromethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1-Dichloroethene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Carbon Disulphide _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Dichloromethane _A	<5	-	-	-	-	-	-	µg/kg	5	A-T-006s
trans 1,2-Dichloroethene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1-Dichloroethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
cis 1,2-Dichloroethene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
2,2-Dichloropropane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromochloromethane _A [#]	<5	-	-	-	-	-	-	µg/kg	5	A-T-006s
Chloroform _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,1-Trichloroethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1-Dichloropropene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Carbon Tetrachloride _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dichloroethane _A [#]	<2	-	-	-	-	-	-	µg/kg	2	A-T-006s
Trichloroethene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dichloropropane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Dibromomethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromodichloromethane _A [#]	<10	-	-	-	-	-	-	µg/kg	10	A-T-006s
cis 1,3-Dichloropropene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
trans 1,3-Dichloropropene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,2-Trichloroethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,3-Dichloropropane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Tetrachloroethene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Dibromochloromethane _A [#]	<3	-	-	-	-	-	-	µg/kg	3	A-T-006s
1,2-Dibromoethane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Chlorobenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,1,2-Tetrachloroethane _A	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/34	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP216	TP217	TP217	TP217	TP218	TP218	TP219			
Depth to Top	1.80	0.20	0.50	0.30	0.50	0.80	0.15			
Depth To Bottom	1.90	0.30	0.60	0.40	0.60	0.90	0.25			
Date Sampled	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOLID			
Sample Matrix Code	6	7	3	6A	7	5	7			
Styrene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromoform _A [#]	<3	-	-	-	-	-	-	µg/kg	3	A-T-006s
Isopropylbenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,1,2,2-Tetrachloroethane _A	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2,3-Trichloropropane _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
Bromobenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
n-Propylbenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
2-Chlorotoluene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,3,5-Trimethylbenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
4-Chlorotoluene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
tert-Butylbenzene _A [#]	<2	-	-	-	-	-	-	µg/kg	2	A-T-006s
1,2,4-Trimethylbenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
sec-Butylbenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
4-Isopropyltoluene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,3-Dichlorobenzene _A	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,4-Dichlorobenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
n-Butylbenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dichlorobenzene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2-Dibromo-3-chloropropane (DCBP) _A	<2	-	-	-	-	-	-	µg/kg	2	A-T-006s
1,2,4-Trichlorobenzene _A	<3	-	-	-	-	-	-	µg/kg	3	A-T-006s
Hexachlorobutadiene _A [#]	<1	-	-	-	-	-	-	µg/kg	1	A-T-006s
1,2,3-Trichlorobenzene _A	<3	-	-	-	-	-	-	µg/kg	3	A-T-006s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/34	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TP216	TP217	TP217	TP217	TP218	TP218	TP219			
Depth to Top	1.80	0.20	0.50	0.30	0.50	0.80	0.15			
Depth To Bottom	1.90	0.30	0.60	0.40	0.60	0.90	0.25			
Date Sampled	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25	05-Nov-25			
Sample Type	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOLID			
Sample Matrix Code	6	7	3	6A	7	5	7			
TPH CWG with Clean Up										
Ali >C5-C6 _A	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Total Aliphatics _A	<1	-	-	-	-	-	-	mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<2	-	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C12-C16 _A	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	<1	-	-	-	-	-	-	mg/kg	1	A-T-055s
Total Aromatics _A	<2	-	-	-	-	-	-	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	<2	-	-	-	-	-	-	mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	-	-	-	-	-	-	mg/kg	0.01	A-T-022s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/42	25/12859/43	25/12859/44	25/12859/45	25/12859/49			Units	Limit of Detection	Method ref
Client Sample No					Tile					
Client Sample ID	TP220	TP220	TP221	TP221	TP204					
Depth to Top	0.30	0.70	0.90	1.80	0.00					
Depth To Bottom	0.40	0.80	1.00	1.90	0.10					
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25					
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOLID - BULK					
Sample Matrix Code	7	5A	7	5A	8					
% Stones >10mm _A	<0.1	<0.1	<0.1	<0.1	-			% w/w	0.1	A-T-044
pH _D ^{M#}	8.85 ^U	4.59	9.22 ^U	6.39	-			pH	0.01	A-T-031s
Arsenic _D ^{M#}	26 ^U	2	24 ^U	<1	-			mg/kg	1	A-T-024s
Cadmium _D	<1.0	<1.0	<1.0	<1.0	-			mg/kg	1	A-T-024s
Copper _D ^{M#}	33 ^U	16	31 ^U	4	-			mg/kg	1	A-T-024s
Chromium _D ^{M#}	16 ^U	17	16 ^U	10	-			mg/kg	1	A-T-024s
Lead _D ^{M#}	51 ^U	11	41 ^U	7	-			mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	-			mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	25 ^U	13	24 ^U	6	-			mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1 ^U	<1	<1 ^U	<1	-			mg/kg	1	A-T-024s
Zinc _D ^{M#}	80 ^U	26	40 ^U	11	-			mg/kg	1	A-T-024s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/42	25/12859/43	25/12859/44	25/12859/45	25/12859/49			Units	Limit of Detection	Method ref
Client Sample No					Tile					
Client Sample ID	TP220	TP220	TP221	TP221	TP204					
Depth to Top	0.30	0.70	0.90	1.80	0.00					
Depth To Bottom	0.40	0.80	1.00	1.90	0.10					
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25					
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOLID - BULK					
Sample Matrix Code	7	5A	7	5A	8					
Asbestos in Soil (inc. matrix)										
Asbestos in soil ^U	NAD ^U	-	NAD ^U	-	-					A-T-045
Asbestos Matrix (visual) _D	-	-	-	-	-					A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-	-					A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	-	N/A	-	-					A-T-045
Bulk Fibre ID (inc. matrix)										
Bulk Fibre Identification [#]	-	-	-	-	Chrysotile					A-T-045
Bulk Fibre Identification Matrix (visual) _D	-	-	-	-	Cement					A-T-045
Bulk Fibre Identification - Suitable for Water Absorption Test? _D	-	-	-	-	Yes					A-T-045

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/42	25/12859/43	25/12859/44	25/12859/45	25/12859/49			Units	Limit of Detection	Method ref
Client Sample No					Tile					
Client Sample ID	TP220	TP220	TP221	TP221	TP204					
Depth to Top	0.30	0.70	0.90	1.80	0.00					
Depth To Bottom	0.40	0.80	1.00	1.90	0.10					
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25					
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOLID - BULK					
Sample Matrix Code	7	5A	7	5A	8					
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01 ^U	<0.01	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01 ^U	<0.01	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02 ^U	<0.02	<0.02 ^U	<0.02	-			mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04 ^U	<0.04	<0.04 ^U	<0.04	-			mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04 ^U	<0.04	<0.04 ^U	<0.04	-			mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05 ^U	<0.05	<0.05 ^U	<0.05	-			mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05 ^U	<0.05	<0.05 ^U	<0.05	-			mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07 ^U	<0.07	<0.07 ^U	<0.07	-			mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06 ^U	<0.06	<0.06 ^U	<0.06	-			mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04 ^U	<0.04	<0.04 ^U	<0.04	-			mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08 ^U	<0.08	<0.08 ^U	<0.08	-			mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01 ^U	<0.01	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03 ^U	<0.03	<0.03 ^U	<0.03	-			mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03 ^U	<0.03	<0.03 ^U	<0.03	-			mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	<0.03 ^U	<0.03	0.05 ^U	<0.03	-			mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07 ^U	<0.07	<0.07 ^U	<0.07	-			mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	<0.08 ^U	<0.08	<0.08 ^U	<0.08	-			mg/kg	0.01	A-T-019s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/42	25/12859/43	25/12859/44	25/12859/45	25/12859/49			Units	Limit of Detection	Method ref
Client Sample No					Tile					
Client Sample ID	TP220	TP220	TP221	TP221	TP204					
Depth to Top	0.30	0.70	0.90	1.80	0.00					
Depth To Bottom	0.40	0.80	1.00	1.90	0.10					
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25					
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOLID - BULK					
Sample Matrix Code	7	5A	7	5A	8					
Speciated PCB-WHO12										
PCB BZ 81 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 105 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 114 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 118 _A ^{M#}	<0.007 ^U	-	<0.007 ^U	<0.007	-			mg/kg	0.007	A-T-004s
PCB BZ 123 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 126 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 156 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 157 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 167 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 169 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 189 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
PCB BZ 77 _A	<0.005	-	<0.005	<0.005	-			mg/kg	0.005	A-T-004s
Total Speciated PCB-WHO12 _A	<0.007	-	<0.007	<0.007	-			mg/kg	0.005	A-T-004s

Envirolab Job Number: 25/12859

Client Project Name: Heywood Stores

Client Project Ref: 323173

Lab Sample ID	25/12859/42	25/12859/43	25/12859/44	25/12859/45	25/12859/49			Units	Limit of Detection	Method ref
Client Sample No					Tile					
Client Sample ID	TP220	TP220	TP221	TP221	TP204					
Depth to Top	0.30	0.70	0.90	1.80	0.00					
Depth To Bottom	0.40	0.80	1.00	1.90	0.10					
Date Sampled	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25	06-Nov-25					
Sample Type	SOLID	SOIL - ES	SOLID	SOIL - ES	SOLID - BULK					
Sample Matrix Code	7	5A	7	5A	8					
TPH CWG with Clean Up										
Ali >C5-C6 _A	-	-	<0.01	<0.01	-			mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	-	-	<0.01	<0.01	-			mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	-	-	<1	<1	-			mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	-	-	<1 ^U	<1	-			mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	-	-	<1 ^U	<1	-			mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	-	-	<1 ^U	<1	-			mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	-	-	2 ^U	<1	-			mg/kg	1	A-T-055s
Total Aliphatics _A	-	-	2	<1	-			mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	-	-	<2	<2	-			mg/kg	1	A-T-055s
Aro >C10-C12 _A	-	-	<1	<1	-			mg/kg	1	A-T-055s
Aro >C12-C16 _A	-	-	2	<1	-			mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	-	-	2 ^U	<1	-			mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	-	-	3 ^U	<1	-			mg/kg	1	A-T-055s
Total Aromatics _A	-	-	8	<2	-			mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35) _A	-	-	10	<2	-			mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s
MTBE _A [#]	-	-	<0.01 ^U	<0.01	-			mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “A”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

“Trace Asbestos Identified” will be reported if there is not enough present to verify the type.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as “% stones >10mm”.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.

Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: RSK Environment Helsby, Spring Lodge, 172 Chester Road, Helsby, Cheshire,
UK, WA6 0AR

Project: Heywood Stores
Clients Project No: 323173

Project No: 25/12859
Date Received: 11/11/2025 (am)
Cool Box Temperatures (°C): 8.1 - 12.6

Lab Sample ID	25/12859/21
Client Sample No	
Client Sample ID/Depth	TP210 0.30-0.40m
Date Sampled	04/11/25
Deviation Code	
F	✓

Key

F Maximum holding time exceeded between sampling date and analysis for analytes listed below

HOLDING TIME EXCEEDANCES

Lab Sample ID	25/12859/21
Client Sample No	
Client Sample ID/Depth	TP210 0.30-0.40m
Date Sampled	04/11/25
PAH-16MS	✓

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	25/12859/8	25/12859/9	25/12859/10	25/12859/11	25/12859/13
Client Sample No												
Client Sample ID/Depth	TP201 0.30-0.40m	TP201 0.90-1.00m	TP202 0.20-0.30m	TP202 0.70-0.80m	TP203 0.00-0.10m	TP203 0.30-0.40m	TP203 1.00-1.10m	TP204 0.00-0.10m	TP204 0.30-0.40m	TP204 0.80-0.90m	TP205 0.40-0.50m	TP206 0.40-0.50m
Date Sampled	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	07/11/25	07/11/25
A-T-004s												
A-T-006s												
A-T-019s	14/11/2025	14/11/2025	14/11/2025	14/11/2025		14/11/2025	14/11/2025		14/11/2025	14/11/2025		14/11/2025
A-T-022s	14/11/2025	14/11/2025										
A-T-024s	24/11/2025	24/11/2025	24/11/2025	24/11/2025		24/11/2025	24/11/2025		24/11/2025	24/11/2025		24/11/2025
A-T-031s	21/11/2025	21/11/2025	21/11/2025	21/11/2025		21/11/2025	21/11/2025		21/11/2025	21/11/2025		21/11/2025
A-T-032s	25/11/2025											
A-T-044	19/11/2025	19/11/2025	19/11/2025	19/11/2025		19/11/2025	19/11/2025		19/11/2025	19/11/2025		19/11/2025
A-T-045	14/11/2025		14/11/2025		14/11/2025	14/11/2025		14/11/2025	14/11/2025		14/11/2025	14/11/2025
A-T-052s												
A-T-054												
A-T-055s	14/11/2025	14/11/2025										
Calc-As Recd	14/11/2025	14/11/2025										

Lab Sample ID	25/12859/15	25/12859/16	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22	25/12859/23	25/12859/25	25/12859/26	25/12859/27	25/12859/28
Client Sample No												
Client Sample ID/Depth	TP207 0.15-0.30m	TP207 0.90-1.00m	TP208 0.30-0.40m	TP209 0.80-0.90m	TP209 1.30m	TP210 0.30-0.40m	TP210 1.90-2.00m	TP211 0.15m	TP212 0.50-0.60m	TP213 0.20-0.30m	TP213 0.60-0.70m	TP214 0.40-0.50m
Date Sampled	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	05/11/25
A-T-004s				13/11/2025	13/11/2025	13/11/2025	13/11/2025					
A-T-006s												
A-T-019s	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	25/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	
A-T-022s				14/11/2025	14/11/2025	14/11/2025		14/11/2025	14/11/2025	14/11/2025		
A-T-024s	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	
A-T-031s	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	
A-T-032s												
A-T-044	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	
A-T-045	14/11/2025		14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025		14/11/2025
A-T-052s												
A-T-054						20/11/2025						
A-T-055s				14/11/2025	14/11/2025	18/11/2025		18/11/2025	14/11/2025	14/11/2025		
Calc-As Recd				14/11/2025	14/11/2025	18/11/2025		18/11/2025	14/11/2025	14/11/2025		

Lab Sample ID	25/12859/30	25/12859/31	25/12859/32	25/12859/33	25/12859/34	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	25/12859/42
Client Sample No												
Client Sample ID/Depth	TP215 0.70-0.80m	TP215 1.80-1.90m	TP216 0.60-0.70m	TP216 1.00-1.10m	TP216 1.80-1.90m	TP217 0.20-0.30m	TP217 0.50-0.60m	TP217 0.30-0.40m	TP218 0.50-0.60m	TP218 0.80-0.90m	TP219 0.15-0.25m	TP220 0.30-0.40m
Date Sampled	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	06/11/25
A-T-004s		13/11/2025										13/11/2025
A-T-006s		13/11/2025		13/11/2025	13/11/2025							
A-T-019s	14/11/2025	14/11/2025		14/11/2025	14/11/2025		14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025
A-T-022s	14/11/2025			14/11/2025	14/11/2025							
A-T-024s		24/11/2025		24/11/2025			24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025	24/11/2025
A-T-031s		21/11/2025		21/11/2025			21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025	21/11/2025
A-T-032s												
A-T-044	19/11/2025	19/11/2025		19/11/2025	19/11/2025		19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025	19/11/2025
A-T-045	14/11/2025	14/11/2025	14/11/2025			17/11/2025		17/11/2025	17/11/2025		17/11/2025	17/11/2025
A-T-052s		17/11/2025										
A-T-054												
A-T-055s	14/11/2025			14/11/2025	14/11/2025							
Calc-As Recd	14/11/2025			14/11/2025	14/11/2025							

Lab Sample ID	25/12859/43	25/12859/44	25/12859/45	25/12859/49
Client Sample No				Title
Client Sample ID/Depth	TP220 0.70-0.80m	TP221 0.90-1.00m	TP221 1.80-1.90m	TP204 0.00-0.10m
Date Sampled	06/11/25	06/11/25	06/11/25	06/11/25
A-T-004s		13/11/2025	13/11/2025	
A-T-006s				
A-T-019s	14/11/2025	14/11/2025	14/11/2025	
A-T-022s		14/11/2025	14/11/2025	
A-T-024s	24/11/2025	24/11/2025	24/11/2025	
A-T-031s	21/11/2025	21/11/2025	21/11/2025	
A-T-032s				
A-T-044	19/11/2025	19/11/2025	19/11/2025	
A-T-045		17/11/2025		20/11/2025
A-T-052s				
A-T-054				
A-T-055s		14/11/2025	14/11/2025	
Calc-As Recd		14/11/2025	14/11/2025	

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report



Appendix F

EXPLORATORY HOLE RECORDS

KEY TO EXPLORATORY HOLE LOGS - SUMMARY OF ABBREVIATIONS

SAMPLING

Sample type codes:

B	=	Bulk disturbed sample.
D	=	Small disturbed sample.
ES	=	Soil sample for environmental testing.
U	=	Undisturbed driven tube sample - Number of blows indicated. % recovery reported.

Undisturbed sample detail codes:

U ₍₁₀₀₎	=	100mm diameter undisturbed sample.
--------------------	---	------------------------------------

IN-SITU TESTING

SPT	=	Standard Penetration Test using split spoon sampler. (_(NR) indicates 'No Sample Recovery').
V	=	Field Vane Test. Peak value (c_u) & Residual value (c_r), given as shear strength in kPa.
PID	=	Photo Ionisation Detector Results, in ppm.

ROTARY DRILLING INFORMATION

W	=	Water flush returns (%)
TCR	=	Total core recovery (%)
SCR	=	Solid core recovery (%)
RQD	=	Rock quality designations (%)
If	=	Fracture spacing (mm).

Where variable the minimum - mode - maximum spacing may be quoted.

In fracture column (i) denotes discontinuity is infilled (refer to Fracture Table for details).
'NI' denotes non-intact core. 'NA' denotes not applicable.

- All borehole log drill times are reported in hh:mm.
- All lengths used to determine rock core mechanical properties taken along the centre line of the core.
- Obvious induced fractures have been ignored.
- The assessment of solid core is based on lengths that show a full diameter and not necessarily a full circumference.

AZCL = Assessed zone of core loss.

ADDITIONAL NOTES

1. All soil and rock descriptions and legends in general accordance with BS EN ISO 14688-1:2018, 14688-2:2018, 14689:2018, and BS5930:2015+A1:2020.
2. Material types divided by a broken line (- - -) indicates an unclear boundary.
3. Fracture spacings (If) quoted in the Description of Strata for specific strata or specific fracture sets are also quoted in mm, e.g. (25/80/230) referring to (Min/Avg/Max).
4. The data on any sheet within the report showing the AGS icon is available in the AGS format.
5. Weathering descriptions in accordance with CIRIA Report C570 Engineering in Mercia Mudstone, CIRIA Report C574 Engineering in Chalk (2002), London Clay (King 1981), BS 5930:2015 Code of practice for ground investigations - Figure 9 - Approach 4, BS EN ISO 14689:2018 Geotechnical Investigation and testing - Identification, Description and Classification of Rock - Table 13, BS EN ISO 14689-1 2003 Geotechnical Investigation and testing - Identification and Classification of Rock - Part 1 - Identification and Description - Table 13, BS5930 (1999).

KEY TO EXPLORATORY HOLE LOGS - SUMMARY OF GRAPHIC SYMBOLS

WATER COLUMN SYMBOLS

	First water strike, second water strike etc.
	Standing water level following first strike, standing water level following second strike etc.
	Seepage.
	Standing water level recorded at documented date.

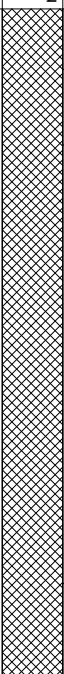
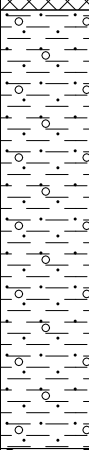
MATERIAL GRAPHIC LEGENDS

	CLAY with COBBLES		Gravelly clayey SAND		Asphalt		Concrete		Clayey SAND
	Gravelly CLAY		Gravelly silty CLAY		Gravelly CLAY with COBBLES		Gravelly SAND		MADE GROUND
	Mudstone		Possible MADE GROUND		SAND		Sandstone		Sandy CLAY
	Sandy silty CLAY		Sandy CLAY with COBBLES		Gravelly sandy CLAY		Sandy gravelly CLAY		Sandy gravelly silty CLAY
	Gravelly sandy CLAY with COBBLES		Sandy gravelly silty CLAY with COBBLES		Sandy clayey SILT		Silty CLAY		Silty SAND

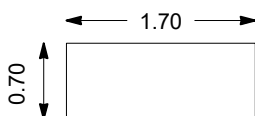
INSTRUMENTATION SYMBOLS

	Backfill		Bentonite seal		Concrete		Gravel filter		Flush cover
	Plain pipe		Slotted pipe						

Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP201
Contract Ref: 323173	Start: 06.11.25 End: 06.11.25	Ground Level: 130.27	National Grid Co-ordinate: E:358595.8 N:409352.3	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.30-0.40 0.30	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete.	0.20	
						MADE GROUND. Black sandy subangular to subrounded fine to medium GRAVEL of clinker, concrete.	0.45	
0.90-1.00 0.90	2	ES PID	0.0ppm			Stiff greyish brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to medium mudstone, sandstone, siltstone, coal. Occasional decaying plant matter. ... From 1.00m. Becoming grey	(1.45)	
						Firm purplish brown slightly sandy slightly gravelly silty CLAY with low cobble content. Gravel is angular to subrounded fine to medium mudstone, sandstone, siltstone, coal. Cobbles are subrounded to rounded medium to coarse of various lithologies. Occasional decaying wood, plant matter. Trial pit terminated at 2.20m	1.90 (0.30) 2.20	

Plan (Not to Scale)



General Remarks

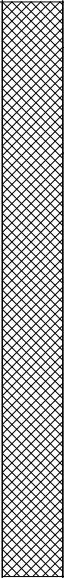
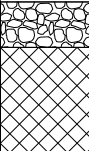
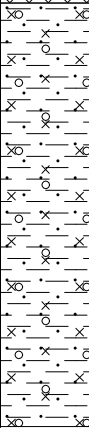
1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works.
3. Groundwater seepage encountered at 0.45m depth.
4. Trial pit stable.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

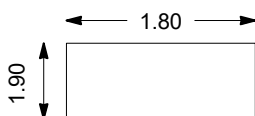
Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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Contract: Heywood Stores			Client: Trammell Crow Company		Trial Pit: TP202
Contract Ref: 323173	Start: 06.11.25 End: 06.11.25	Ground Level: 130.28	National Grid Co-ordinate: E:385621.4 N:409327.2		Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.20-0.30 0.20	1	ES PID	0.0ppm	↓		MADE GROUND. Reinforced concrete.	0.15	
						MADE GROUND. Black slightly sandy angular to subrounded fine to coarse GRAVEL of clinker.	(0.35)	
							0.50	
0.70-0.80 0.70	2	ES PID	0.0ppm			Stiff greyish brown slightly sandy slightly gravelly silty CLAY with laminations of silt and fine sand. Gravel is subangular to subrounded fine to medium mudstone, siltstone, coal.	(1.40)	
						Trial pit terminated at 1.90m.	1.90	

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works
3. Groundwater encountered at 0.15m depth beneath the concrete
4. Trial pit stable
5. Trial pit backfilled with arisings upon completion

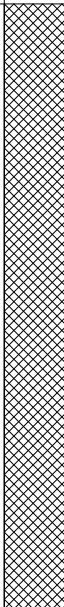
All dimensions in metres

Scale: **1:25**

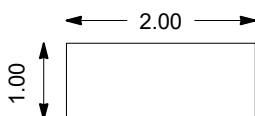
Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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TRIAL PIT LOG

Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP203
Contract Ref: 323173	Start: 06.11.25 End: 06.11.25	Ground Level: 130.17	National Grid Co-ordinate: E:385550.1 N:409326.1	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.10 0.00	1	ES PID	0.0ppm			MADE GROUND. Greyish brown sandy angular to subrounded fine to coarse GRAVEL of concrete, various lithologies, insulation, rebar, asbestos cement board. Cobbles of concrete and brick.	0.20	
0.30-0.40 0.30	2	ES PID	0.1ppm			MADE GROUND. Black very sandy angular to subangular fine to medium GRAVEL of clinker, brick, concrete.	0.40	
						MADE GROUND. Reddish brown slightly sandy slightly gravelly angular fine to coarse COBBLES of brick.	(0.30) 0.70	
1.00-1.10 1.00	3	ES PID	0.1ppm			Stiff light grey mottled light brown and orangish brown slightly gravelly sandy CLAY.	(0.70) 1.40	
						Stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to medium sandstone, siltstone, mudstone and coal. Occasional decaying roots, rootlets and plant matter.	(0.60) 2.00	
Trial pit terminated at 2.00m								

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works.
3. Groundwater seepage encountered at 0.70m depth.
4. Slight instability in pit between 0.00m and 0.70m.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

Scale: **1:25**

Method Used:

Machine dug

Plant Used:

JCB-3CX

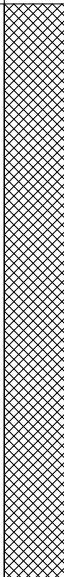
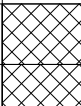
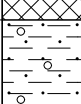
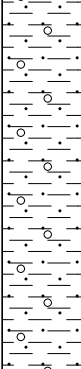
Logged By:

Rhian Knott

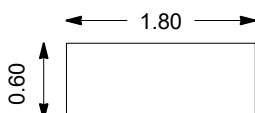
Checked By:

JC


Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP204
Contract Ref: 323173	Start: 06.11.25 End: 06.11.25	Ground Level: 130.25	National Grid Co-ordinate: E:385595.9 N:409293.6	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.10 0.00	1	ES PID	0.0ppm			MADE GROUND. Grey slightly sandy angular to rounded fine to coarse GRAVEL and COBBLES with high boulder content. Gravel is concrete, insulation foam, clinker, various lithologies and asbestos cement board. Cobbles and boulders of reinforced concrete.	0.20	
0.30-0.40 0.30	2	ES PID	0.0ppm			MADE GROUND. Black slightly sandy angular to subangular fine to coarse GRAVEL of clinker,concrete and various lithologies.	0.40	
0.80-0.90 0.80	3	ES PID	0.0ppm			Stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse of various lithologies. Occasional decaying roots and rootlets.	(1.50)	
						. . . From 1.50m. Becoming grey mottled greyish brown.	1.90	
Trial pit terminated at 1.90m								

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works.
3. Groundwater encountered at 0.20m depth.
4. Trial pit stable.
5. Trial pit backfilled with arisings upon completion.
6. Possible asbestos cement board identified in crushed material at surface in surrounding area.

All dimensions in metres

Scale: **1:25**

Method Used:

Machine dug

Plant Used:

JCB-3CX

Logged By:

Rhian Knott

Checked By:

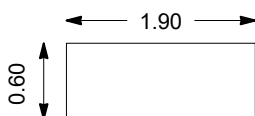
JC



Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP205
Contract Ref: 323173	Start: 07.11.25 End: 07.11.25	Ground Level: 128.44	National Grid Co-ordinate: E:385496.4 N:409322.6	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.40-0.50 0.40	1	ES PID	0.0ppm			MADE GROUND. Asphalt. MADE GROUND. Reinforced concrete.	0.05 0.30	
						MADE GROUND. Yellowish brown sandy subangular to subrounded medium to coarse GRAVEL of sandstone.	0.35	
0.80-0.90 0.80	2	ES PID	0.0ppm			MADE GROUND. Black sandy angular to subrounded fine to coarse GRAVEL of clinker, brick, sandstone, shale with medium cobble content. Cobbles of brick. Stiff light grey mottled light brown slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to coarse mudstone, sandstone, siltstone and coal.	0.50 (1.00)	
						Stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to medium mudstone, sandstone, siltstone. Occasional decaying plant matter.	1.50 (0.60)	
						Trial pit terminated at 2.10m.	2.10	

Plan (Not to Scale)



General Remarks

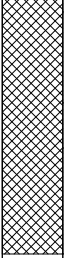
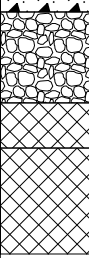
1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Hardstanding broken out prior to start of works.
3. Groundwater not encountered.
4. Trial pit stable.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

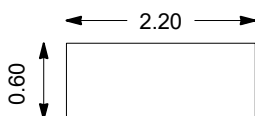
Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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Contract: Heywood Stores			Client: Trammell Crow Company		Trial Pit: TP206
Contract Ref: 323173	Start: 07.11.25 End: 07.11.25	Ground Level: 126.80	National Grid Co-ordinate: E:385438.3 N:409246.3		Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.40-0.50 0.40	1	ES PID	0.0ppm			MADE GROUND. Asphalt	0.05	
						MADE GROUND. Reinforced concrete	(0.30)	
							0.35	
						MADE GROUND. Black slightly sandy angular to subangular fine to coarse GRAVEL of clinker.	0.50	
						... From 0.35m to 0.85m. Grey slightly sandy angular to subangular fine to medium GRAVEL of limestone in East end of pit.	(0.35)	
0.80-0.90 0.80	2	ES PID	0.0ppm			MADE GROUND. Firm to stiff light brown mottled light grey and orangish brown slightly gravelly sandy CLAY. Gravel is angular to subrounded fine to medium mudstone, sandstone and siltstone.	0.85	
						... At 0.85m. Blue plastic pipe in base of pit running east -west. Trial pit terminated at 0.85m on suspected water pipe.		

Plan (Not to Scale)



General Remarks

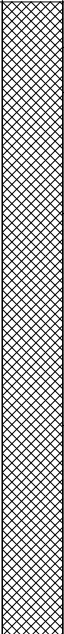
1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Hardstanding broken out prior to start of works.
3. Groundwater seepage encountered from 0.35m depth within limestone gravel.
4. Trial pit stable.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

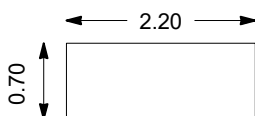
Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP207
Contract Ref: 323173	Start: 04.11.25 End: 04.11.25	Ground Level: 129.65	National Grid Co-ordinate: E:385551.2 N:409248.2	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.15-0.30 0.15	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete	0.15	
						MADE GROUND. Black sandy subangular to rounded fine to coarse GRAVEL of clinker.	0.30	
						MADE GROUND. Pinkish brown sandy slightly silty angular to subangular fine to coarse GRAVEL of shale with medium cobble content. Cobbles of shale.	(0.40)	
0.60-0.70 0.60	2	ES PID	0.0ppm				0.70	
0.90-1.00 0.90	3	ES PID	0.0ppm			Firm brown mottled grey slightly sandy slightly gravelly silty CLAY. Gravel is subangular to subrounded fine to medium mudstone, sandstone, siltstone, coal.	(0.70)	
							1.40	
						Firm purplish brown slightly gravelly silty CLAY with pockets sandy clay and grey clayey silt. Gravel is subangular to rounded fine to medium mudstone, sandstone, siltstone, coal, clay nodules. Decaying plants in silt.	(0.70)	
							2.10	
						Trial pit terminated at 2.10m		

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to works
3. Groundwater seepage encountered at 0.70m depth.
4. Trial pit stable.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

Scale: **1:25**

Method Used:

Machine dug

Plant Used:

JCB-3CX

Logged By:

Rhian Knott

Checked By:

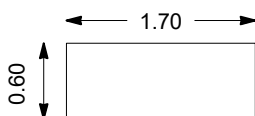
JC



Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP208
Contract Ref: 323173	Start: 04.11.25 End: 04.11.25	Ground Level: 129.57	National Grid Co-ordinate: E:385536.5 N:409225.0	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.30-0.40 0.30	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete	0.20	
						MADE GROUND. Black sandy subangular to rounded fine to coarse GRAVEL of clinker.	0.25	
						MADE GROUND. Pinkish brown sandy angular to subangular fine to coarse GRAVEL of shale with high cobble and boulder content. Cobbles and boulders of shale.	0.50	
0.70-0.80 0.70	2	ES PID	0.0ppm			Firm to stiff brown mottled grey and orangish brown slightly sandy slightly gravelly silty CLAY. Gravel is subangular to subrounded fine to medium mudstone, sandstone, siltstone. Occasional pockets of orange fine to medium sand.	(1.60)	
							2.10	
2.30-2.40 2.30	3	ES PID	0.0ppm			Firm greyish brown mottled grey slightly gravelly silty CLAY with pockets of purplish brown fine to coarse sand and greyish brown mottled grey silt. Gravel is subangular to rounded fine to medium mudstone, sandstone, siltstone. Occasional decaying plant matter.	(0.60)	
							2.70	
						Trial pit terminated at 2.70m		

Plan (Not to Scale)



General Remarks

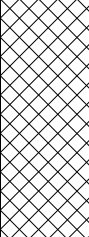
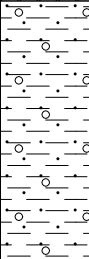
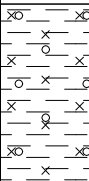
1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out before start of works.
3. Groundwater encountered at 2.10m depth.
4. Trial pit stable
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

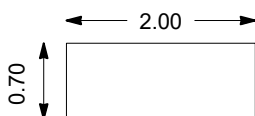
Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP209
Contract Ref: 323173	Start: 04.11.25 End: 04.11.25	Ground Level: 129.49	National Grid Co-ordinate: E:385518.0 N:409203.3	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.80-0.90 0.80	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete. MADE GROUND. Black sandy angular to subangular fine to medium GRAVEL of clinker. MADE GROUND. Pinkish brown sandy angular to subangular fine to coarse GRAVEL of shale with high cobble and boulder content. Cobbles and boulders of shale. ... From 0.80m. Becoming brown	0.15 0.25 (0.95) 1.20	  
1.30-1.40 1.30	2	ES PID	0.0ppm			Firm to stiff orangish brown mottled light grey slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to coarse mudstone, sandstone, siltstone. Occasional pockets of orangish brown sand. Firm greyish brown mottled grey slightly gravelly silty CLAY with pockets of purplish brown fine to coarse sand and greyish brown mottled grey silt. Gravel is subangular to rounded fine to medium mudstone, sandstone, siltstone. Occasional decaying plant matter.	(0.90) 2.10 (0.60) 2.70	 
Trial pit terminated at 2.70m								

Plan (Not to Scale)



General Remarks

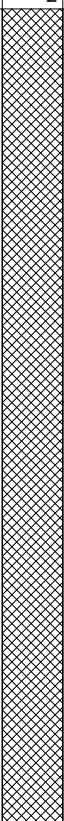
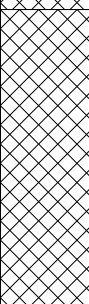
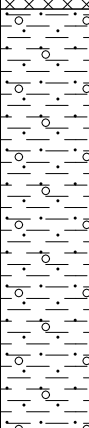
1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works
3. Groundwater not encountered.
4. Trial pit stable
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

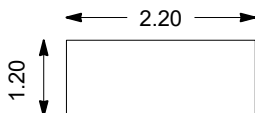
Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP210
Contract Ref: 323173	Start: 04.11.25 End: 04.11.25	Ground Level: 127.53	National Grid Co-ordinate: E:385448.0 N:409189.9	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.30-0.40 0.30	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete	0.15	
						MADE GROUND. Reddish brown slightly sandy angular to subangular fine to coarse GRAVEL of shale with medium cobble content. Cobbles of shale.	0.30	
						MADE GROUND. Reddish brown slightly sandy angular to subangular fine to coarse GRAVEL and COBBLES. Gravel of brick, concrete, glass, clinker, sandstone. Cobbles of brick, concrete, sandstone. Medium boulder content of concrete and Sandstone. . . . 0.30m to 0.45m. Band of black sandy gravel in North end of pit.	(1.00) 1.30	
1.90-2.00 1.90	2	ES PID	0.0ppm			Stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to medium mudstone, sandstone, siltstone, coal. Occasional decaying plant matter.	(1.40) 2.70	
Trial pit terminated at 2.70m								

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works.
3. Groundwater encountered at 1.80m depth.
4. Trial pit unstable between 0.15m and 1.30m depth.
5. Trial pit backfilled with arisings upon completion.

All dimensions in metres

Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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TRIAL PIT LOG

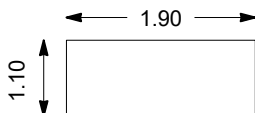
Contract:		Client:		Trial Pit:	
Heywood Stores		Trammell Crow Company		TP211	
Contract Ref:		Start: 07.11.25	Ground Level:	National Grid Co-ordinate:	Sheet:
323173		End: 07.11.25	127.48	E:385441.5 N:409166.7	1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.15 0.15	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete	0.15	
						MADE GROUND. Reddish brown slightly sandy angular to subangular fine to coarse GRAVEL of shale. Trial pit terminated at 0.15m at base of concrete		

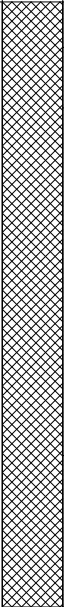
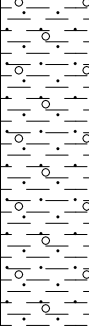
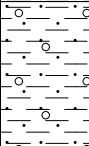
Plan (Not to Scale) Diagram showing a rectangular pit with a width of 2.10m and a depth of 1.20m.		General Remarks - Position scanned with a CAT, Genny and GPR prior to excavation. Pit not advanced due to GPR trace in pit. - Concrete broken out prior to start of works. - Groundwater not encountered. - Concrete not reinstated.	
		All dimensions in metres Scale: 1:25	
Method Used: Hand dug	Plant Used: Hand tools	Logged By: Rhian Knott	Checked By: JC

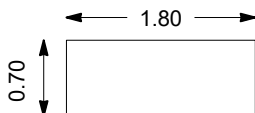
Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP212
Contract Ref: 323173	Start: 04.11.25 End: 04.11.25	Ground Level: 127.55	National Grid Co-ordinate: E:385461.0 N:409145.4	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.20-0.30 0.20	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete	0.15	
						MADE GROUND. Brown gravelly fine to coarse SAND. Gravel is subrounded to rounded fine to coarse of various lithologies	0.30	
0.50-0.60 0.50	2	ES PID	0.0ppm			MADE GROUND. Black mottled pinkish brown sandy angular to subangular fine to coarse GRAVEL of shale and coal.	(0.30) 0.60	
						MADE GROUND. Red slightly sandy slightly gravelly angular coarse COBBLES of brick and siltstone. Gravel is angular to subangular fine to coarse brick.	(0.60) 1.20	
1.60-1.70 1.60	3	ES PID	0.0ppm			Firm to stiff brown mottled grey slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to coarse mudstone, siltstone and sandstone.	(1.10) 2.30	
						Trial pit terminated at 2.30m.		

Plan (Not to Scale)		General Remarks		
		- Position scanned with a CAT, Genny and GPR prior to excavation. - Concrete broken out prior to start of works. - Groundwater not encountered. - Slightly instability between 0.15m and 1.20m. - Trial pit backfilled with arisings upon completion.		
All dimensions in metres		Scale: 1:25		
Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	

Contract: Heywood Stores			Client: Trammell Crow Company		Trial Pit: TP213
Contract Ref: 323173	Start: 04.11.25 End: 04.11.25	Ground Level: 127.56	National Grid Co-ordinate: E:385481.5 N:409159.0		Sheet: 1 of 1

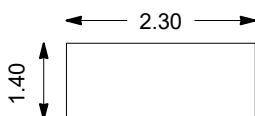
Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.20-0.30 0.20	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete.	0.15	
						MADE GROUND. Reddish brown sandy angular to subangular fine to coarse GRAVEL of shale with high cobble content. Cobbles of brick	0.35	
0.60-0.70 0.60	2	ES PID	0.0ppm			Firm orangish brown mottled light grey slightly gravelly sandy CLAY.	(1.15)	
							1.50	
						Firm grey slightly sandy slightly gravelly CLAY with frequent decaying plant matter. Gravel is subangular to subrounded fine to coarse mudstone, siltstone, sandstone and coal.	(0.50)	
						Trial pit terminated at 2.00m.	2.00	

Plan (Not to Scale)		General Remarks			
		- Position scanned with a CAT, Genny and GPR prior to excavation. - Concrete broken out prior to start of works. - Groundwater seepage encountered at 0.35m depth. - Trial pit stable. - Trial pit backfilled with arisings upon completion.			
All dimensions in metres		Scale: 1:25			
Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC		

Contract: Heywood Stores			Client: Trammell Crow Company		Trial Pit: TP214
Contract Ref: 323173	Start: 05.11.25 End: 05.11.25	Ground Level: 127.43	National Grid Co-ordinate: E:385460.6 N:409118.5		Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.40-0.60 0.40	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete MADE GROUND. Light brown sandy slightly silty subrounded to rounded fine to coarse GRAVEL of various lithologies. MADE GROUND. Reddish brown slightly sandy slightly clayey angular to subrounded fine to coarse GRAVEL of brick, concrete, clinker, sandstone and various lithologies. High cobble and boulder content of brick, sandstone, clinker, wood.	0.25 0.30 (0.80) 1.10	
1.30-1.40 1.30	2	ES PID	0.2ppm			Firm light grey mottled yellowish brown slightly gravelly sandy CLAY. Gravel is subangular to rounded fine to coarse sandstone, quartzite and various lithologies. Firm brown mottled grey and orangish brown slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to medium mudstone, sandstone, siltstone, coal and various lithologies. Occasional decaying rootlets. ... From 2.10m. Becoming greyish brown mottled grey.	(0.60) 1.70 (0.60) 2.30	
Trial pit terminated at 2.30m								

Plan (Not to Scale)



General Remarks

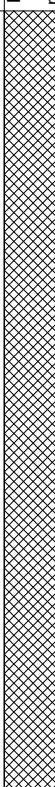
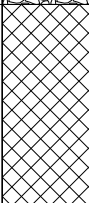
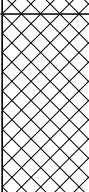
1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works.
3. Groundwater not encountered.
4. Trial pit unstable between 0.25m and 1.10m.
5. Trial pit backfilled with arisings upon completion.

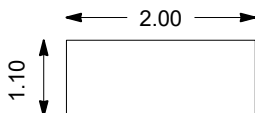
All dimensions in metres

Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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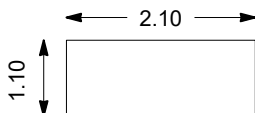
Contract: Heywood Stores			Client: Trammell Crow Company		Trial Pit: TP215
Contract Ref: 323173	Start: 05.11.25 End: 05.11.25	Ground Level: 129.46	National Grid Co-ordinate: E:385540.0 N:409096.2		Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend		
Depth	No	Type	Results							
0.70-0.80 0.70	1	ES PID	0.4ppm			MADE GROUND. Reinforced concrete	0.20			
						MADE GROUND. Pinkish brown slightly sandy angular to subrounded fine to coarse GRAVEL of shale, clinker, sandstone, brick. High cobble content of brick and sandstone	(0.70)			
						MADE GROUND. Brown slightly sandy slightly gravelly angular coarse COBBLES and BOULDERS. Cobbles of brick, boulders of sandstone	0.90 (0.60)			
1.80-1.90 1.80	2	ES PID	0.0ppm			Firm dark grey slightly sandy clayey SILT. Faint organic odour.	1.50 (0.90)			
						Stiff greyish brown slightly sandy silty CLAY.	2.40			
						Trial pit terminated at 2.60m	2.60			

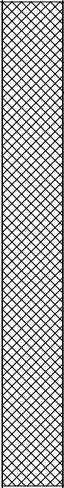
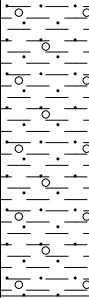
Plan (Not to Scale)		General Remarks			
		- Position scanned with a CAT, Genny and GPR prior to excavation. - Concrete broken out prior to start of works. - Groundwater encountered at 1.50m depth. - Trial pit unstable between 0.20m and 1.50m. - Trial pit backfilled with arisings upon completion.			
All dimensions in metres		Scale: 1:25			
Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC		

Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP216
Contract Ref: 323173	Start: 05.11.25 End: 05.11.25	Ground Level: 129.45	National Grid Co-ordinate: E:385535.8 N:409062.7	Sheet: 1 of 1

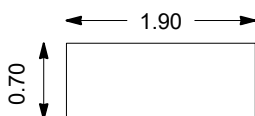
Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.60-0.70 0.60	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete. ... At 0.20m. Blue pastic membrane beneath concrete MADE GROUND. Multicoloured slightly sandy angular to subangular fine to coarse GRAVEL of shale, clinker, brick, asbestos cement board with medium cobble content. Cobbles of brick.	0.20 (0.60) 0.80	
1.00-1.10 1.00	2	ES PID	0.8ppm			Black slightly gravelly very sandy clayey SILT. Gravel is angular to rounded fine to medium mudstone, coal and various lithologies. Frequent rootlets and organic odour. ... From 0.80m. Becoming reddish grown with high cobble content	(0.30) 1.10	
1.80-1.90 1.80	3	ES PID	0.0ppm			Firm light grey mottled light brown slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to medium sandstone, siltstone, mudstone	(0.90) 2.00	
Trial pit terminated at 2.00m								

Plan (Not to Scale)		General Remarks		
		- Position scanned with a CAT, Genny and GPR prior to excavation. - Concrete broken out prior to start of works. - Groundwater not encountered. - Trial pit stable. - Trial pit backfilled with arisings upon completion		
All dimensions in metres		Scale: 1:25		
Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	

Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP217
Contract Ref: 323173	Start: 05.11.25 End: 05.11.25	Ground Level: 129.54	National Grid Co-ordinate: E:385581.3 N:409070.8	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.20-0.30	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete.	0.20	
0.20						MADE GROUND. Light brown sandy angular to subrounded fine to coarse GRAVEL of various lithologies.	0.30	
0.30-0.40	2	ES PID	0.0ppm			MADE GROUND. Reddish brown sandy gravelly CLAY with low cobble content. Gravel is angular to subangular fine to coarse brick, shale, coal, clinker. Cobbles of brick	0.40	
0.50-0.60	3	ES PID	0.0ppm			Stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to medium sandstone, mudstone, siltstone, coal.	(1.20)	
0.50						Trial pit terminated at 1.60m	1.60	

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works
3. Groundwater seepage encountered at 0.20m beneath concrete.
4. Trial pit stable.
5. Trial pit backfilled with arisings upon completion

All dimensions in metres

Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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TRIAL PIT LOG

Contract:		Client:		Trial Pit:
Heywood Stores		Trammell Crow Company		TP218
Contract Ref:	Start: 05.11.25	Ground Level:	National Grid Co-ordinate:	Sheet:
323173	End: 05.11.25	129.28	E:385625.0 N:409021.7	1 of 1

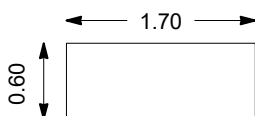
Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.50-0.60 0.50	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete.	0.15	
						MADE GROUND. Light brown sandy slightly clayey angular to subrounded fine to coarse GRAVEL of various lithologies.	0.30	
0.80-0.90 0.80	2	ES PID	0.0ppm			MADE GROUND. Reddish brown sandy angular to subrounded fine to coarse GRAVEL of brick, shale, clinker with very high cobble content. Cobbles of brick.	(0.40)	
						Firm to stiff light brown mottled grey and orangish brown slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to medium sandstone, siltstone, mudstone and coal.	0.70	
							(0.90)	
							1.60	
						Trial pit terminated at 1.60m		

Plan (Not to Scale)		General Remarks 1. Position scanned with a CAT, Genny and GPR prior to excavation. 2. Concrete broken out prior to start of works. 3. Groundwater not encountered. 4. Trial pit stable 5. Trial pit backfilled with arisings upon completion.	
		All dimensions in metres	Scale: 1:25
Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC

Contract: Heywood Stores		Client: Trammell Crow Company		Trial Pit: TP219
Contract Ref: 323173	Start: 05.11.25 End: 05.11.25	Ground Level: 129.48	National Grid Co-ordinate: E:385644.2 N:409057.8	Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.15-0.25 0.15	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete	0.15	
						MADE GROUND. Pinkish brown sandy very clayey angular to subangular fine to coarse GRAVEL of shale	0.25	
						Firm to stiff greyish brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to medium sandstone, siltstone, mudstone and coal.		
0.80-0.90 0.80	2	ES PID	0.0ppm			... 1.00m to 1.20m. Band of purplish brown silty fine to coarse sand.	(1.45)	
							1.70	
Trial pit terminated at 1.70m								

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works.
3. Groundwater seepage encountered at 1.20m depth. Standing water present beneath concrete prior to excavation.
4. Trial pit stable.
5. Trial pit backfilled with arisings upon completion

All dimensions in metres

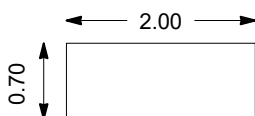
Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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Contract: Heywood Stores			Client: Trammell Crow Company		Trial Pit: TP220
Contract Ref: 323173	Start: 06.11.25 End: 06.11.25	Ground Level: 129.26	National Grid Co-ordinate: E:385681.9 N:409034.9		Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.30-0.50 0.30	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete.	0.15	
						MADE GROUND. Reddish brown sandy angular to subangular fine to coarse GRAVEL of shale and brick with high cobble content. Cobbles of brick and shale.	(0.40)	
0.80-0.80 0.80	2	ES PID	0.0ppm			Firm to stiff light grey mottled orangish brown slightly gravelly sandy CLAY. Gravel is subangular to subrounded fine to coarse sandstone, siltstone. Occasional decaying rootlets and roots	(0.95)	
						Stiff laminated dark grey slightly sandy slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse sandstone, siltstone, clay nodules.	1.50 (0.40)	
						Trial pit terminated at 1.90m	1.90	

Plan (Not to Scale)



General Remarks

1. Position scanned with a CAT, Genny and GPR prior to excavation.
2. Concrete broken out prior to start of works.
3. Groundwater not encountered.
4. Trial pit stable
5. Trial pit backfilled with arisings upon completion.

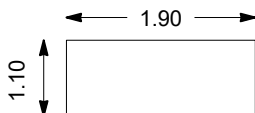
All dimensions in metres

Scale: **1:25**

Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC	
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Contract: Heywood Stores			Client: Trammell Crow Company		Trial Pit: TP221
Contract Ref: 323173	Start: 06.11.25 End: 06.11.25	Ground Level: 129.16	National Grid Co-ordinate: E:385665.8 N:408992.7		Sheet: 1 of 1

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.90-1.20 0.90	1	ES PID	0.0ppm			MADE GROUND. Reinforced concrete	0.15	
						MADE GROUND. Reddish brown slightly sandy angular to subangular fine to coarse GRAVEL and COBBLES with high boulder content. Gravel is shale, brick and clinker. Cobbles are of brick, mudstone, sandstone, shale/clinker?. Boulders of sandstone, clinker.	(1.35)	
1.80-1.90 1.80	2	ES PID	0.2ppm			Firm to stiff light grey mottled yellowish brown slightly gravelly sandy CLAY with pockets of light grey sand. Gravel is subangular to subrounded fine to coarse sandstone, siltstone and various lithologies.	(0.90)	
						Trial pit terminated at 2.40m.	2.40	

Plan (Not to Scale)		General Remarks			
		- Position scanned with a CAT, Genny and GPR prior to excavation. - Concrete broken out prior to start of works - Groundwater not encountered. - Trial pit unstable between 0.15m and 1.50m. - Trial pit backfilled with arisings upon completion.			
		All dimensions in metres		Scale: 1:25	
Method Used: Machine dug	Plant Used: JCB-3CX	Logged By: Rhian Knott	Checked By: JC		



Appendix G

GENERIC ASSESSMENT CRITERIA

G 1. GAC for Commercial End Use

Generic assessment criteria for human health: commercial scenario

Background

RSK's generic assessment criteria (GAC) were initially prepared following the publication by the Environment Agency (EA) of soil guideline value (SGV) and toxicological (TOX) reports, and associated publications in 2009⁽¹⁾. RSK GAC were updated following the publication of GAC by LQM/CIEH in 2009⁽²⁾. RSK GAC are periodically revised when updated information on toxicological, land use or receptor parameters is published.

Updates to the RSK GAC

In 2014, the publication of Category 4 Screening Levels (C4SL)^(3,4), as part of the Defra-funded research project SP1010, included modifications to certain exposure assumptions documented within EA Science Report SC050221/SR3 (herein after referred to as SR3)⁽⁵⁾ used in the generation of SGVs.

C4SL were initially published for six substances (cadmium, arsenic, benzene, benzo(a)pyrene, chromium VI and lead) for a sandy loam soil type with 6% soil organic matter, based on a low level of toxicological concern (LLTC; see Section 2.3 of research project report SP1010⁽³⁾). Further C4SL were published in 2021 for vinyl chloride, tetrachloroethene (PCE) and trichloroethene (TCE). Where a C4SL has been published, the RSK GAC duplicates the C4SL using all input parameters within the SP1010 final project report⁽³⁾ and associated chemical specific reports⁽⁶⁾, and adopts them as GAC for these substances. Due to the use of decimal places rather than significant figures applied to the Contaminated Land Exposure Assessment (CLEA) tool outputs, the GAC presented may be marginally differently to the C4SL values, however any differences between the values are minimal and would not equate to an unacceptable risk.

For all other substances the only C4SL exposure modification relevant to a commercial end use are daily inhalation rates.

The RSK GAC have also been revised with updated toxicology published by LQM/CIEH in 2015⁽⁷⁾ or by the USEPA⁽¹⁴⁾, where a C4SL has not been published.

RSK GAC derivation for metals and organic compounds

Model selection

Soil assessment criteria (SAC) were calculated using the CLEA tool v1.071, supporting EA guidance^(5,8,9) and revised exposure scenarios published for the C4SL⁽³⁾. The SAC are also termed GAC.

Pathway selection

In accordance with SR3⁽⁵⁾ the commercial scenario considers risks to a female worker who works from the age of 16 to 65 years. It should be noted that this end use is not suitable for a workplace nursery but may be appropriate for a sports centre or shopping centre where children are present. In accordance with Box 3.5, SR3⁽⁵⁾ the pathways considered for production of the SAC in the commercial scenario are

- direct soil and dust ingestion

- dermal contact with soil both indoors and outdoors
- indoor air inhalation from soil and vapour and outdoor inhalation of soil and vapour.

With respect to volatilisation, the CLEA model assumes a simple linear partitioning of a chemical in the soil between the sorbed, dissolved and vapour phase⁽⁹⁾. The upper boundaries of this partitioning are represented by the maximum aqueous solubility and pure saturated vapour concentration of the chemical. The CLEA model estimates saturated soil concentrations where these limits are reached⁽⁹⁾. The CLEA software uses a traffic light system to identify when individual and/or combined assessment criteria exceed the lower of either the aqueous- or vapour-based soil saturation limits. Model output cells are flagged red where the saturated soil concentration has been exceeded and the contribution of the indoor and outdoor vapour pathway to total exposure is greater than 10%. In this case, further consideration of the following is required⁽⁹⁾:

- Free phase contamination may be present.
- Exposure from the vapour pathways will be over-predicted by the model, as in reality the vapour phase concentration will not increase at concentrations above saturation limits
- Where the vapour pathway contribution is greater than 90%, it is unlikely the relevant health criteria value (HCV) will be exceeded at soil concentrations at least a factor of ten higher than the relevant HCV.

Where the vapour pathway is the predominant pathway (contributes greater than 90% of exposure) or the only exposure route considered and the cell is highlighted red (SAC exceeds saturation limit), the risk based on the assumed conceptual model is likely to be negligible as the vapour risk is assumed to be tolerable at maximum possible soil concentrations. In such circumstances, the vapour pathway exposure should be considered based on the presence of free phase or non-aqueous phase liquid sources and the measured concentrations of volatile organic compounds (VOC) in the vapour phase. Screening could be considered based on setting the SAC as the modelled soil saturation limits. However, as stated within the CLEA handbook⁽⁹⁾, this is likely to not be practical in many cases because of the very low saturation limits and, in any case, is highly conservative.

It should also be noted that for mixtures of compounds, free phase may be present where soil (or groundwater) concentrations are well below saturation limits for individual compounds.

Where the vapour pathway is only one of the exposure pathways considered, an additional approach can then be utilised as detailed within Section 4.12 of the CLEA model handbook⁽⁹⁾, which explains how to calculate an effective assessment criterion manually.

SR3⁽⁵⁾ states that, as a general rule of thumb, it is recognised that estimating vapour phase concentrations from dissolved and sorbed phase contamination by petroleum hydrocarbons are at least a factor of ten higher than those likely to be measured on-site. RSK has therefore applied an empirical subsurface to indoor air correction factor of 10 into the CLEA model chemical database for all petroleum hydrocarbon fractions (including BTEX, trimethylbenzenes and the polycyclic aromatic hydrocarbons (PAH) naphthalene, acenaphthene and acenaphthylene) to reduce this conservatism.

Input selection

The most up-to-date published chemical and toxicological data was obtained from EA Report SC050021/SR7⁽¹⁰⁾, the EA TOX⁽¹⁾ reports, the C4SL SP1010 project report and associated chemical specific reports^(3,6), the 2015 LQM/CIEH report⁽⁷⁾ or the USEPA IRIS database⁽¹⁴⁾. Where a LLTC^(3,6) has been published for a substance, RSK has used these input parameters to derive the RSK GAC. Toxicological and specific chemical parameters for 1,2,4-trimethylbenzene, barium, methyl tertiary-butyl ether (MTBE), 1,1,2-trichloroethane, 1,1-dichloroethene, 1,2-dichloropropane, 2-chloronaphthalene, chloroethane, chloromethane, cis 1,2-dichloroethene, dichloromethane, hexachloroethane and trans 1,2-dichloroethene were obtained from the CL:AIRE Soil Generic Assessment Criteria report⁽¹¹⁾.

For TPH, aromatic hydrocarbons C₅–C₈ were not modelled, as this range comprises benzene (>EC5-EC7) and toluene (>EC7-EC8), which are modelled separately.

Physical parameters

For the commercial end use, the CLEA default pre-1970s three-storey office building was used. SR3⁽⁵⁾ notes this commercial building type to be the most conservative in terms of protection from vapour intrusion. The default input building parameters presented in Table 3.10 of SR3⁽⁵⁾ have been used.

The parameters for a sandy loam soil type were used in line with Table 4.4 of SR3⁽⁵⁾. This includes a value of 6% for the percentage of soil organic matter (SOM) within the soil. In RSK's experience, this is rather high for many sites. To avoid undertaking site-specific risk assessments for this SOM, RSK has produced an additional set of GAC for SOM of 1% and 2.5% for all substances using the CLEA tool.

Summary of modifications to the default CLEA SR3⁽⁵⁾ input parameters for a commercial land use

In summary, the RSK commercial GAC were produced using the default input parameters for soil properties, the air dispersion model, building properties and the vapour model detailed in SR3⁽⁵⁾. Modifications to the default SR3⁽⁵⁾ exposure scenarios based on the C4SL exposure scenarios⁽³⁾ are presented in Table 2 below. The sole modification to the default commercial input parameters is the updated inhalation rate.

The final selected GAC are presented by pathway in Table 3 with the combined GAC in Table 4.

Figure 1: Conceptual model for CLEA commercial scenario

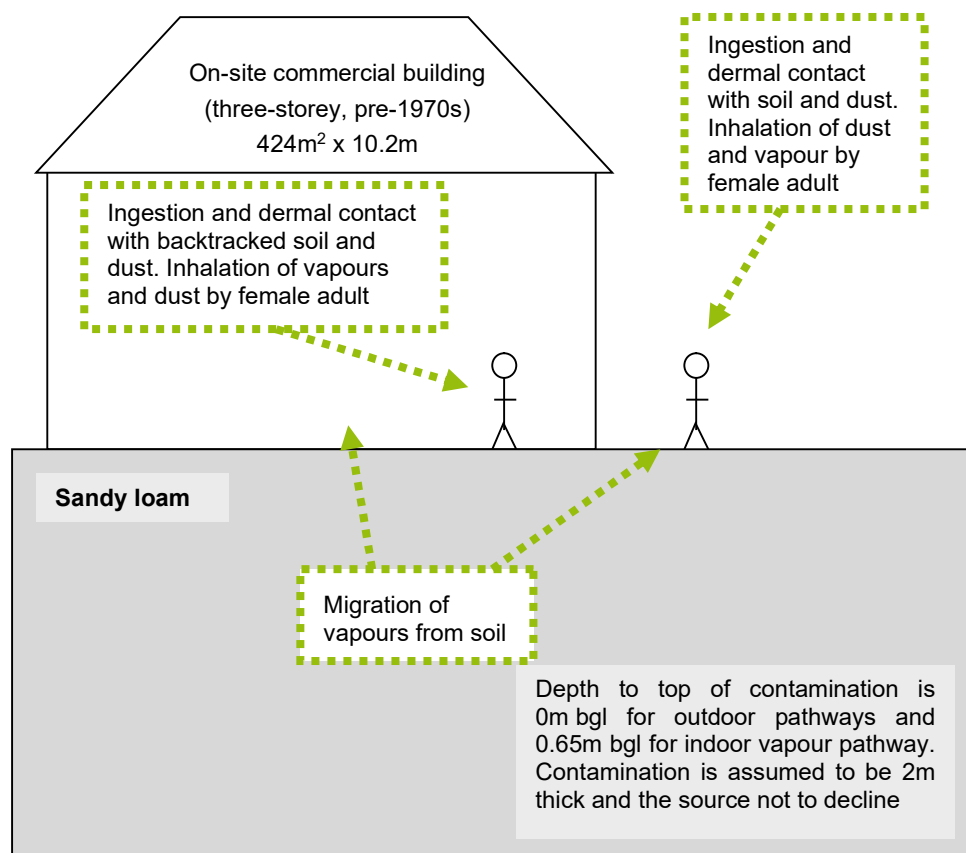


Table 1: Exposure assessment parameters for commercial scenario – inputs for CLEA model

Parameter	Value	Justification
Land use	Commercial	Chosen land use
Receptor	Female worker	Taken as female adult exposed over 49 years from age 16 to 65 years, Box 3.5, SR3 ⁽⁵⁾
Building	Office (pre-1970)	Key generic assumption given in Box 3.5, SR3 ⁽⁵⁾ . Pre-1970s three-storey office building chosen as it is the most conservative in terms of protection from vapour intrusion (Section 3.4.6, SR3 ⁽⁵⁾)
Soil type	Sandy loam	Most common UK soil type (Section 4.3.1, Table 4.4, SR3 ⁽⁵⁾)
Start age class (AC)	17	AC corresponding to key generic assumption that the critical receptor is a working female adult exposed over a 49-year period from age 16 to 65 years. Assumption given in Box 3.5, SR3 ⁽⁵⁾
End AC	17	
SOM (%)	6	Representative of sandy loam according to EA guidance note dated January 2009 entitled 'Changes We Have Made to the CLEA Framework Documents' ⁽¹³⁾
	1	To provide SAC for sites where SOM < 6% as often observed by RSK
	2.5	
pH	7	Model default

Table 2: Commercial – modified receptor inputs

Parameter	Unit	Value	Justification
Inhalation rate (AC17)	m ³ day ⁻¹	15.7	Mean value USEPA, 2011 ⁽¹²⁾ ; Table 3.2, SP1010 ⁽³⁾

References

1. Environment Agency (2009), 'Science Reports SC050021 - SGV and TOX reports for: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs'; 'Supplementary information for the derivation of SGV for: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs', and 'Contaminants in soil: updated collation of toxicological data and intake values for humans: benzene, toluene, ethylbenzene, xylene, mercury, selenium, nickel, arsenic, cadmium, phenol, dioxins, furans and dioxin-like PCBs'. Available at: <https://www.gov.uk/government/publications/contaminants-in-soil-updated-collation-of-toxicological-data-and-intake-values-for-humans> and <https://www.gov.uk/government/publications/land-contamination-soil-guideline-values-sgvs> (accessed 4 February 2015)
2. Nathanial, C. P., McCaffrey, C., Ashmore, M., Cheng, Y., Gillet, A. G., Ogden, R. C. and Scott, D. (2009), *LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment*, second edition (Nottingham: Land Quality Press).
3. Contaminated Land: Applications in Real Environment (CL:AIRE) (2014). 'Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination', Revision 2, DEFRA research project SP1010.
4. Department for Environment, Food and Rural Affairs (Defra) (2014), 'SP1010: Development of Category 4 Screening Levels for assessment of land affected by contamination – Policy Companion Document', Revision 2.
5. Environment Agency (2009), *Science Report – SC050021/SR3. Updated technical background to the CLEA model* (Bristol: Environment Agency).
6. Contaminated Land: Applications in Real Environment (CL:AIRE) (2014). 'Appendices C to H). DEFRA research project SP1010'. CL:AIRE (2021). Category 4 Screening Levels: Trichloroethene (TCE). CL:AIRE, London. ISBN 978-1-905046-38-6. CL:AIRE (2021). Category 4 Screening Levels: Vinyl Chloride. CL:AIRE, London. ISBN 978-1-905046-36-2. CL:AIRE (2021). Category 4 Screening Levels: Tetrachloroethene (PCE). CL:AIRE, London. ISBN 978-1-905046-37-9.
7. Nathanial, C. P., McCaffrey, C., Gillet, A. G., Ogden, R. C. and Nathanial, J. F. (2015), *The LQM/CIEH S4ULs for Human Health Risk Assessment* (Nottingham: Land Quality Press).
8. Environment Agency (2009), *Human health toxicological assessment of contaminants in soil. Science Report – Final SC050021/SR2* (Bristol: Environment Agency).
9. Environment Agency (2009), *Science Report – SC050021/SR4 CLEA Software (version 1.05) Handbook* (Bristol: Environment Agency).
10. Environment Agency (2008), *Science Report SC050021/SR7. Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values* (Bristol: Environment Agency).
11. CL:AIRE (2010), *Soil Generic Assessment Criteria for Human Health Risk Assessment* (London: CL:AIRE).
12. USEPA (2011), *Exposure factors handbook*, EPA/600/R-090/052F (Washington, DC: Office of Research and Development).
13. Environment Agency (2009), 'Changes made to the CLEA framework documents after the three-month evaluation period in 2008', released January 2009.

14. USEPA (2010). Hydrogen cyanide and cyanide salts. Integrated Risk Information Systems (IRIS) Chemical Assessment Summary. September 2010. <https://www.epa.gov/iris> (accessed 9 December 2015)

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - COMMERCIAL



Table 3

Human health generic assessment criteria by pathway for commercial scenario

Compound	Notes	SAC appropriate to pathway SOM 1% (mg/kg)			Soil saturation limit (mg/kg)	SAC appropriate to pathway SOM 2.5% (mg/kg)			Soil saturation limit (mg/kg)	SAC appropriate to pathway SOM 6% (mg/kg)			Soil saturation limit (mg/kg)
		Oral	Inhalation	Combined		Oral	Inhalation	Combined		Oral	Inhalation	Combined	
Metals													
Arsenic	(a,b)	6.35E+02	1.25E+03	NR	NR	6.35E+02	1.25E+03	NR	NR	6.35E+02	1.25E+03	NR	NR
Barium	(b)	2.21E+04	NR	NR	NR	2.21E+04	NR	NR	NR	2.21E+04	NR	NR	NR
Beryllium		3.97E+03	1.17E+01	NR	NR	3.97E+03	1.17E+01	NR	NR	3.97E+03	1.17E+01	NR	NR
Boron		2.38E+05	2.82E+07	NR	NR	2.38E+05	2.82E+07	NR	NR	2.38E+05	2.82E+07	NR	NR
Cadmium	(a)	7.73E+02	8.57E+02	4.10E+02	NR	7.73E+02	8.57E+02	4.10E+02	NR	7.73E+02	8.57E+02	4.10E+02	NR
Chromium (III) - trivalent	(c)	3.31E+05	8.57E+03	NR	NR	3.31E+05	8.57E+03	NR	NR	3.31E+05	8.57E+03	NR	NR
Chromium (VI) - hexavalent	(a,d)	9.62E+02	4.91E+01	NR	NR	9.62E+02	4.91E+01	NR	NR	9.62E+02	4.91E+01	NR	NR
Copper		1.89E+05	8.96E+04	6.83E+04	NR	1.89E+05	8.96E+04	6.83E+04	NR	1.89E+05	8.96E+04	6.83E+04	NR
Lead	(a)	2.32E+03	NR	NR	NR	2.32E+03	NR	NR	NR	2.32E+03	NR	NR	NR
Elemental Mercury (Hg ⁰)	(d)	NR	1.54E+01	NR	4.31E+00	NR	3.26E+01	NR	1.07E+01	NR	5.80E+01	NR	2.58E+01
Inorganic Mercury (Hg ²⁺)		1.18E+03	1.97E+04	1.12E+03	NR	1.18E+03	1.97E+04	1.12E+03	NR	1.18E+03	1.97E+04	1.12E+03	NR
Methyl Mercury (Hg ⁴⁺)		3.38E+02	2.13E+03	2.92E+02	7.33E+01	3.38E+02	3.87E+03	3.11E+02	1.42E+02	3.38E+02	7.33E+03	3.23E+02	3.04E+02
Nickel	(d)	3.06E+03	9.83E+02	NR	NR	3.06E+03	9.83E+02	NR	NR	3.06E+03	9.83E+02	NR	NR
Selenium	(b)	1.23E+04	NR	NR	NR	1.23E+04	NR	NR	NR	1.23E+04	NR	NR	NR
Vanadium		2.15E+04	9.03E+03	NR	NR	2.15E+04	9.03E+03	NR	NR	2.15E+04	9.03E+03	NR	NR
Zinc	(b)	7.35E+05	1.97E+08	NR	NR	7.35E+05	1.97E+08	NR	NR	7.35E+05	1.97E+08	NR	NR
Cyanide (free)		6.56E+02	7.51E+04	6.53E+02	NR	6.56E+02	7.51E+04	6.53E+02	NR	6.56E+02	7.51E+04	6.53E+02	NR
Volatile Organic Compounds													
Benzene	(a)	1.09E+03	2.79E+01	2.72E+01	1.22E+03	1.09E+03	5.19E+01	4.96E+01	2.26E+03	1.09E+03	1.08E+02	9.80E+01	4.71E+03
Toluene		4.24E+05	6.49E+04	5.63E+04	8.69E+02	4.24E+05	1.43E+05	1.07E+05	1.92E+03	4.24E+05	3.24E+05	1.84E+05	4.36E+03
Ethylbenzene		1.91E+05	5.89E+03	5.71E+03	5.18E+02	1.91E+05	1.38E+04	1.28E+04	1.22E+03	1.91E+05	3.21E+04	2.75E+04	2.84E+03
Xylene - m		3.43E+05	6.26E+03	6.15E+03	6.25E+02	3.43E+05	1.47E+04	1.41E+04	1.47E+03	3.43E+05	3.44E+04	3.12E+04	3.46E+03
Xylene - o		3.43E+05	6.73E+03	6.60E+03	4.78E+02	3.43E+05	1.57E+04	1.50E+04	1.12E+03	3.43E+05	3.65E+04	3.30E+04	2.62E+03
Xylene - p		3.43E+05	6.03E+03	5.92E+03	5.76E+02	3.43E+05	1.41E+04	1.36E+04	1.35E+03	3.43E+05	3.28E+04	3.00E+04	3.17E+03
Total xylene		3.43E+05	6.03E+03	5.92E+03	6.25E+02	3.43E+05	1.41E+04	1.36E+04	1.47E+03	3.43E+05	3.28E+04	3.00E+04	3.46E+03
Methyl tertiary-Butyl ether (MTBE)		5.72E+05	7.58E+03	7.48E+03	2.04E+04	5.72E+05	1.23E+04	1.21E+04	3.31E+04	5.72E+05	2.34E+04	2.24E+04	6.27E+04
1,1,1,2-Tetrachloroethane		1.10E+04	1.09E+02	1.08E+02	2.60E+03	1.10E+04	2.53E+02	2.47E+02	6.02E+03	1.10E+04	5.88E+02	5.59E+02	1.40E+04
1,1,2,2-Tetrachloroethane		1.10E+04	2.81E+02	2.74E+02	2.67E+03	1.10E+04	5.75E+02	5.46E+02	5.46E+03	1.10E+04	1.26E+03	1.13E+03	1.20E+04
1,1,1-Trichloroethane		1.14E+06	6.60E+02	6.60E+02	1.43E+03	1.14E+06	1.35E+03	1.35E+03	2.92E+03	1.14E+06	2.96E+03	2.95E+03	6.39E+03
1,1,2 Trichloroethane		7.62E+03	9.02E+01	8.91E+01	4.03E+03	7.62E+03	1.84E+02	1.80E+02	8.21E+03	7.62E+03	4.02E+02	3.82E+02	1.80E+04
1,1-Dichloroethene		8.76E+04	2.43E+01	2.43E+01	2.23E+03	8.76E+04	4.30E+01	4.30E+01	3.94E+03	8.76E+04	8.68E+01	8.67E+01	7.94E+03
1,2-Dichloroethane		2.29E+02	6.73E-01	6.71E-01	3.41E+03	2.29E+02	9.71E-01	9.67E-01	4.91E+03	2.29E+02	1.67E+00	1.65E+00	8.43E+03
1,2,4-Trimethylbenzene		NR	3.29E+02	NR	4.74E+02	NR	6.41E+02	NR	1.16E+03	NR	1.04E+03	NR	2.76E+03
1,3,5-Trimethylbenzene	(e)	NR	NR	NR	2.30E+02	NR	NR	NR	5.52E+02	NR	NR	NR	1.30E+03
1,2-Dichloropropane		2.57E+04	3.14E+00	3.13E+00	1.19E+03	2.57E+04	5.54E+00	5.54E+00	2.11E+03	2.57E+04	1.11E+01	1.11E+01	4.24E+03
Carbon Tetrachloride (tetrachloromethane)		7.62E+03	2.87E+00	2.87E+00	1.52E+03	7.62E+03	6.29E+00	6.28E+00	3.32E+03	7.62E+03	1.43E+01	1.42E+01	7.54E+03
Chloroethane		NR	9.01E+02	NR	2.61E+03	NR	1.22E+03	NR	3.54E+03	NR	1.97E+03	NR	5.71E+03
Chloromethane		NR	9.54E-01	NR	1.91E+03	NR	1.11E+00	NR	2.24E+03	NR	1.49E+00	NR	2.99E+03
Cis 1,2 Dichloroethene		1.36E+01	NR	NR	3.94E+03	2.29E+01	NR	NR	6.61E+03	4.44E+01	NR	NR	1.29E+04
Dichloromethane		9.04E+03	2.63E+02	2.57E+02	7.27E+03	9.04E+03	3.50E+02	3.39E+02	9.68E+03	9.04E+03	5.53E+02	5.26E+02	1.53E+04
Tetrachloroethene (PCE)		2.67E+04	2.45E+01	2.45E+01	4.24E+02	2.67E+04	5.49E+01	5.48E+01	9.51E+02	2.67E+04	1.26E+02	1.25E+02	2.18E+03
Trans 1,2 Dichloroethene		3.23E+04	2.07E+01	NR	3.42E+03	3.23E+04	3.74E+01	NR	6.17E+03	3.23E+04	7.63E+01	NR	1.26E+04
Trichloroethene (TCE)		7.30E-01	2.59E+00	NR	1.54E+03	1.53E+00	5.43E+00	NR	3.22E+03	3.38E+00	1.20E+01	NR	7.14E+03
Vinyl Chloride (chloroethene)		1.19E+02	1.13E+00	1.12E+00	1.36E+03	1.19E+02	1.46E+00	1.45E+00	1.76E+03	1.19E+02	2.24E+00	2.20E+00	2.69E+03
Semi-Volatile Organic Compounds													
2-Chloronaphthalene		1.53E+05	3.71E+02	3.70E+02	1.14E+02	1.53E+05	9.07E+02	9.02E+02	2.80E+02	1.53E+05	2.13E+03	2.10E+03	6.69E+02
Acenaphthene		1.10E+05	2.75E+06	1.06E+05	5.70E+01	1.10E+05	5.38E+06	1.08E+05	1.41E+02	1.10E+05	8.83E+06	1.08E+05	3.36E+02

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - COMMERCIAL



Table 3

Human health generic assessment criteria by pathway for commercial scenario

Compound	Notes	SAC appropriate to pathway SOM 1% (mg/kg)			Soil saturation limit (mg/kg)	SAC appropriate to pathway SOM 2.5% (mg/kg)			Soil saturation limit (mg/kg)	SAC appropriate to pathway SOM 6% (mg/kg)			Soil saturation limit (mg/kg)
		Oral	Inhalation	Combined		Oral	Inhalation	Combined		Oral	Inhalation	Combined	
Acenaphthylene		1.10E+05	2.68E+06	1.05E+05	8.61E+01	1.10E+05	5.23E+06	1.07E+05	2.12E+02	1.10E+05	8.65E+06	1.08E+05	5.06E+02
Anthracene		5.49E+05	1.13E+07	5.23E+05	1.17E+00	5.49E+05	2.35E+07	5.36E+05	2.91E+00	5.49E+05	4.13E+07	5.42E+05	6.96E+00
Benzo(a)anthracene		2.84E+02	4.08E+02	1.67E+02	1.71E+00	2.84E+02	4.47E+02	1.74E+02	4.28E+00	2.84E+02	4.67E+02	1.76E+02	1.03E+01
Benzo(a)pyrene	(a)	7.68E+01	2.04E+02	5.58E+01	9.11E-01	7.68E+01	2.09E+02	5.61E+01	2.28E+00	7.68E+01	2.11E+02	5.63E+01	5.46E+00
Benzo(b)fluoranthene		7.13E+01	1.17E+02	4.43E+01	1.22E+00	7.13E+01	1.20E+02	4.47E+01	3.04E+00	7.13E+01	1.21E+02	4.49E+01	7.29E+00
Benzo(g,h,i)perylene		6.29E+03	1.05E+04	3.93E+03	1.54E-02	6.29E+03	1.06E+04	3.95E+03	3.85E-02	6.29E+03	1.07E+04	3.96E+03	9.23E-02
Benzo(k)fluoranthene		1.88E+03	3.11E+03	1.17E+03	6.87E-01	1.88E+03	3.17E+03	1.18E+03	1.72E+00	1.88E+03	3.21E+03	1.19E+03	4.12E+00
Chrysene		5.67E+02	8.89E+02	3.46E+02	4.40E-01	5.67E+02	9.25E+02	3.52E+02	1.10E+00	5.67E+02	9.47E+02	3.55E+02	2.64E+00
Dibenzo(a,h)anthracene		5.67E+00	9.32E+00	3.53E+00	3.93E-03	5.67E+00	9.52E+00	3.55E+00	9.82E-03	5.67E+00	9.64E+00	3.57E+00	2.36E-02
Fluoranthene		2.29E+04	1.89E+06	2.26E+04	1.89E+01	2.29E+04	2.72E+06	2.27E+04	4.73E+01	2.29E+04	3.32E+06	2.27E+04	1.13E+02
Fluorene		7.31E+04	4.55E+05	6.30E+04	3.09E+01	7.31E+04	1.06E+06	6.84E+04	7.65E+01	7.31E+04	2.24E+06	7.08E+04	1.83E+02
Hexachloroethane		2.09E+01	NR	NR	8.17E+00	4.98E+01	NR	NR	2.01E+01	1.11E+02	NR	NR	4.81E+01
Indeno(1,2,3-cd)pyrene		8.10E+02	1.31E+03	5.01E+02	6.13E-02	8.10E+02	1.35E+03	5.06E+02	1.53E-01	8.10E+02	1.37E+03	5.09E+02	3.68E-01
Naphthalene		3.64E+04	1.87E+03	1.78E+03	7.64E+01	3.64E+04	4.39E+03	3.92E+03	1.83E+02	3.64E+04	9.94E+03	7.81E+03	4.32E+02
Phenanthrene		2.28E+04	5.35E+05	2.19E+04	3.60E+01	2.28E+04	1.09E+06	2.24E+04	8.96E+01	2.28E+04	1.86E+06	2.25E+04	2.14E+02
Pyrene		5.49E+04	4.47E+06	5.42E+04	2.20E+00	5.49E+04	6.46E+06	5.44E+04	5.49E+00	5.49E+04	7.91E+06	5.45E+04	1.32E+01
Phenol		1.10E+06	2.65E+04	2.59E+04	2.42E+04	1.10E+06	3.04E+04	2.96E+04	3.81E+04	1.10E+06	3.46E+04	3.35E+04	7.03E+04

Total petroleum hydrocarbons

Aliphatic hydrocarbons EC5-EC6		4.77E+06	3.19E+03	3.19E+03	3.04E+02	4.77E+06	5.86E+03	5.86E+03	5.58E+02	4.77E+06	1.21E+04	1.21E+04	1.15E+03
Aliphatic hydrocarbons >EC6-EC8		4.77E+06	7.79E+03	7.78E+03	1.44E+02	4.77E+06	1.74E+04	1.74E+04	3.22E+02	4.77E+06	3.97E+04	3.96E+04	7.36E+02
Aliphatic hydrocarbons >EC8-EC10		9.53E+04	2.02E+03	2.00E+03	7.77E+01	9.53E+04	4.91E+03	4.85E+03	1.90E+02	9.53E+04	1.17E+04	1.13E+04	4.51E+02
Aliphatic hydrocarbons >EC10-EC12		9.53E+04	9.97E+03	9.69E+03	4.75E+01	9.53E+04	2.47E+04	2.29E+04	1.18E+02	9.53E+04	5.89E+04	4.73E+04	2.83E+02
Aliphatic hydrocarbons >EC12-EC16		9.53E+04	8.26E+04	5.88E+04	2.37E+01	9.53E+04	2.04E+05	8.17E+04	5.91E+01	9.53E+04	4.81E+05	9.02E+04	1.42E+02
Aliphatic hydrocarbons >EC16-EC35	(b)	1.58E+06	NR	NR	8.48E+00	1.75E+06	NR	NR	2.12E+01	1.83E+06	NR	NR	5.09E+01
Aliphatic hydrocarbons >EC35-EC44	(b)	1.58E+06	NR	NR	8.48E+00	1.75E+06	NR	NR	2.12E+01	1.83E+06	NR	NR	5.09E+01
Aromatic hydrocarbons >EC8-EC10		3.81E+04	3.55E+03	3.46E+03	6.13E+02	3.81E+04	8.66E+03	8.11E+03	1.50E+03	3.81E+04	2.05E+04	1.70E+04	3.58E+03
Aromatic hydrocarbons >EC10-EC12		3.81E+04	1.92E+04	1.62E+04	3.64E+02	3.81E+04	4.69E+04	2.79E+04	8.99E+02	3.81E+04	1.10E+05	3.42E+04	2.15E+03
Aromatic hydrocarbons >EC12-EC16		3.81E+04	2.02E+05	3.62E+04	1.69E+02	3.81E+04	4.76E+05	3.73E+04	4.19E+02	3.81E+04	1.03E+06	3.78E+04	1.00E+03
Aromatic hydrocarbons >EC16-EC21	(b)	2.82E+04	NR	NR	5.37E+01	2.83E+04	NR	NR	1.34E+02	2.84E+04	NR	NR	3.21E+02
Aromatic hydrocarbons >EC21-EC35	(b)	2.84E+04	NR	NR	4.83E+00	2.84E+04	NR	NR	1.21E+01	2.84E+04	NR	NR	2.90E+01
Aromatic hydrocarbons >EC35-EC44	(b)	2.84E+04	NR	NR	4.83E+00	2.84E+04	NR	NR	1.21E+01	2.84E+04	NR	NR	2.90E+01

Notes:

EC - equivalent carbon. GrAC - groundwater screening value. SAC - soil screening value.

The CLEA model output is colour coded depending upon whether the soil saturation limit has been exceeded.

	Calculated SAC exceeds soil saturation limit and may significantly affect the interpretation of any exceedances as the contribution of the indoor and outdoor vapour pathway to total exposure is >10%.
	Calculated SAC exceeds soil saturation limit but the exceedance will not affect the SAC significantly as the contribution of the indoor and outdoor vapour pathway to total exposure is <10%.
	Calculated SAC does not exceed the soil saturation limit.

The SAC for organic compounds are dependant upon soil organic matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58. 1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.

SAC for TPH fractions, PAHs naphthalene, acenaphthene and acenaphthylene, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway (Section 10.1.1, SR3)

(a) SAC for arsenic, benzene, benzo(a)pyrene, cadmium, chromium VI and lead are derived using the C4SL toxicology data.

(b) SAC for barium and selenium should not include the inhalation pathway as no expert group HCV has been derived; aliphatic and aromatic hydrocarbons >EC16 should not include inhalation pathway due to their non-volatile nature and inhalation exposure being minimal (oral, dermal and inhalation exposure is compared to the oral HCV); arsenic should only be based on oral contribution (rather than combined) owing to the relative small contribution from inhalation in accordance with the SGV report. The Oral SAC should be adopted for zinc and benzo(a)pyrene.

(c) SAC for CrIII should be based on the lower of the oral and inhalation SAC (see LQM/CIEH 2015 Section 6.8)

(d) SAC for elemental mercury, chromium VI and nickel should be based on the inhalation pathway only.

(e) SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4 trimethylbenzene may be used.

GENERIC ASSESSMENT CRITERIA FOR HUMAN HEALTH - COMMERCIAL



Table 4
Human Health Generic Assessment Criteria for Commercial Scenario

Compound	SAC for Soil SOM 1% (mg/kg)	SAC for Soil SOM 2.5% (mg/kg)	SAC for Soil SOM 6% (mg/kg)
Metals			
Arsenic	640	640	640
Barium	22,000	22,000	22,000
Beryllium	12	12	12
Boron	240,000	240,000	240,000
Cadmium	410	410	410
Chromium (III) - trivalent	8,600	8,600	8,600
Chromium (VI) - hexavalent	49	49	49
Copper	68,000	68,000	68,000
Lead	2,300	2,300	2,300
Elemental Mercury (Hg ⁰)	15 (4)	33 (11)	58 (26)
Inorganic Mercury (Hg ²⁺)	1,120	1,120	1,120
Methyl Mercury (Hg ⁴⁺)	290 (73)	310 (142)	320
Nickel	980	980	980
Selenium	12,000	12,000	12,000
Vanadium	9,000	9,000	9,000
Zinc	740,000	740,000	740,000
Cyanide (free)	650	650	650
Volatile Organic Compounds			
Benzene	27	50	98
Toluene	56,000 (869)	107,000 (1,916)	184,000 (4,357)
Ethylbenzene	6,000 (518)	13,000 (1,216)	27,000 (2,844)
Xylene - m	6,200 (625)	14,100 (1,474)	31,200 (3,457)
Xylene - o	6,600 (478)	15,000 (1,120)	33,000 (2,618)
Xylene - p	5,900 (576)	13,600 (1,353)	30,000 (3,167)
Total xylene	5,900 (625)	13,600 (1,474)	30,000 (3,457)
Methyl tertiary-Butyl ether (MTBE)	7,500	12,100	22,400
1,1,1,2 Tetrachloroethane	110	250	560
1,1,2,2-Tetrachloroethane	270	550	1,130
1,1,1-Trichloroethane	700	1,300	3,000
1,1,2 Trichloroethane	89	180	382
1,1-Dichloroethene	24	43	87
1,2-Dichloroethane	0.67	0.97	1.65
1,2,4-Trimethylbenzene	330	640	1,040
1,3,5-Trimethylbenzene	NR	NR	NR
1,2-Dichloropropane	3	6	11
Carbon Tetrachloride (tetrachloromethane)	2.9	6.3	14.2
Chloroethane	901	1,223	1,972
Chloromethane	1.0	1.1	1.5
Cis 1,2 Dichloroethene	14	23	44
Dichloromethane	257	339	526
Tetrachloroethene (PCE)	24	55	125
Trichloroethene (TCE)	0.7	1.5	3.4
Trans 1,2 Dichloroethene	21	37	76
Vinyl Chloride (chloroethene)	1.1	1.4	2.2
Semi-Volatile Organic Compounds			
2-Chloronaphthalene	370 (114)	902 (280)	2,098 (669)
Acenaphthene	110,000	110,000	110,000
Acenaphthylene	110,000	110,000	110,000
Anthracene	520,000	540,000	540,000
Benzo(a)anthracene	170	170	180
Benzo(a)pyrene	77	77	77
Benzo(b)fluoranthene	44	45	45
Benzo(g,h,i)perylene	3,900	3,900	4,000
Benzo(k)fluoranthene	1,200	1,200	1,200
Chrysene	350	350	350
Dibenzo(a,h)anthracene	3.5	3.6	3.6
Fluoranthene	23,000	23,000	23,000
Fluorene	63,000 (31)	68,000	71,000
Hexachloroethane	21 (8)	50 (20)	111 (48)
Indeno(1,2,3-cd)pyrene	500	510	510
Naphthalene	1,800 (76)	3,900 (183)	7,800 (432)
Phenanthrene	22,000	22,000	23,000
Pyrene	54,000	54,000	54,000
Phenol	440*	690*	1,300*
Total Petroleum Hydrocarbons			
Aliphatic hydrocarbons EC ₅ -EC ₆	3,200 (304)	5,900 (558)	12,100 (1,150)
Aliphatic hydrocarbons >EC ₅ -EC ₈	7,800 (144)	17,400 (322)	39,600 (736)
Aliphatic hydrocarbons >EC ₈ -EC ₁₀	2,000 (78)	4,800 (190)	11,300 (451)
Aliphatic hydrocarbons >EC ₁₀ -EC ₁₂	9,700 (48)	22,900 (118)	47,300 (283)
Aliphatic hydrocarbons >EC ₁₂ -EC ₁₆	59,000 (24)	82,000 (59)	90,000 (142)
Aliphatic hydrocarbons >EC ₁₆ -EC ₃₅	1,000,000**	1,000,000**	1,000,000**
Aliphatic hydrocarbons >EC ₃₅ -EC ₄₄	1,000,000**	1,000,000**	1,000,000**
Aromatic hydrocarbons >EC ₅ -EC ₁₀	3,500 (613)	8,100 (1,503)	17,000 (3,580)
Aromatic hydrocarbons >EC ₁₀ -EC ₁₂	16,000 (364)	28,000 (899)	34,000 (2,150)
Aromatic hydrocarbons >EC ₁₂ -EC ₁₆	36,000 (169)	37,000	38,000
Aromatic hydrocarbons >EC ₁₆ -EC ₂₁	28,000	28,000	28,000
Aromatic hydrocarbons >EC ₂₁ -EC ₃₅	28,000	28,000	28,000
Aromatic hydrocarbons >EC ₃₅ -EC ₄₄	28,000	28,000	28,000
Minerals			
Asbestos	Stage 1 test – No asbestos detected with ID; Stage 2 test - <0.001% dry weight (exceedance of either equates to an exceedance of the GAC) ¹		
Notes:			
* Generic assessment criteria not calculated owing to low volatility of substance and therefore no pathway, or an absence of toxicological data.			
NR - SAC for 1,3,5-trimethylbenzene is not recorded owing to the lack of toxicological data, SAC for 1,2,4 trimethylbenzene may be used			
EC - equivalent carbon. GRAC - groundwater assessment criteria. SAC - soil assessment criteria.			
* The GAC for Phenol is based on a threshold which is protective of direct contact (SC050021/Phenol SGV report)			
** Denoted SAC calculated exceeds 100% contaminant, hence 100% (1,000,000mg/kg) has been taken as SAC			
The SAC for organic compounds are dependent on Soil Organic Matter (SOM) (%) content. To obtain SOM from total organic carbon (TOC) (%) divide by 0.58.			
1% SOM is 0.58% TOC. DL Rowell Soil Science: Methods and Applications, Longmans, 1994.			
SAC for TPH fractions, PAHs naphthalene, acenaphthene and acenaphthylene, BTEX and trimethylbenzene compounds were produced using an attenuation factor for the indoor air inhalation pathway of 10 to reduce conservatism associated with the vapour inhalation pathway, section 10.1.1, SR3.			
(VALUE IN BRACKETS)			
RSK has adopted an approach for petroleum hydrocarbons in accordance with LQM/CIEH whereby the concentration modelled for each petroleum hydrocarbon fraction has been tabulated as the SAC with the corresponding solubility or vapour saturation limits given in brackets.			



Appendix H

GQRA DATA SCREENING ASSESSMENT

H 1. Soil Assessment to Human Health

Project name	Heywood Stores		Notes	
Project code	323173			
Client name	Telford Living			
Address				
NGR				
Land use	Commercial Scenario			
SOM	1%			
GAC version	2021_00			

		Lab sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	25/12859/8	25/12859/9	25/12859/10
		Client sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203	TP204	TP204	TP204
		Depth to top	0.3	0.9	0.2	0.7	0	0.3	1	0	0.3	0.8
		Depth to bottom	0.4	1	0.3	0.8	0.1	0.4	1.1	0.1	0.4	0.9
		Date sampled	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects				
Metals and Inorganics												
Arsenic	mg/kg	640		69	<1	31	29	2	16	4	16	2
Cadmium	mg/kg	410			<1.0	31	0	31	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	8600	49	69	9	31	31	0	22	17	17	19
Copper	mg/kg	68000		103	4	31	31	0	100	26	95	20
Lead	mg/kg	2300		1030	7	31	31	0	51	10	20	11
Mercury	mg/kg	1120	15	0.41	<0.17	31	3	28	<0.17	<0.17	<0.17	<0.17
Nickel	mg/kg	980		51	6	31	31	0	48	24	47	26
Selenium	mg/kg	12000		2	<1	31	3	28	<1	<1	1	<1
Zinc	mg/kg	740000		1020	11	31	31	0	48	41	26	45
Asbestos												
Bulk Fibre Identification		Detect				1	1	0				
Asbestos in soil		Detect				27	1	26	NAD		NAD	
Asbestos Matrix (microscope)		Detect				27	1	26	-		-	
Asbestos in soil % composition (hand picking and weighing)	% w/w	0.001		0.006	0.006	1	1	0				
Bulk Fibre Identification Matrix (visual)		Detect				1	1	0				
Petroleum Hydrocarbons												
Ali >C5-C6	mg/kg	3200	304		<0.01	13	0	13	<0.01	<0.01		
Ali >C6-C8	mg/kg	7800	144		<0.01	13	0	13	<0.01	<0.01		
Ali >C8-C10	mg/kg	2000	78		<1	13	0	13	<1	<1		
Ali >C10-C12	mg/kg	9700	48		<1	13	0	13	<1	<1		
Ali >C12-C16	mg/kg	59000	24	2	<1	13	1	12	<1	<1		
Ali >C16-C21	mg/kg			89	<1	13	6	7	1	<1		
Ali >C21-C35	mg/kg			240	<1	13	8	5	7	1		
Ali >C16-C35 calculated	mg/kg	1000000		329	<1	13	8	5	8	1		
Total Aliphatics	mg/kg			329	<1	13	8	5	9	1		
Aro >C5-C7	mg/kg				<0.01	13	0	13	<0.01	<0.01		
Aro >C7-C8	mg/kg				<0.01	13	0	13	<0.01	<0.01		
Aro >C8-C10	mg/kg	3500	613	175	<2	13	2	11	<2	<2		
Aro >C10-C12	mg/kg	16000	364	1	<1	13	1	12	1	<1		
Aro >C12-C16	mg/kg	36000	169	576	<1	13	7	6	5	<1		
Aro >C16-C21	mg/kg	28000		1710	<1	13	7	6	4	<1		
Aro >C21-C35	mg/kg	28000		4050	<1	13	8	5	4	2		
Total Aromatics	mg/kg			6510	<2	13	8	5	14	2		
TPH (Ali & Aro)	mg/kg			6840	<2	13	8	5	22	4		
BTEX - Benzene	mg/kg	27			<0.01	13	0	13	<0.01	<0.01		
BTEX - Toluene	mg/kg	56000	869		<0.01	13	0	13	<0.01	<0.01		
BTEX - Ethyl Benzene	mg/kg	6000	518		<0.01	13	0	13	<0.01	<0.01		
BTEX - o Xylene	mg/kg	6600	478		<0.01	13	0	13	<0.01	<0.01		

Project name	Heywood Stores									
Project code	323173									
Client name	Telford Living									
Address										
NGR										
Land use	Commercial Scenario									
SOM	1%									
GAC version	2021_00									

									Lab sample ID	25/12859/49	25/12859/11	25/12859/13	25/12859/15	25/12859/16	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22
									Client sample ID	TP204	TP205	TP206	TP207	TP207	TP208	TP209	TP209	TP210	TP210
									Depth to top	0	0.4	0.4	0.15	0.9	0.3	0.8	1.3	0.3	1.9
									Depth to bottom	0.1	0.5	0.5	0.3	1	0.4	0.9		0.4	2
									Date sampled	06/11/25	07/11/25	07/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Metals and Inorganics																			
Arsenic	mg/kg	640		69	<1	31	29	2				<1	9	2	10	12	7	69	6
Cadmium	mg/kg	410			<1.0	31	0	31				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	8600	49	69		9	31	31	0			18	22	14	15	14	15	69	22
Copper	mg/kg	68000		103		4	31	31	0			13	81	14	29	24	8	103	22
Lead	mg/kg	2300		1030		7	31	31	0			10	14	8	26	18	12	1030	12
Mercury	mg/kg	1120	15	0.41	<0.17		31	3	28			<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.23	<0.17
Nickel	mg/kg	980		51		6	31	31	0			23	44	13	24	26	10	21	30
Selenium	mg/kg	12000		2	<1		31	3	28			<1	<1	<1	<1	<1	<1	2	<1
Zinc	mg/kg	740000		1020		11	31	31	0			45	30	23	35	53	19	1020	43
Asbestos																			
Bulk Fibre Identification		Detect				1	1	0	Chrysotile										
Asbestos in soil		Detect				27	1	26		NAD	NAD	NAD		NAD	NAD	NAD		Chrysotile	NAD
Asbestos Matrix (microscope)		Detect				27	1	26		-	-	-		-	-	-		Loose Fibres	-
Asbestos in soil % composition (hand picking and weighing)	% w/w	0.001		0.006	0.006	1	1	0										0.006	
Bulk Fibre Identification Matrix (visual)		Detect				1	1	0	Cement										
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg	3200	304		<0.01	13	0	13								<0.01	<0.01	<0.01	
Ali >C6-C8	mg/kg	7800	144		<0.01	13	0	13								<0.01	<0.01	<0.01	
Ali >C8-C10	mg/kg	2000	78		<1	13	0	13								<1	<1	<50	
Ali >C10-C12	mg/kg	9700	48		<1	13	0	13								<1	<1	<50	
Ali >C12-C16	mg/kg	59000	24	2	<1	13	1	12								<1	<1	<50	
Ali >C16-C21	mg/kg			89	<1	13	6	7								<1	<1	89	
Ali >C21-C35	mg/kg			240	<1	13	8	5								<1	<1	240	
Ali >C16-C35 calculated	mg/kg	1000000		329	<1	13	8	5								<1	<1	329	
Total Aliphatics	mg/kg			329	<1	13	8	5								<1	<1	329	
Aro >C5-C7	mg/kg				<0.01	13	0	13								<0.01	<0.01	<0.01	
Aro >C7-C8	mg/kg				<0.01	13	0	13								<0.01	<0.01	<0.01	
Aro >C8-C10	mg/kg	3500	613	175	<2	13	2	11								<2	<2	175	
Aro >C10-C12	mg/kg	16000	364	1	<1	13	1	12								<1	<1	<50	
Aro >C12-C16	mg/kg	36000	169	576	<1	13	7	6								<1	<1	576	
Aro >C16-C21	mg/kg	28000		1710	<1	13	7	6								<1	<1	1710	
Aro >C21-C35	mg/kg	28000		4050	<1	13	8	5								<1	<1	4050	
Total Aromatics	mg/kg			6510	<2	13	8	5								<2	<2	6510	
TPH (Ali & Aro)	mg/kg			6840	<2	13	8	5								<2	<2	6840	
BTEX - Benzene	mg/kg	27			<0.01	13	0	13								<0.01	<0.01	<0.01	
BTEX - Toluene	mg/kg	56000	869		<0.01	13	0	13								<0.01	<0.01	<0.01	
BTEX - Ethyl Benzene	mg/kg	6000	518		<0.01	13	0	13								<0.01	<0.01	<0.01	
BTEX - o Xylene	mg/kg	6600	478		<0.01	13	0	13								<0.01	<0.01	<0.01	

Project name	Heywood Stores	
Project code	323173	
Client name	Telford Living	
Address		
NGR		
Land use	Commercial Scenario	
SOM	1%	
GAC version	2021_00	

									Lab sample ID	25/12859/23	25/12859/25	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	25/12859/34
									Client sample ID	TP211	TP212	TP213	TP213	TP214	TP215	TP215	TP216	TP216	TP216
									Depth to top	0.15	0.5	0.2	0.6	0.4	0.7	1.8	0.6	1	1.8
									Depth to bottom		0.6	0.3	0.7	0.5	0.8	1.9	0.7	1.1	1.9
									Date sampled	04/11/25	04/11/25	04/11/25	04/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Metals and Inorganics																			
Arsenic	mg/kg	640		69	<1	31	29	2	23	9	37	7			16		9		
Cadmium	mg/kg	410			<1.0	31	0	31	<1.0	<1.0	<1.0	<1.0			<1.0		<1.0		
Chromium	mg/kg	8600	49	69	9	31	31	0	14	9	19	18			19		12		
Copper	mg/kg	68000		103	4	31	31	0	20	8	39	15			44		23		
Lead	mg/kg	2300		1030	7	31	31	0	43	15	46	10			45		42		
Mercury	mg/kg	1120	15	0.41	<0.17	31	3	28	0.21	<0.17	<0.17	<0.17			<0.17		<0.17		
Nickel	mg/kg	980		51	6	31	31	0	15	10	29	13			19		12		
Selenium	mg/kg	12000		2	<1	31	3	28	<1	<1	<1	<1			<1		<1		
Zinc	mg/kg	740000		1020	11	31	31	0	112	29	36	22			29		37		
Asbestos																			
Bulk Fibre Identification		Detect				1	1	0											
Asbestos in soil		Detect				27	1	26	NAD	NAD	NAD		NAD	NAD	NAD	NAD			
Asbestos Matrix (microscope)		Detect				27	1	26	-	-	-		-	-	-	-			
Asbestos in soil % composition (hand picking and weighing)	% w/w	0.001		0.006	0.006	1	1	0											
Bulk Fibre Identification Matrix (visual)		Detect				1	1	0											
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg	3200	304		<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	
Ali >C6-C8	mg/kg	7800	144		<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	
Ali >C8-C10	mg/kg	2000	78		<1	13	0	13	<1	<1	<1			<1			<1	<1	
Ali >C10-C12	mg/kg	9700	48		<1	13	0	13	<1	<1	<1			<1			<1	<1	
Ali >C12-C16	mg/kg	59000	24	2	<1	13	1	12	2	<1	<1			<1			<1	<1	
Ali >C16-C21	mg/kg			89	<1	13	6	7	4	<1	2			1			1	<1	
Ali >C21-C35	mg/kg			240	<1	13	8	5	8	<1	10			6			14	<1	
Ali >C16-C35 calculated	mg/kg	1000000		329	<1	13	8	5	12	<1	12			7			15	<1	
Total Aliphatics	mg/kg			329	<1	13	8	5	15	<1	12			7			16	<1	
Aro >C5-C7	mg/kg				<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	
Aro >C7-C8	mg/kg				<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	
Aro >C8-C10	mg/kg	3500	613	175	<2	13	2	11	3	<2	<2			<2			<2	<2	
Aro >C10-C12	mg/kg	16000	364	1	<1	13	1	12	<1	<1	<1			<1			<1	<1	
Aro >C12-C16	mg/kg	36000	169	576	<1	13	7	6	6	<1	3			2			3	<1	
Aro >C16-C21	mg/kg	28000		1710	<1	13	7	6	7	<1	3			2			3	<1	
Aro >C21-C35	mg/kg	28000		4050	<1	13	8	5	4	<1	3			3			8	<1	
Total Aromatics	mg/kg			6510	<2	13	8	5	20	<2	10			8			13	<2	
TPH (Ali & Aro)	mg/kg			6840	<2	13	8	5	35	<2	23			15			29	<2	
BTEX - Benzene	mg/kg	27			<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	
BTEX - Toluene	mg/kg	56000	869		<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	
BTEX - Ethyl Benzene	mg/kg	6000	518		<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	
BTEX - o Xylene	mg/kg	6600	478		<0.01	13	0	13	<0.01	<0.01	<0.01			<0.01			<0.01	<0.01	

Project name	Heywood Stores	
Project code	323173	
Client name	Telford Living	
Address		
NGR		
Land use	Commercial Scenario	
SOM	1%	
GAC version	2021_00	

									Lab sample ID	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	25/12859/42	25/12859/43	25/12859/44	25/12859/45
									Client sample ID	TP217	TP217	TP217	TP218	TP218	TP219	TP220	TP220	TP221	TP221
									Depth to top	0.2	0.5	0.3	0.5	0.8	0.15	0.3	0.7	0.9	1.8
									Depth to bottom	0.3	0.6	0.4	0.6	0.9	0.25	0.4	0.8	1	1.9
									Date sampled	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Metals and Inorganics																			
Arsenic	mg/kg	640		69	<1	31	29	2			6	20	12	8	44	26	2	24	<1
Cadmium	mg/kg	410			<1.0	31	0	31		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	8600	49	69	9	31	31	0		17		12	13	16	23	16	17	16	10
Copper	mg/kg	68000		103	4	31	31	0		16		25	17	13	57	33	16	31	4
Lead	mg/kg	2300		1030	7	31	31	0		10		33	19	11	63	51	11	41	7
Mercury	mg/kg	1120	15	0.41	<0.17	31	3	28		<0.17		0.41	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Nickel	mg/kg	980		51	6	31	31	0		13		18	17	9	41	25	13	24	6
Selenium	mg/kg	12000		2	<1	31	3	28		<1	<1	<1	<1		1	<1	<1	<1	<1
Zinc	mg/kg	740000		1020	11	31	31	0		27		34	42	19	71	80	26	40	11
Asbestos																			
Bulk Fibre Identification		Detect				1	1	0											
Asbestos in soil		Detect				27	1	26	NAD			NAD	NAD		NAD	NAD		NAD	
Asbestos Matrix (microscope)		Detect				27	1	26	-		-	-	-		-	-		-	
Asbestos in soil % composition (hand picking and weighing)	% w/w	0.001		0.006	0.006	1	1	0											
Bulk Fibre Identification Matrix (visual)		Detect				1	1	0											
Petroleum Hydrocarbons																			
Ali >C5-C6	mg/kg	3200	304		<0.01	13	0	13										<0.01	<0.01
Ali >C6-C8	mg/kg	7800	144		<0.01	13	0	13										<0.01	<0.01
Ali >C8-C10	mg/kg	2000	78		<1	13	0	13										<1	<1
Ali >C10-C12	mg/kg	9700	48		<1	13	0	13										<1	<1
Ali >C12-C16	mg/kg	59000	24	2	<1	13	1	12										<1	<1
Ali >C16-C21	mg/kg			89	<1	13	6	7										<1	<1
Ali >C21-C35	mg/kg			240	<1	13	8	5										2	<1
Ali >C16-C35 calculated	mg/kg	1000000		329	<1	13	8	5										2	<1
Total Aliphatics	mg/kg			329	<1	13	8	5										2	<1
Aro >C5-C7	mg/kg				<0.01	13	0	13										<0.01	<0.01
Aro >C7-C8	mg/kg				<0.01	13	0	13										<0.01	<0.01
Aro >C8-C10	mg/kg	3500	613	175	<2	13	2	11										<2	<2
Aro >C10-C12	mg/kg	16000	364	1	<1	13	1	12										<1	<1
Aro >C12-C16	mg/kg	36000	169	576	<1	13	7	6										2	<1
Aro >C16-C21	mg/kg	28000		1710	<1	13	7	6										2	<1
Aro >C21-C35	mg/kg	28000		4050	<1	13	8	5										3	<1
Total Aromatics	mg/kg			6510	<2	13	8	5										8	<2
TPH (Ali & Aro)	mg/kg			6840	<2	13	8	5										10	<2
BTEX - Benzene	mg/kg	27			<0.01	13	0	13										<0.01	<0.01
BTEX - Toluene	mg/kg	56000	869		<0.01	13	0	13										<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg	6000	518		<0.01	13	0	13										<0.01	<0.01
BTEX - o Xylene	mg/kg	6600	478		<0.01	13	0	13										<0.01	<0.01

									Lab sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	25/12859/8	25/12859/9	25/12859/10
									Client sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203	TP204	TP204	TP204
									Depth to top	0.3	0.9	0.2	0.7	0	0.3	1	0	0.3	0.8
									Depth to bottom	0.4	1	0.3	0.8	0.1	0.4	1.1	0.1	0.4	0.9
									Date sampled	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
BTEX - m & p Xylene	mg/kg	5900	576		<0.01	13	0	13	<0.01	<0.01									
Fuel oxygenates																			
MTBE	mg/kg	7500			<0.01	13	0	13	<0.01	<0.01									
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg	110000		4.03	<0.01	33	3	30	<0.01	<0.01	<0.01	<0.01		0.11	<0.01		<0.01		0.05
Acenaphthylene	mg/kg	110000		1.14	<0.01	33	3	30	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01		<0.01		0.01
Anthracene	mg/kg	520000		6.47	<0.02	33	3	30	<0.02	<0.02	<0.02	<0.02		0.15	<0.02		<0.02		0.12
Benzo(a)anthracene	mg/kg	170		37.6	<0.04	33	6	27	<0.04	<0.04	<0.04	<0.04		0.52	<0.04		<0.04		0.29
Benzo(a)pyrene	mg/kg	77		45.4	<0.04	33	6	27	<0.04	<0.04	<0.04	<0.04		0.54	<0.04		<0.04		0.31
Benzo(b)fluoranthene	mg/kg	44		58.2	<0.05	33	6	27	<0.05	<0.05	<0.05	<0.05		0.64	<0.05		<0.05		0.49
Benzo(ghi)perylene	mg/kg	3900		27.1	<0.05	33	5	28	<0.05	<0.05	<0.05	<0.05		0.32	<0.05		<0.05		0.19
Benzo(k)fluoranthene	mg/kg	1200		18.9	<0.07	33	3	30	<0.07	<0.07	<0.07	<0.07		0.23	<0.07		<0.07		0.15
Chrysene	mg/kg	350		49.9	<0.06	33	6	27	<0.06	<0.06	<0.06	<0.06		0.69	<0.06		<0.06		0.5
Dibenzo(ah)anthracene	mg/kg	3.5		6.7	<0.04	33	2	31	<0.04	<0.04	<0.04	<0.04		0.07	<0.04		<0.04	<0.04	
Fluoranthene	mg/kg	23000		68.4	<0.08	33	6	27	<0.08	<0.08	<0.08	<0.08		1.43	<0.08		<0.08		0.87
Fluorene	mg/kg	63000	31	1.75	<0.01	33	3	30	<0.01	<0.01	<0.01	<0.01		0.02	<0.01		<0.01		0.03
Indeno(123-cd)pyrene	mg/kg	500		25.6	<0.03	33	6	27	<0.03	<0.03	<0.03	<0.03		0.34	<0.03		<0.03		0.22
Naphthalene	mg/kg	1800	76	0.12	<0.03	33	4	29	0.1	<0.03	<0.03	<0.03		0.1	<0.03		<0.03		0.12
Phenanthrene	mg/kg	22000		27.8	<0.03	33	14	19	0.11	<0.03		0.05	<0.03		1.02	<0.03		<0.03	0.31
Pyrene	mg/kg	54000		70.1	<0.07	33	6	27	<0.07	<0.07	<0.07	<0.07		1.15	<0.07		<0.07		0.79
Total PAH-16MS	mg/kg			449	<0.08	33	10	23	0.21	<0.08	<0.08	<0.08		7.33	<0.08		<0.08		4.45
Polycyclic aromatic hydrocarbons (SVOC)																			
Hexachlorobutadiene	mg/kg				<0.1	1	0	1											
Volatile Organic Compounds (VOC)																			
1,1,1,2-Tetrachloroethane	mg/kg	110			<0.001	3	0	3											
1,1,1-Trichloroethane	mg/kg	700			<0.001	3	0	3											
1,1,2,2-Tetrachloroethane	mg/kg	270			<0.001	3	0	3											
1,1,2-Trichloroethane	mg/kg	89			<0.001	3	0	3											
1,1-Dichloroethane	mg/kg				<0.001	3	0	3											
1,1-Dichloroethene	mg/kg	24			<0.001	3	0	3											
1,1-Dichloropropene	mg/kg				<0.001	3	0	3											
1,2,3-Trichlorobenzene	mg/kg				<0.003	3	0	3											
1,2,3-Trichloropropane	mg/kg				<0.001	3	0	3											
1,2,4-Trichlorobenzene	mg/kg				<0.1	1	0	1											
1,2,4-Trichlorobenzene	mg/kg				<0.003	3	0	3											
1,2,4-Trimethylbenzene	mg/kg	330			<0.001	3	0	3											
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	3	0	3											
1,2-Dibromoethane	mg/kg				<0.001	3	0	3											
1,2-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,2-Dichlorobenzene	mg/kg				<0.001	3	0	3											
1,2-Dichloroethane	mg/kg	0.67			<0.002	3	0	3											
1,2-Dichloropropane	mg/kg	3			<0.001	3	0	3											
1,3,5-Trimethylbenzene	mg/kg	330			<0.001	3	0	3											
1,3-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,3-Dichlorobenzene	mg/kg				<0.001	3	0	3											
1,3-Dichloropropane	mg/kg				<0.001	3	0	3											
1,4-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,4-Dichlorobenzene	mg/kg				<0.001	3	0	3											
2,2-Dichloropropane	mg/kg				<0.001	3	0	3											
2-Chlorotoluene	mg/kg				<0.001	3	0	3											
4-Chlorotoluene	mg/kg				<0.001	3	0	3											

									Lab sample ID	25/12859/49	25/12859/11	25/12859/13	25/12859/15	25/12859/16	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22
									Client sample ID	TP204	TP205	TP206	TP207	TP207	TP208	TP209	TP209	TP210	TP210
									Depth to top	0	0.4	0.4	0.15	0.9	0.3	0.8	1.3	0.3	1.9
									Depth to bottom	0.1	0.5	0.5	0.3	1	0.4	0.9		0.4	2
									Date sampled	06/11/25	07/11/25	07/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
BTEX - m & p Xylene	mg/kg	5900	576		<0.01	13	0	13								<0.01	<0.01	<0.01	
Fuel oxygenates																			
MTBE	mg/kg	7500			<0.01	13	0	13								<0.01	<0.01	<0.01	
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg	110000		4.03	<0.01	33	3	30				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	4.03	<0.01
Acenaphthylene	mg/kg	110000		1.14	<0.01	33	3	30				<0.01	<0.01	<0.01	0.01	<0.01	<0.01	1.14	<0.01
Anthracene	mg/kg	520000		6.47	<0.02	33	3	30				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	6.47	<0.02
Benzo(a)anthracene	mg/kg	170		37.6	<0.04	33	6	27				0.08	<0.04	<0.04	0.08	<0.04	<0.04	37.6	0.06
Benzo(a)pyrene	mg/kg	77		45.4	<0.04	33	6	27				0.13	<0.04	<0.04	0.11	<0.04	<0.04	45.4	0.07
Benzo(b)fluoranthene	mg/kg	44		58.2	<0.05	33	6	27				0.15	<0.05	<0.05	0.15	<0.05	<0.05	58.2	0.07
Benzo(ghi)perylene	mg/kg	3900		27.1	<0.05	33	5	28				0.11	<0.05	<0.05	0.06	<0.05	<0.05	27.1	<0.05
Benzo(k)fluoranthene	mg/kg	1200		18.9	<0.07	33	3	30				<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	18.9	<0.07
Chrysene	mg/kg	350		49.9	<0.06	33	6	27				0.11	<0.06	<0.06	0.1	<0.06	<0.06	49.9	0.08
Dibenzo(ah)anthracene	mg/kg	3.5		6.7	<0.04	33	2	31				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	6.7	<0.04
Fluoranthene	mg/kg	23000		68.4	<0.08	33	6	27				0.13	<0.08	<0.08	0.1	<0.08	<0.08	68.4	0.12
Fluorene	mg/kg	63000	31	1.75	<0.01	33	3	30				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.75	<0.01
Indeno(123-cd)pyrene	mg/kg	500		25.6	<0.03	33	6	27				0.11	<0.03	<0.03	0.07	<0.03	<0.03	25.6	0.04
Naphthalene	mg/kg	1800	76	0.12	<0.03	33	4	29				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.30	<0.03
Phenanthrene	mg/kg	22000		27.8	<0.03	33	14	19				0.04	0.06	<0.03	<0.03	<0.03	<0.03	27.8	0.07
Pyrene	mg/kg	54000		70.1	<0.07	33	6	27				0.14	<0.07	<0.07	0.24	<0.07	<0.07	70.1	0.13
Total PAH-16MS	mg/kg			449	<0.08	33	10	23				1	<0.08	<0.08	0.92	<0.08	<0.08	449	0.64
Polycyclic aromatic hydrocarbons (SVOC)																			
Hexachlorobutadiene	mg/kg				<0.1	1	0	1											
Volatile Organic Compounds (VOC)																			
1,1,1,2-Tetrachloroethane	mg/kg	110			<0.001	3	0	3											
1,1,1-Trichloroethane	mg/kg	700			<0.001	3	0	3											
1,1,2,2-Tetrachloroethane	mg/kg	270			<0.001	3	0	3											
1,1,2-Trichloroethane	mg/kg	89			<0.001	3	0	3											
1,1-Dichloroethane	mg/kg				<0.001	3	0	3											
1,1-Dichloroethene	mg/kg	24			<0.001	3	0	3											
1,1-Dichloropropene	mg/kg				<0.001	3	0	3											
1,2,3-Trichlorobenzene	mg/kg				<0.003	3	0	3											
1,2,3-Trichloropropane	mg/kg				<0.001	3	0	3											
1,2,4-Trichlorobenzene	mg/kg				<0.1	1	0	1											
1,2,4-Trichlorobenzene	mg/kg				<0.003	3	0	3											
1,2,4-Trimethylbenzene	mg/kg	330			<0.001	3	0	3											
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	3	0	3											
1,2-Dibromoethane	mg/kg				<0.001	3	0	3											
1,2-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,2-Dichlorobenzene	mg/kg				<0.001	3	0	3											
1,2-Dichloroethane	mg/kg	0.67			<0.002	3	0	3											
1,2-Dichloropropane	mg/kg	3			<0.001	3	0	3											
1,3,5-Trimethylbenzene	mg/kg	330			<0.001	3	0	3											
1,3-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,3-Dichlorobenzene	mg/kg				<0.001	3	0	3											
1,3-Dichloropropane	mg/kg				<0.001	3	0	3											
1,4-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,4-Dichlorobenzene	mg/kg				<0.001	3	0	3											
2,2-Dichloropropane	mg/kg				<0.001	3	0	3											
2-Chlorotoluene	mg/kg				<0.001	3	0	3											
4-Chlorotoluene	mg/kg				<0.001	3	0	3											

									Lab sample ID	25/12859/23	25/12859/25	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	25/12859/34
									Client sample ID	TP211	TP212	TP213	TP213	TP214	TP215	TP215	TP216	TP216	TP216
									Depth to top	0.15	0.5	0.2	0.6	0.4	0.7	1.8	0.6	1	1.8
									Depth to bottom		0.6	0.3	0.7	0.5	0.8	1.9	0.7	1.1	1.9
									Date sampled	04/11/25	04/11/25	04/11/25	04/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
BTEX - m & p Xylene	mg/kg	5900	576		<0.01	13	0	13	<0.01	<0.01	<0.01				<0.01			<0.01	<0.01
Fuel oxygenates																			
MTBE	mg/kg	7500			<0.01	13	0	13	<0.01	<0.01	<0.01				<0.01			<0.01	<0.01
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg	110000		4.03	<0.01	33	3	30	<0.01	<0.01	<0.01	<0.01			<0.01	<0.01		<0.01	<0.01
Acenaphthylene	mg/kg	110000		1.14	<0.01	33	3	30	<0.01	<0.01	<0.01	<0.01			<0.01	<0.01		<0.01	<0.01
Anthracene	mg/kg	520000		6.47	<0.02	33	3	30	<0.02	<0.02	<0.02	<0.02			<0.02	<0.02		<0.02	<0.02
Benzo(a)anthracene	mg/kg	170		37.6	<0.04	33	6	27	<0.04	<0.04	<0.04	<0.04			<0.04	<0.04		<0.04	<0.04
Benzo(a)pyrene	mg/kg	77		45.4	<0.04	33	6	27	<0.04	<0.04	<0.04	<0.04			<0.04	<0.04		<0.04	<0.04
Benzo(b)fluoranthene	mg/kg	44		58.2	<0.05	33	6	27	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05		<0.05	<0.05
Benzo(ghi)perylene	mg/kg	3900		27.1	<0.05	33	5	28	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05		<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	1200		18.9	<0.07	33	3	30	<0.07	<0.07	<0.07	<0.07			<0.07	<0.07		<0.07	<0.07
Chrysene	mg/kg	350		49.9	<0.06	33	6	27	<0.06	<0.06	<0.06	<0.06			<0.06	<0.06		<0.06	<0.06
Dibenzo(ah)anthracene	mg/kg	3.5		6.7	<0.04	33	2	31	<0.04	<0.04	<0.04	<0.04			<0.04	<0.04		<0.04	<0.04
Fluoranthene	mg/kg	23000		68.4	<0.08	33	6	27	<0.08	<0.08	<0.08	<0.08			<0.08	<0.08		<0.08	<0.08
Fluorene	mg/kg	63000	31	1.75	<0.01	33	3	30	<0.01	<0.01	<0.01	<0.01			<0.01	<0.01		<0.01	<0.01
Indeno(123-cd)pyrene	mg/kg	500		25.6	<0.03	33	6	27	<0.03	<0.03	<0.03	<0.03			<0.03	<0.03		<0.03	<0.03
Naphthalene	mg/kg	1800	76	0.12	<0.03	33	4	29	<0.03	<0.03	<0.03	<0.03			<0.03	<0.03		<0.03	<0.03
Phenanthrene	mg/kg	22000		27.8	<0.03	33	14	19	0.11	<0.03		0.09	<0.03		<0.03	0.06		<0.03	<0.03
Pyrene	mg/kg	54000		70.1	<0.07	33	6	27	<0.07	<0.07	<0.07	<0.07			<0.07	<0.07		<0.07	<0.07
Total PAH-16MS	mg/kg			449	<0.08	33	10	23	0.11	<0.08		0.09	<0.08		<0.08	<0.08		<0.08	<0.08
Polycyclic aromatic hydrocarbons (SVOC)																			
Hexachlorobutadiene	mg/kg				<0.1	1	0	1								<0.1			
Volatile Organic Compounds (VOC)																			
1,1,1,2-Tetrachloroethane	mg/kg	110			<0.001	3	0	3								<0.001		<0.001	<0.001
1,1,1-Trichloroethane	mg/kg	700			<0.001	3	0	3								<0.001		<0.001	<0.001
1,1,2,2-Tetrachloroethane	mg/kg	270			<0.001	3	0	3								<0.001		<0.001	<0.001
1,1,2-Trichloroethane	mg/kg	89			<0.001	3	0	3								<0.001		<0.001	<0.001
1,1-Dichloroethane	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
1,1-Dichloroethene	mg/kg	24			<0.001	3	0	3								<0.001		<0.001	<0.001
1,1-Dichloropropene	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
1,2,3-Trichlorobenzene	mg/kg				<0.003	3	0	3								<0.003		<0.003	<0.003
1,2,3-Trichloropropane	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
1,2,4-Trichlorobenzene	mg/kg				<0.1	1	0	1								<0.1			
1,2,4-Trichlorobenzene	mg/kg				<0.003	3	0	3								<0.003		<0.003	<0.003
1,2,4-Trimethylbenzene	mg/kg	330			<0.001	3	0	3								<0.001		<0.001	<0.001
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	3	0	3								<0.002		<0.002	<0.002
1,2-Dibromoethane	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
1,2-Dichlorobenzene	mg/kg				<0.1	1	0	1								<0.1			
1,2-Dichlorobenzene	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
1,2-Dichloroethane	mg/kg	0.67			<0.002	3	0	3								<0.002		<0.002	<0.002
1,2-Dichloropropane	mg/kg	3			<0.001	3	0	3								<0.001		<0.001	<0.001
1,3,5-Trimethylbenzene	mg/kg	330			<0.001	3	0	3								<0.001		<0.001	<0.001
1,3-Dichlorobenzene	mg/kg				<0.1	1	0	1								<0.1			
1,3-Dichlorobenzene	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
1,3-Dichloropropane	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
1,4-Dichlorobenzene	mg/kg				<0.1	1	0	1								<0.1			
1,4-Dichlorobenzene	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
2,2-Dichloropropane	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
2-Chlorotoluene	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001
4-Chlorotoluene	mg/kg				<0.001	3	0	3								<0.001		<0.001	<0.001

									Lab sample ID	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	25/12859/42	25/12859/43	25/12859/44	25/12859/45
									Client sample ID	TP217	TP217	TP217	TP218	TP218	TP219	TP220	TP220	TP221	TP221
									Depth to top	0.2	0.5	0.3	0.5	0.8	0.15	0.3	0.7	0.9	1.8
									Depth to bottom	0.3	0.6	0.4	0.6	0.9	0.25	0.4	0.8	1	1.9
									Date sampled	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
BTEX - m & p Xylene	mg/kg	5900	576		<0.01	13	0	13										<0.01	<0.01
Fuel oxygenates																			
MTBE	mg/kg	7500			<0.01	13	0	13										<0.01	<0.01
Polycyclic aromatic hydrocarbons																			
Acenaphthene	mg/kg	110000		4.03	<0.01	33	3	30		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	mg/kg	110000		1.14	<0.01	33	3	30		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	mg/kg	520000		6.47	<0.02	33	3	30		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	mg/kg	170		37.6	<0.04	33	6	27		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Benzo(a)pyrene	mg/kg	77		45.4	<0.04	33	6	27		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Benzo(b)fluoranthene	mg/kg	44		58.2	<0.05	33	6	27		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	mg/kg	3900		27.1	<0.05	33	5	28		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	1200		18.9	<0.07	33	3	30		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Chrysene	mg/kg	350		49.9	<0.06	33	6	27		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Dibenzo(ah)anthracene	mg/kg	3.5		6.7	<0.04	33	2	31		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Fluoranthene	mg/kg	23000		68.4	<0.08	33	6	27		<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Fluorene	mg/kg	63000	31	1.75	<0.01	33	3	30		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(123-cd)pyrene	mg/kg	500		25.6	<0.03	33	6	27		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Naphthalene	mg/kg	1800	76	0.12	<0.03	33	4	29		<0.03		0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Phenanthrene	mg/kg	22000		27.8	<0.03	33	14	19		<0.03		0.08	0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03
Pyrene	mg/kg	54000		70.1	<0.07	33	6	27		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Total PAH-16MS	mg/kg			449	<0.08	33	10	23		<0.08		0.14	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Polycyclic aromatic hydrocarbons (SVOC)																			
Hexachlorobutadiene	mg/kg				<0.1	1	0	1											
Volatile Organic Compounds (VOC)																			
1,1,1,2-Tetrachloroethane	mg/kg	110			<0.001	3	0	3											
1,1,1-Trichloroethane	mg/kg	700			<0.001	3	0	3											
1,1,2,2-Tetrachloroethane	mg/kg	270			<0.001	3	0	3											
1,1,2-Trichloroethane	mg/kg	89			<0.001	3	0	3											
1,1-Dichloroethane	mg/kg				<0.001	3	0	3											
1,1-Dichloroethene	mg/kg	24			<0.001	3	0	3											
1,1-Dichloropropene	mg/kg				<0.001	3	0	3											
1,2,3-Trichlorobenzene	mg/kg				<0.003	3	0	3											
1,2,3-Trichloropropane	mg/kg				<0.001	3	0	3											
1,2,4-Trichlorobenzene	mg/kg				<0.1	1	0	1											
1,2,4-Trichlorobenzene	mg/kg				<0.003	3	0	3											
1,2,4-Trimethylbenzene	mg/kg	330			<0.001	3	0	3											
1,2-Dibromo-3-chloropropane	mg/kg				<0.002	3	0	3											
1,2-Dibromoethane	mg/kg				<0.001	3	0	3											
1,2-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,2-Dichlorobenzene	mg/kg				<0.001	3	0	3											
1,2-Dichloroethane	mg/kg	0.67			<0.002	3	0	3											
1,2-Dichloropropane	mg/kg	3			<0.001	3	0	3											
1,3,5-Trimethylbenzene	mg/kg	330			<0.001	3	0	3											
1,3-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,3-Dichlorobenzene	mg/kg				<0.001	3	0	3											
1,3-Dichloropropane	mg/kg				<0.001	3	0	3											
1,4-Dichlorobenzene	mg/kg				<0.1	1	0	1											
1,4-Dichlorobenzene	mg/kg				<0.001	3	0	3											
2,2-Dichloropropane	mg/kg				<0.001	3	0	3											
2-Chlorotoluene	mg/kg				<0.001	3	0	3											
4-Chlorotoluene	mg/kg				<0.001	3	0	3											

									Lab sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	25/12859/8	25/12859/9	25/12859/10
									Client sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203	TP204	TP204	TP204
									Depth to top	0.3	0.9	0.2	0.7	0	0.3	1	0	0.3	0.8
									Depth to bottom	0.4	1	0.3	0.8	0.1	0.4	1.1	0.1	0.4	0.9
									Date sampled	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
4-Isopropyltoluene	mg/kg				<0.001	3	0	3											
Benzene	mg/kg	27			<0.001	1	0	1											
Bromobenzene	mg/kg				<0.001	3	0	3											
Bromochloromethane	mg/kg				<0.005	3	0	3											
Bromodichloromethane	mg/kg				<0.01	3	0	3											
Bromoform	mg/kg				<0.003	3	0	3											
Bromomethane	mg/kg				<0.001	3	0	3											
Carbon Disulphide	mg/kg				<0.001	3	0	3											
Carbon Tetrachloride	mg/kg	2.9			<0.001	3	0	3											
Chlorobenzene	mg/kg				<0.001	3	0	3											
Chloroethane	mg/kg	901			<0.001	3	0	3											
Chloroform	mg/kg				<0.001	3	0	3											
Chloromethane	mg/kg	1			<0.01	3	0	3											
cis 1,2-Dichloroethene	mg/kg	14			<0.001	3	0	3											
cis 1,3-Dichloropropene	mg/kg				<0.001	3	0	3											
Dibromochloromethane	mg/kg				<0.003	3	0	3											
Dibromomethane	mg/kg				<0.001	3	0	3											
Dichlorodifluoromethane	mg/kg				<0.001	3	0	3											
Dichloromethane	mg/kg	257			<0.005	3	0	3											
Ethylbenzene	mg/kg	6000	518		<0.001	1	0	1											
Hexachlorobutadiene	mg/kg				<0.001	3	0	3											
Isopropylbenzene	mg/kg				<0.001	3	0	3											
m & p Xylene	mg/kg	5900	576		<0.001	1	0	1											
n-Butylbenzene	mg/kg				<0.001	3	0	3											
n-Propylbenzene	mg/kg				<0.001	3	0	3											
o-Xylene	mg/kg	6600	478		<0.001	1	0	1											
sec-Butylbenzene	mg/kg				<0.001	3	0	3											
Styrene	mg/kg				<0.001	3	0	3											
tert-Butylbenzene	mg/kg				<0.002	3	0	3											
Tetrachloroethene	mg/kg	24			<0.001	3	0	3											
Toluene	mg/kg	56000	869		<0.001	1	0	1											
trans 1,2-Dichloroethene	mg/kg	21			<0.001	3	0	3											
trans 1,3-Dichloropropene	mg/kg				<0.001	3	0	3											
Trichloroethene	mg/kg	0.7			<0.001	3	0	3											
Trichlorofluoromethane	mg/kg				<0.001	3	0	3											
Vinyl Chloride	mg/kg	1.1			<0.001	3	0	3											
Semi-Volatile Organic Compounds (SVOC)																			
2,4,5-Trichlorophenol	mg/kg				<0.1	1	0	1											
2,4,6-Trichlorophenol	mg/kg				<0.1	1	0	1											
2,4-Dichlorophenol	mg/kg				<0.1	1	0	1											
2,4-Dimethylphenol	mg/kg				<0.1	1	0	1											
2,4-Dinitrotoluene	mg/kg				<0.1	1	0	1											
2,6-Dinitrotoluene	mg/kg				<0.1	1	0	1											
2-Chloronaphthalene	mg/kg	370	114		<0.1	1	0	1											
2-Chlorophenol	mg/kg				<0.1	1	0	1											
2-Methylnaphthalene	mg/kg				<0.1	1	0	1											
2-Methylphenol	mg/kg				<0.1	1	0	1											
2-Nitrophenol	mg/kg				<0.1	1	0	1											
4-Chloro-3-methylphenol	mg/kg				<0.1	1	0	1											
4-Methylphenol	mg/kg				<0.1	1	0	1											
4-Nitrophenol	mg/kg				<0.2	1	0	1											

										Lab sample ID	25/12859/49	25/12859/11	25/12859/13	25/12859/15	25/12859/16	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22
										Client sample ID	TP204	TP205	TP206	TP207	TP207	TP208	TP209	TP209	TP210	TP210
										Depth to top	0	0.4	0.4	0.15	0.9	0.3	0.8	1.3	0.3	1.9
										Depth to bottom	0.1	0.5	0.5	0.3	1	0.4	0.9		0.4	2
										Date sampled	06/11/25	07/11/25	07/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects												
4-Isopropyltoluene	mg/kg				<0.001	3	0	3												
Benzene	mg/kg	27			<0.001	1	0	1												
Bromobenzene	mg/kg				<0.001	3	0	3												
Bromochloromethane	mg/kg				<0.005	3	0	3												
Bromodichloromethane	mg/kg				<0.01	3	0	3												
Bromoform	mg/kg				<0.003	3	0	3												
Bromomethane	mg/kg				<0.001	3	0	3												
Carbon Disulphide	mg/kg				<0.001	3	0	3												
Carbon Tetrachloride	mg/kg	2.9			<0.001	3	0	3												
Chlorobenzene	mg/kg				<0.001	3	0	3												
Chloroethane	mg/kg	901			<0.001	3	0	3												
Chloroform	mg/kg				<0.001	3	0	3												
Chloromethane	mg/kg	1			<0.01	3	0	3												
cis 1,2-Dichloroethene	mg/kg	14			<0.001	3	0	3												
cis 1,3-Dichloropropene	mg/kg				<0.001	3	0	3												
Dibromochloromethane	mg/kg				<0.003	3	0	3												
Dibromomethane	mg/kg				<0.001	3	0	3												
Dichlorodifluoromethane	mg/kg				<0.001	3	0	3												
Dichloromethane	mg/kg	257			<0.005	3	0	3												
Ethylbenzene	mg/kg	6000	518		<0.001	1	0	1												
Hexachlorobutadiene	mg/kg				<0.001	3	0	3												
Isopropylbenzene	mg/kg				<0.001	3	0	3												
m & p Xylene	mg/kg	5900	576		<0.001	1	0	1												
n-Butylbenzene	mg/kg				<0.001	3	0	3												
n-Propylbenzene	mg/kg				<0.001	3	0	3												
o-Xylene	mg/kg	6600	478		<0.001	1	0	1												
sec-Butylbenzene	mg/kg				<0.001	3	0	3												
Styrene	mg/kg				<0.001	3	0	3												
tert-Butylbenzene	mg/kg				<0.002	3	0	3												
Tetrachloroethene	mg/kg	24			<0.001	3	0	3												
Toluene	mg/kg	56000	869		<0.001	1	0	1												
trans 1,2-Dichloroethene	mg/kg	21			<0.001	3	0	3												
trans 1,3-Dichloropropene	mg/kg				<0.001	3	0	3												
Trichloroethene	mg/kg	0.7			<0.001	3	0	3												
Trichlorofluoromethane	mg/kg				<0.001	3	0	3												
Vinyl Chloride	mg/kg	1.1			<0.001	3	0	3												
Semi-Volatile Organic Compounds (SVOC)																				
2,4,5-Trichlorophenol	mg/kg				<0.1	1	0	1												
2,4,6-Trichlorophenol	mg/kg				<0.1	1	0	1												
2,4-Dichlorophenol	mg/kg				<0.1	1	0	1												
2,4-Dimethylphenol	mg/kg				<0.1	1	0	1												
2,4-Dinitrotoluene	mg/kg				<0.1	1	0	1												
2,6-Dinitrotoluene	mg/kg				<0.1	1	0	1												
2-Chloronaphthalene	mg/kg	370	114		<0.1	1	0	1												
2-Chlorophenol	mg/kg				<0.1	1	0	1												
2-Methylnaphthalene	mg/kg				<0.1	1	0	1												
2-Methylphenol	mg/kg				<0.1	1	0	1												
2-Nitrophenol	mg/kg				<0.1	1	0	1												
4-Chloro-3-methylphenol	mg/kg				<0.1	1	0	1												
4-Methylphenol	mg/kg				<0.1	1	0	1												
4-Nitrophenol	mg/kg				<0.2	1	0	1												

										Lab sample ID	25/12859/23	25/12859/25	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	25/12859/34
										Client sample ID	TP211	TP212	TP213	TP213	TP214	TP215	TP215	TP216	TP216	TP216
										Depth to top	0.15	0.5	0.2	0.6	0.4	0.7	1.8	0.6	1	1.8
										Depth to bottom		0.6	0.3	0.7	0.5	0.8	1.9	0.7	1.1	1.9
										Date sampled	04/11/25	04/11/25	04/11/25	04/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects												
4-Isopropyltoluene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Benzene	mg/kg	27			<0.001	1	0	1									<0.001			
Bromobenzene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Bromochloromethane	mg/kg				<0.005	3	0	3									<0.005		<0.005	<0.005
Bromodichloromethane	mg/kg				<0.01	3	0	3									<0.01		<0.01	<0.01
Bromoform	mg/kg				<0.003	3	0	3									<0.003		<0.003	<0.003
Bromomethane	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Carbon Disulphide	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Carbon Tetrachloride	mg/kg	2.9			<0.001	3	0	3									<0.001		<0.001	<0.001
Chlorobenzene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Chloroethane	mg/kg	901			<0.001	3	0	3									<0.001		<0.001	<0.001
Chloroform	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Chloromethane	mg/kg	1			<0.01	3	0	3									<0.01		<0.01	<0.01
cis 1,2-Dichloroethene	mg/kg	14			<0.001	3	0	3									<0.001		<0.001	<0.001
cis 1,3-Dichloropropene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Dibromochloromethane	mg/kg				<0.003	3	0	3									<0.003		<0.003	<0.003
Dibromomethane	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Dichlorodifluoromethane	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Dichloromethane	mg/kg	257			<0.005	3	0	3									<0.005		<0.005	<0.005
Ethylbenzene	mg/kg	6000	518		<0.001	1	0	1									<0.001			
Hexachlorobutadiene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Isopropylbenzene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
m & p Xylene	mg/kg	5900	576		<0.001	1	0	1									<0.001			
n-Butylbenzene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
n-Propylbenzene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
o-Xylene	mg/kg	6600	478		<0.001	1	0	1									<0.001			
sec-Butylbenzene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Styrene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
tert-Butylbenzene	mg/kg				<0.002	3	0	3									<0.002		<0.002	<0.002
Tetrachloroethene	mg/kg	24			<0.001	3	0	3									<0.001		<0.001	<0.001
Toluene	mg/kg	56000	869		<0.001	1	0	1									<0.001			
trans 1,2-Dichloroethene	mg/kg	21			<0.001	3	0	3									<0.001		<0.001	<0.001
trans 1,3-Dichloropropene	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Trichloroethene	mg/kg	0.7			<0.001	3	0	3									<0.001		<0.001	<0.001
Trichlorofluoromethane	mg/kg				<0.001	3	0	3									<0.001		<0.001	<0.001
Vinyl Chloride	mg/kg	1.1			<0.001	3	0	3									<0.001		<0.001	<0.001
Semi-Volatile Organic Compounds (SVOC)																				
2,4,5-Trichlorophenol	mg/kg				<0.1	1	0	1									<0.1			
2,4,6-Trichlorophenol	mg/kg				<0.1	1	0	1									<0.1			
2,4-Dichlorophenol	mg/kg				<0.1	1	0	1									<0.1			
2,4-Dimethylphenol	mg/kg				<0.1	1	0	1									<0.1			
2,4-Dinitrotoluene	mg/kg				<0.1	1	0	1									<0.1			
2,6-Dinitrotoluene	mg/kg				<0.1	1	0	1									<0.1			
2-Chloronaphthalene	mg/kg	370	114		<0.1	1	0	1									<0.1			
2-Chlorophenol	mg/kg				<0.1	1	0	1									<0.1			
2-Methylnaphthalene	mg/kg				<0.1	1	0	1									<0.1			
2-Methylphenol	mg/kg				<0.1	1	0	1									<0.1			
2-Nitrophenol	mg/kg				<0.1	1	0	1									<0.1			
4-Chloro-3-methylphenol	mg/kg				<0.1	1	0	1									<0.1			
4-Methylphenol	mg/kg				<0.1	1	0	1									<0.1			
4-Nitrophenol	mg/kg				<0.2	1	0	1									<0.2			

										Lab sample ID	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	25/12859/42	25/12859/43	25/12859/44	25/12859/45
										Client sample ID	TP217	TP217	TP217	TP218	TP218	TP219	TP220	TP220	TP221	TP221
										Depth to top	0.2	0.5	0.3	0.5	0.8	0.15	0.3	0.7	0.9	1.8
										Depth to bottom	0.3	0.6	0.4	0.6	0.9	0.25	0.4	0.8	1	1.9
										Date sampled	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects												
4-Isopropyltoluene	mg/kg				<0.001	3	0	3												
Benzene	mg/kg	27			<0.001	1	0	1												
Bromobenzene	mg/kg				<0.001	3	0	3												
Bromochloromethane	mg/kg				<0.005	3	0	3												
Bromodichloromethane	mg/kg				<0.01	3	0	3												
Bromoform	mg/kg				<0.003	3	0	3												
Bromomethane	mg/kg				<0.001	3	0	3												
Carbon Disulphide	mg/kg				<0.001	3	0	3												
Carbon Tetrachloride	mg/kg	2.9			<0.001	3	0	3												
Chlorobenzene	mg/kg				<0.001	3	0	3												
Chloroethane	mg/kg	901			<0.001	3	0	3												
Chloroform	mg/kg				<0.001	3	0	3												
Chloromethane	mg/kg	1			<0.01	3	0	3												
cis 1,2-Dichloroethene	mg/kg	14			<0.001	3	0	3												
cis 1,3-Dichloropropene	mg/kg				<0.001	3	0	3												
Dibromochloromethane	mg/kg				<0.003	3	0	3												
Dibromomethane	mg/kg				<0.001	3	0	3												
Dichlorodifluoromethane	mg/kg				<0.001	3	0	3												
Dichloromethane	mg/kg	257			<0.005	3	0	3												
Ethylbenzene	mg/kg	6000	518		<0.001	1	0	1												
Hexachlorobutadiene	mg/kg				<0.001	3	0	3												
Isopropylbenzene	mg/kg				<0.001	3	0	3												
m & p Xylene	mg/kg	5900	576		<0.001	1	0	1												
n-Butylbenzene	mg/kg				<0.001	3	0	3												
n-Propylbenzene	mg/kg				<0.001	3	0	3												
o-Xylene	mg/kg	6600	478		<0.001	1	0	1												
sec-Butylbenzene	mg/kg				<0.001	3	0	3												
Styrene	mg/kg				<0.001	3	0	3												
tert-Butylbenzene	mg/kg				<0.002	3	0	3												
Tetrachloroethene	mg/kg	24			<0.001	3	0	3												
Toluene	mg/kg	56000	869		<0.001	1	0	1												
trans 1,2-Dichloroethene	mg/kg	21			<0.001	3	0	3												
trans 1,3-Dichloropropene	mg/kg				<0.001	3	0	3												
Trichloroethene	mg/kg	0.7			<0.001	3	0	3												
Trichlorofluoromethane	mg/kg				<0.001	3	0	3												
Vinyl Chloride	mg/kg	1.1			<0.001	3	0	3												
Semi-Volatile Organic Compounds (SVOC)																				
2,4,5-Trichlorophenol	mg/kg				<0.1	1	0	1												
2,4,6-Trichlorophenol	mg/kg				<0.1	1	0	1												
2,4-Dichlorophenol	mg/kg				<0.1	1	0	1												
2,4-Dimethylphenol	mg/kg				<0.1	1	0	1												
2,4-Dinitrotoluene	mg/kg				<0.1	1	0	1												
2,6-Dinitrotoluene	mg/kg				<0.1	1	0	1												
2-Chloronaphthalene	mg/kg	370	114		<0.1	1	0	1												
2-Chlorophenol	mg/kg				<0.1	1	0	1												
2-Methylnaphthalene	mg/kg				<0.1	1	0	1												
2-Methylphenol	mg/kg				<0.1	1	0	1												
2-Nitrophenol	mg/kg				<0.1	1	0	1												
4-Chloro-3-methylphenol	mg/kg				<0.1	1	0	1												
4-Methylphenol	mg/kg				<0.1	1	0	1												
4-Nitrophenol	mg/kg				<0.2	1	0	1												

									Lab sample ID	25/12859/1	25/12859/2	25/12859/3	25/12859/4	25/12859/5	25/12859/6	25/12859/7	25/12859/8	25/12859/9	25/12859/10
									Client sample ID	TP201	TP201	TP202	TP202	TP203	TP203	TP203	TP204	TP204	TP204
									Depth to top	0.3	0.9	0.2	0.7	0	0.3	1	0	0.3	0.8
									Depth to bottom	0.4	1	0.3	0.8	0.1	0.4	1.1	0.1	0.4	0.9
									Date sampled	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Bis(2-chloroethoxy)methane	mg/kg				<0.1	1	0	1											
Bis(2-chloroethyl)ether	mg/kg				<0.1	1	0	1											
Bis(2-chloroisopropyl)ether	mg/kg				<0.1	1	0	1											
Bis(2-ethylhexyl)phthalate	mg/kg				<0.5	1	0	1											
Butylbenzyl phthalate	mg/kg				<0.1	1	0	1											
Carbazole	mg/kg				<0.1	1	0	1											
Dibenzofuran	mg/kg				<0.1	1	0	1											
Diethyl phthalate	mg/kg				<0.1	1	0	1											
Dimethyl phthalate	mg/kg				<0.1	1	0	1											
Hexachlorobenzene	mg/kg				<0.1	1	0	1											
Hexachloroethane	mg/kg	21	8		<0.1	1	0	1											
Isophorone	mg/kg				<0.1	1	0	1											
n-Dibutylphthalate	mg/kg				<0.1	1	0	1											
n-Dioctylphthalate	mg/kg				<0.5	1	0	1											
Nitrobenzene	mg/kg				<0.1	1	0	1											
n-Nitroso-n-dipropylamine	mg/kg				<0.1	1	0	1											
Pentachlorophenol	mg/kg				<0.1	1	0	1											
Perylene	mg/kg				<0.1	1	0	1											
Phenols																			
Phenol	mg/kg	440			<0.1	1	0	1											
PCBs																			
PCB BZ 105	mg/kg				<0.005	8	0	8											
PCB BZ 114	mg/kg				<0.005	8	0	8											
PCB BZ 118	mg/kg				<0.007	8	0	8											
PCB BZ 123	mg/kg				<0.005	8	0	8											
PCB BZ 126	mg/kg				<0.005	8	0	8											
PCB BZ 156	mg/kg				<0.005	8	0	8											
PCB BZ 157	mg/kg				<0.005	8	0	8											
PCB BZ 167	mg/kg				<0.005	8	0	8											
PCB BZ 169	mg/kg				<0.005	8	0	8											
PCB BZ 189	mg/kg				<0.005	8	0	8											
PCB BZ 77	mg/kg				<0.005	8	0	8											
PCB BZ 81	mg/kg				<0.005	8	0	8											
Other analytes																			
% Stones >10mm	% w/w			32.2	<0.1	33	5	28	<0.1	<0.1	<0.1	<0.1		11.7	<0.1		<0.1	<0.1	
4-Bromophenyl phenyl ether	mg/kg				<0.1	1	0	1											
pH	pH			10.92	4.59	31	31	0	9.76	7.94	8.52	7.77		9.76	6.23		7.37	8.53	
Total Organic Carbon	% w/w			14.1	14.1	1	1	0	14.1										
Converted to SOM (x / 0.58)	% w/w			24.31034	24.31034	1	1	0	24.3103448										
Total Speciated PCB-WHO12	mg/kg				<0.007	8	0	8											

									Lab sample ID	25/12859/49	25/12859/11	25/12859/13	25/12859/15	25/12859/16	25/12859/17	25/12859/19	25/12859/20	25/12859/21	25/12859/22
									Client sample ID	TP204	TP205	TP206	TP207	TP207	TP208	TP209	TP209	TP210	TP210
									Depth to top	0	0.4	0.4	0.15	0.9	0.3	0.8	1.3	0.3	1.9
									Depth to bottom	0.1	0.5	0.5	0.3	1	0.4	0.9		0.4	2
									Date sampled	06/11/25	07/11/25	07/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25	04/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Bis(2-chloroethoxy)methane	mg/kg				<0.1	1	0	1											
Bis(2-chloroethyl)ether	mg/kg				<0.1	1	0	1											
Bis(2-chloroisopropyl)ether	mg/kg				<0.1	1	0	1											
Bis(2-ethylhexyl)phthalate	mg/kg				<0.5	1	0	1											
Butylbenzyl phthalate	mg/kg				<0.1	1	0	1											
Carbazole	mg/kg				<0.1	1	0	1											
Dibenzofuran	mg/kg				<0.1	1	0	1											
Diethyl phthalate	mg/kg				<0.1	1	0	1											
Dimethyl phthalate	mg/kg				<0.1	1	0	1											
Hexachlorobenzene	mg/kg				<0.1	1	0	1											
Hexachloroethane	mg/kg	21		8	<0.1	1	0	1											
Isophorone	mg/kg				<0.1	1	0	1											
n-Dibutylphthalate	mg/kg				<0.1	1	0	1											
n-Dioctylphthalate	mg/kg				<0.5	1	0	1											
Nitrobenzene	mg/kg				<0.1	1	0	1											
n-Nitroso-n-dipropylamine	mg/kg				<0.1	1	0	1											
Pentachlorophenol	mg/kg				<0.1	1	0	1											
Perylene	mg/kg				<0.1	1	0	1											
Phenols																			
Phenol	mg/kg	440			<0.1	1	0	1											
PCBs																			
PCB BZ 105	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 114	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 118	mg/kg				<0.007	8	0	8								<0.007	<0.007	<0.007	<0.007
PCB BZ 123	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 126	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 156	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 157	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 167	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 169	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 189	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 77	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
PCB BZ 81	mg/kg				<0.005	8	0	8								<0.005	<0.005	<0.005	<0.005
Other analytes																			
% Stones >10mm	% w/w			32.2	<0.1	33	5	28				<0.1	<0.1	<0.1	<0.1	32.2	<0.1	<0.1	<0.1
4-Bromophenyl phenyl ether	mg/kg				<0.1	1	0	1											
pH	pH			10.92	4.59	31	31	0				9.73	8.09	5.67	6.51	8.29	5.31	8.24	7.23
Total Organic Carbon	% w/w			14.1	14.1	1	1	0											
Converted to SOM (x / 0.58)	% w/w			24.31034	24.31034	1	1	0											
Total Speciated PCB-WHO12	mg/kg				<0.007	8	0	8								<0.007	<0.007	<0.007	<0.007

									Lab sample ID	25/12859/23	25/12859/25	25/12859/26	25/12859/27	25/12859/28	25/12859/30	25/12859/31	25/12859/32	25/12859/33	25/12859/34
									Client sample ID	TP211	TP212	TP213	TP213	TP214	TP215	TP215	TP216	TP216	TP216
									Depth to top	0.15	0.5	0.2	0.6	0.4	0.7	1.8	0.6	1	1.8
									Depth to bottom		0.6	0.3	0.7	0.5	0.8	1.9	0.7	1.1	1.9
									Date sampled	04/11/25	04/11/25	04/11/25	04/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Bis(2-chloroethoxy)methane	mg/kg				<0.1	1	0	1								<0.1			
Bis(2-chloroethyl)ether	mg/kg				<0.1	1	0	1								<0.1			
Bis(2-chloroisopropyl)ether	mg/kg				<0.1	1	0	1								<0.1			
Bis(2-ethylhexyl)phthalate	mg/kg				<0.5	1	0	1								<0.5			
Butylbenzyl phthalate	mg/kg				<0.1	1	0	1								<0.1			
Carbazole	mg/kg				<0.1	1	0	1								<0.1			
Dibenzofuran	mg/kg				<0.1	1	0	1								<0.1			
Diethyl phthalate	mg/kg				<0.1	1	0	1								<0.1			
Dimethyl phthalate	mg/kg				<0.1	1	0	1								<0.1			
Hexachlorobenzene	mg/kg				<0.1	1	0	1								<0.1			
Hexachloroethane	mg/kg	21	8		<0.1	1	0	1								<0.1			
Isophorone	mg/kg				<0.1	1	0	1								<0.1			
n-Dibutylphthalate	mg/kg				<0.1	1	0	1								<0.1			
n-Dioctylphthalate	mg/kg				<0.5	1	0	1								<0.5			
Nitrobenzene	mg/kg				<0.1	1	0	1								<0.1			
n-Nitroso-n-dipropylamine	mg/kg				<0.1	1	0	1								<0.1			
Pentachlorophenol	mg/kg				<0.1	1	0	1								<0.1			
Perylene	mg/kg				<0.1	1	0	1								<0.1			
Phenols																			
Phenol	mg/kg	440			<0.1	1	0	1								<0.1			
PCBs																			
PCB BZ 105	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 114	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 118	mg/kg				<0.007	8	0	8								<0.007			
PCB BZ 123	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 126	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 156	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 157	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 167	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 169	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 189	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 77	mg/kg				<0.005	8	0	8								<0.005			
PCB BZ 81	mg/kg				<0.005	8	0	8								<0.005			
Other analytes																			
% Stones >10mm	% w/w			32.2	<0.1	33	5	28	<0.1		22.1	<0.1	<0.1		<0.1	<0.1		1.7	<0.1
4-Bromophenyl phenyl ether	mg/kg				<0.1	1	0	1								<0.1			
pH	pH			10.92	4.59	31	31	0	7.96		8.56	7.48	4.94			6.1		5.89	
Total Organic Carbon	% w/w			14.1	14.1	1	1	0											
Converted to SOM (x / 0.58)	% w/w			24.31034	24.31034	1	1	0											
Total Speciated PCB-WHO12	mg/kg				<0.007	8	0	8								<0.007			

									Lab sample ID	25/12859/35	25/12859/36	25/12859/37	25/12859/38	25/12859/39	25/12859/40	25/12859/42	25/12859/43	25/12859/44	25/12859/45
									Client sample ID	TP217	TP217	TP217	TP218	TP218	TP219	TP220	TP220	TP221	TP221
									Depth to top	0.2	0.5	0.3	0.5	0.8	0.15	0.3	0.7	0.9	1.8
									Depth to bottom	0.3	0.6	0.4	0.6	0.9	0.25	0.4	0.8	1	1.9
									Date sampled	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	05/11/25	06/11/25	06/11/25	06/11/25	06/11/25
Analyte	Unit	GAC	T1	Max	Min	Count	# Detects	# Non-detects											
Bis(2-chloroethoxy)methane	mg/kg				<0.1	1	0	1											
Bis(2-chloroethyl)ether	mg/kg				<0.1	1	0	1											
Bis(2-chloroisopropyl)ether	mg/kg				<0.1	1	0	1											
Bis(2-ethylhexyl)phthalate	mg/kg				<0.5	1	0	1											
Butylbenzyl phthalate	mg/kg				<0.1	1	0	1											
Carbazole	mg/kg				<0.1	1	0	1											
Dibenzofuran	mg/kg				<0.1	1	0	1											
Diethyl phthalate	mg/kg				<0.1	1	0	1											
Dimethyl phthalate	mg/kg				<0.1	1	0	1											
Hexachlorobenzene	mg/kg				<0.1	1	0	1											
Hexachloroethane	mg/kg	21	8		<0.1	1	0	1											
Isophorone	mg/kg				<0.1	1	0	1											
n-Dibutylphthalate	mg/kg				<0.1	1	0	1											
n-Dioctylphthalate	mg/kg				<0.5	1	0	1											
Nitrobenzene	mg/kg				<0.1	1	0	1											
n-Nitroso-n-dipropylamine	mg/kg				<0.1	1	0	1											
Pentachlorophenol	mg/kg				<0.1	1	0	1											
Perylene	mg/kg				<0.1	1	0	1											
Phenols																			
Phenol	mg/kg	440			<0.1	1	0	1											
PCBs																			
PCB BZ 105	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 114	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 118	mg/kg				<0.007	8	0	8							<0.007		<0.007	<0.007	
PCB BZ 123	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 126	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 156	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 157	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 167	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 169	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 189	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 77	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
PCB BZ 81	mg/kg				<0.005	8	0	8							<0.005		<0.005	<0.005	
Other analytes																			
% Stones >10mm	% w/w			32.2	<0.1	33	5	28		<0.1		12.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-Bromophenyl phenyl ether	mg/kg				<0.1	1	0	1											
pH	pH			10.92	4.59	31	31	0			6.39	7.4	10.92	4.67	6.26	8.85	4.59	9.22	6.39
Total Organic Carbon	% w/w			14.1	14.1	1	1	0											
Converted to SOM (x / 0.58)	% w/w			24.31034	24.31034	1	1	0											
Total Speciated PCB-WHO12	mg/kg				<0.007	8	0	8							<0.007		<0.007	<0.007	

Notes for GQRA (soil) Screening Tool Output		
1		Details of the GAC (landuse, SOM and GAC version) used in the GQRA are displayed at the top of the output screening sheet
2		Full details of the GAC derivation are included in a separate appendix document
3		The output screening sheet presents the reported Total Organic Carbon and the corresponding calculated Soil Organic Matter, using a conversion of TOC (%) divided by 0.58 to compute the SOM
4		Any laboratory results that are appended to the reported concentrations (e.g. Tentatively Identified Compounds, PAH Double Ratio Plots etc.) are not included in the output screening sheet.
	T1	First level screening threshold, equating to:
5		Chromium: total Cr concentration compared to Cr VI (conservative assessment)
		Chromium: total Cr concentration compared to Cr III
	<i>Comment</i>	Where Cr VI has been reported, the CrVI results are compared directly to the CrVI GAC
6		Mercury : total Hg concentration compared to elemental Hg (conservative assessment)
		Mercury : total Hg concentration compared to inorganic Hg
	<i>Comment</i>	The tool does not screen against methyl mercury (this parameter is only reported if mercury has been speciated)
7		Petroleum Hydrocarbons: The soil saturation limit has been exceeded
		Petroleum Hydrocarbons: The modelled GAC has been exceeded
	<i>Comment</i>	RSK has adopted an approach for petroleum hydrocarbons whereby the concentration modelled for each petroleum hydrocarbon fraction has been tabulated as the GAC with the corresponding solubility or vapour saturation limits given in brackets on the GAC appendix document. First level (T1) GQRA screening is against the soil saturation limit.
8		Free cyanide: Conservatively for sites where a child is the critical receptor, concentration compared to the SoBRA (2019) acute GAC for free CN
	<i>Comment</i>	Only applicable where the acute GAC of 24mg/kg for a child as the critical receptor is lower than the chronic GAC i.e. Residential without home-grown produce, POS Parks, POS Resi, Primary School and Secondary School land uses
9		Total cyanide: total CN compared to GAC for free CN or the SoBRA (2019) acute GAC for free CN (whichever is lowest)
	<i>Comment</i>	There is no GAC for total CN (risks are driven by free CN) therefore the first level GQRA screening is against free CN and no other screening is undertaken. For end uses where the critical receptor is a child the T1 is set at the acute GAC for free CN. Only applicable where the acute GAC of 24mg/kg is lower than the chronic GAC. The assumption that cyanide total comprises 100% free CN is conservative and consideration should be made on the suitability of this GAC based on the CSM.
10		Any analyte: First level screening threshold (T1) or GAC may be exceeded (e.g. lab results include a < or > symbol)
11		The GQRA screening for asbestos is in relation to presence or absence ('detect'). Presence is reported as asbestos type or quantification >0.001%. Absence is reported as < limit of quantification of 0.001% or No Asbestos Detected (NAD).
12		Where <u>individual</u> reported concentrations are presented in grey (not black) font, the result was below the laboratory method detection limit.
13		Where cells are shaded grey, <u>all</u> results for that analyte are below the laboratory method detection limit