

90 CARMOOR ROAD, MANCHESTER M13 0FB

PHASE II CONTAMINATION AND GEOTECHNICAL ASSESSMENT

TIGER DEVELOPMENTS LTD

2ND APRIL 2024

LS7347

Site:	**90 CARMOOR ROAD, MANCHESTER, M13 0FB**
Title:	**PHASE II CONTAMINATION AND GEOTECHNICAL ASSESSMENT**
Project:	**PURPOSE-BUILT STUDENT ACCOMMODATION**
Client:	**TIGER DEVELOPMENTS LTD**
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1.0 EXECUTIVE SUMMARY

This summary is a brief precis of the main findings and conclusions of the investigation. For detailed information, the reader is referred to the main report.

The site included a garage workshop, an abandoned residential building, and a building used previously as a private day nursery which is now vacant. The development was to include the demolition of the existing buildings and the construction of new three to six- storeys of purpose-built student accommodation. The intrusive investigation included 5no dynamically sampled holes with rotary follow on, 4no dynamic sampler holes and 2no trial pits.

Strata	Base Depth range (m)	Summary
Made Ground	0.70 – 1.20	Grey brown/black sandy, gravelly CLAY
Till Deposits	16.50 – 19.50	Grey brown to red brown slightly gravelly CLAY, becoming red brown slightly clayey gravelly SAND at approximately 12.00m depth
Collyhurst Sandstone	20.00+	Red fine-grained SANDSTONE.

Groundwater was recorded during the return monitoring standing at a level of 4.40m.

Piled foundations expected to be utilised due to the size of building proposed, and preliminary design parameters are given. The formation should be treated as being medium volume change potential. The cohesive Till will soften rapidly when exposed to free water.

Excavations are generally likely to remain stable. Excavations below the water table may become highly unstable.

Pavements may be formed on the Till Deposits. CBR value of 5% recommended for the clay, which is not classified as being frost susceptible.

Buried structural concrete may be designed to DS-1 and AC-1 in accordance with BS8500. Water supply pipe work will not require protection from aggressive soil contaminants.

Soakage testing identified the level of water remaining constant for over 17 hours in both trial pits.

Soil testing has identified elevated levels of PAH contamination. Requirements for remediation have been identified including the import of clean subsoil and topsoil.

Chemical results on Made Ground corresponded to Inert, and some non-hazardous, for most of the site, with SNRHW within the rear yard. Natural soils tested resulted with Inert Waste classification.

Further investigation may be considered in order to determine the distribution of PAHs across the site, alternatively a vapour membrane may be considered within the ground floor construction.

2.0 INTRODUCTION

2.1 General

Land Science was instructed to undertake a Phase II Contamination and Geotechnical Assessment in relation to the proposed development at 90 Carmoor Road, Manchester M13 0FB. The location is shown on Figure 1, which is centred at grid reference 385519E, 395947N.

2.2 Client

The Client for this appointment was Tiger Developments Limited. This report may only be used by this named client and their project team for the purposes set out and subject to the report conditions. It was understood that the Client already owned the property, and that this investigation was not a pre-purchase appraisal.

2.3 Area Under Investigation

The area under investigation comprised an active garage workshop with front and rear yards, an abandoned residential building, and a building used previously as a private day nursery, which is now vacant. The proposed layout is indicated on Figure 2 and the actual investigation undertaken is indicated on Figure 3. A walkover survey is presented in Appendix A. The area was approximately 2100m^2 or 0.21 hectares.

2.4 Proposed Development

The proposed development was understood to comprise the demolition of the existing buildings followed by the construction of purpose-built student accommodation. This included three to six-storeys, forming 172 beds, with a mix of studio and cluster unts alongside ancillary facilities and shared amenity space, with site access and other associated works. The proposed development was covered under planning application number 135576/FO/2022. Figure 4 illustrates the layout of the proposed development. The findings of this report may be not valid if the proposed development is altered.

2.5 Previous Investigations

Information from the following previous investigation relevant to the site was provided by the client:

- Phase I Desk Study P451205-DOC-S-001, 18th November 2022. A-squared Studi Engineers Ltd.

The phase II ground investigation was carried out in accordance with the recommendations of the previous report and all reports must be read in conjunction with each other.

2.6 Scope of Work

The work carried out is described in detail in following sections but in summary included:

- An intrusive investigation comprising cable percussion boreholes with follow-on rotary drilled boreholes, dynamic sampling, trial pits for soakage testing, dynamic cone penetrometer (DCP) testing for equivalent CBR design;

- Preliminary geotechnical testing of selected soil samples in the field and laboratory;
- Preliminary chemical testing of selected soil and water samples in the field and laboratory;
- Installation of a water monitoring well, and a return visit.

The fieldwork was conducted between 22nd January and 2nd February 2024, under the supervision of Land Science. The return monitoring visit was conducted on 22nd February 2024.

2.7 Geotechnical Objectives

An interpretive Ground Investigation Report (GIR) was required in order to provide an assessment of ground conditions with respect to proposed foundations, pavements, soakaways, concrete specification and excavations.

2.8 Geo-Environmental Objectives

A phase II intrusive investigation was required, to provide a generic quantitative risk assessment (GQRA).

The reports were required to assess risks associated with end users, the proposed development, adjacent land uses, and the wider environment, in the context of the planning regime.

2.9 Standards

Where practicable, the investigation was undertaken in accordance with the following primary standards and guidance:

- Land Contamination Risk Management (LCRM) Environment Agency 2020
- BS10175:2011+A1:2013, Investigation of Potentially Contaminated Sites.
- National Planning Policy Framework, July 2018.
- Building Regulations Approved Document C: Site preparation and resistance to contaminants and moisture, HM Government, July 2013.
- NHBC Standards Chapter 4.1: Land Quality - Managing Ground Conditions, 2019.
- BS 5930:2015 Code of Practice for Site Investigations
- BS 1377:2018 Soils for Civil Engineering Purposes
- BS 8004:2015 Code of Practice for Foundations
- BS EN 1997-2:2007. Eurocode 7: Geotechnical Design – Part 2: Ground Investigation and testing.

Other technical sources have been cited in respect of specific aspects of the investigation, as referenced throughout the text.

3.0 SUMMARY OF PREVIOUS INVESTIGATION

3.1 General

This summary is a brief precis of the main findings and conclusions of the previous Phase I Geotechnical and Geo-Environmental Assessment carried out by others. For detailed information, the reader is referred to the main report.

The development site falls within the central area of Manchester. It is located just outside of the defined city centre. The site area is approximately 2100m^2. The site is bounded by Carmoor Road on the east, United Students – Brookhall student accommodation on the west, the West Indian Community Centre on the north and retail terraces on the south. Access to the site is from Carmoor Road from east and Autumn Street on the west.

3.2 Site Description

Existing uses on the site include a garage workshop, an abandoned residential building, and a building used previously as a private day nursery which is now vacant. None of the buildings are of any architectural merit or are subject to statutory protection. The application site is not within a conservation area. It is situated 250 metres north of Victoria Park conservation area. It is understood that the existing buildings within site will be demolished to enable the new site development.

Existing information from British Geological Survey (BGS) GeoIndex Onshore database indicates that the site is underlain by superficial deposits comprising Till (Diamicton) deposits, overlying the bedrock Collyhurst Sandstone Formation. Made Ground is anticipated to be present on site due to the nature of the site surface, which includes the existing building footprint and hardstanding surfaces.

3.3 Anticipated Ground Conditions

The West Manchester fault, trending north-west to south-east lies approximately 375m to the east of the site boundary. A further fault, known as the East Manchester fault, lies beyond to the east, approximately 700m to the east of the site. The Chester Formation bedrock is recorded to be present below the Till deposits directly east of the fault line. The Manchester Marls Formation is recorded to be present below the Till deposits from approximately 125m to the west of the site, beyond which the Chester Formation bedrock is recorded to be present below the Till deposits.

The Till deposits are classed as a Secondary Undifferentiated Aquifer. The Collyhurst Sandstone Formation is classed as a Principal Aquifer and the Pennine Upper Carboniferous Coal Measures are classed as a Secondary A Aquifer. The combined groundwater vulnerability at the site is low. The dominant water direction would be to the south and southwest.

Information from the British Geological Survey (BGS) Geology of Britain web map was used to provide the following preliminary ground model:

Lithology	Depth below ground level (m bgl)	Thickness (m)	Description
Made Ground	0.00	0.70 to 0.75	Variable anthropogenic deposits comprising natural soils, asphalt and concrete surfacing, gravels and potential ash
Till Deposits (Diamicton)	0.70 to 0.75	Up to 12m	Soft to stiff, brown silty and sandy clay, sand lenses and some fine to medium gravel. Becoming sandy Clay with depth.
Collyhurst Sandstone	From 12.70	Unproven	Red Sandstone bedrock with abundant beds of 'millet seed' sand grains alternating with beds of find grained shard sand with some interbedded grey Sandstones locally.

In addition, groundwater was anticipated, as follows:

- Perched water – in granular soils upon cohesive soil associated with Made Ground but unlikely in natural soils due to high permeability of underlying bedrock.
- Water table depth - at depth with possible flow direction to the south/southwest.

Possible contamination sources noted from the previous walkover included visible evidence of hydrocarbon contamination and use of products, car dismantling, repairs and servicing, as well as parking and potential fuelling / oil changing – leading to likely spills and leaks, impacting the underlying soils and potentially any underlying groundwater. A risk was considered from the ground gases and vapours on site associated with these activities and any underlying Made Ground.

4.0 INTRUSIVE INVESTIGATION

4.1 Investigation Rationale

The scope and layout of the investigation was specified by Whitby Wood Ltd. In summary this comprised:

- 5no. dynamically sampler boreholes with follow-on rotary drilled boreholes within the bedrock to determine pile design parameters;
- 4no. dynamic sampler boreholes;
- 2no. trial pits;
- The positions were located to give broad coverage across the site where access was feasible on the active site;
- A monitoring well was installed in BH003. The installation was sealed through Made Ground, with the response zone in the superficial and bedrock.

Position	Provisional Depth	Existing Location	Testing, installations etc.
BH001	20m	Front of garage off Carmoor Road	PID, SV, HP, SPT
BH002		Front of nursery off Carmoor Road	PID, SV, HP, SPT
BH003		Rear of garage off Autumn Street	PID , SV, HP, SPT, MW
BH004		Front of garage off Carmoor Road	PID, SV, HP, SPT
BH005		Inside garage off Autumn Street	PID, SV, HP, SPT
WS001	3m	Front of nursery off Carmoor Road	PID, SV, HP, SPT
WS002		Rear of garage off Autumn Street	PID, SV, HP, SPT
WS003		Front of garage off Carmoor Road	PID, SV, HP, SPT
WS004		Inside garage off Autumn Street	PID, SV, HP, SPT
TP001		Rear of garage off Autumn Street	PID, SV, HP, FHST
TP002		Front of garage off Carmoor Road	PID, SV, HP, FHST

Position locations were slightly adjusted on site due to access and parked vehicles as it was an active site. Due to fencing around the front of the nursery positions BH002 and WS001 were relocated southeast in front of the adjacent building.

4.2 Geotechnical Strategy

Geotechnical aspects were investigated based on the following strategy:

Area of Concern	Investigation	Position(s)
Shallow soil conditions	Shallow exploratory holes located in and around the proposed development footprint	WS001-WS004
Shrinkable soils	Plasticity index and particle size testing was scheduled to determine the shrinkability and percentage passing 425µm sieve.	BH001-BH005
Sulphate	Representative samples from relevant depths were scheduled for analysis of pH value and water soluble Sulphate.	BH001-BH005
Frost susceptibility	Samples were submitted for plasticity index (cohesive) or particle size distribution (granular) to determine frost susceptibility.	BH001-BH005
Soakage	A shallow exploratory hole was positioned in the indicated	TP001 and

Area of Concern	Investigation	Position(s)
potential	soakaway location.	TP002
Potential piled foundations	20m deep cable percussive/rotary boreholes were sunk across the site to provide deeper ground and groundwater information and parameters for pile design.	BH001-BH005
Groundwater	Observations on the occurrence of water and standing levels were to be made during the fieldwork. A Standpipe WAS installed to enable return groundwater monitoring.	BH003

4.3 Contamination Strategy

Geo-environmental aspects were investigated based on the following strategy:

Area of Concern	Investigation	Position(s)
Made Ground	Representative samples of soil were to be screened for a broad industry standard screening contaminants.	TP001-TP002 & WS001-WS004
Superficial – Till (Diamicton) & Bedrock – Collyhurst Sandstone Formation	Groundwater levels and laboratory testing were required; a monitoring well was installed in BH003 and into the natural ground to determine groundwater levels.	BH003
Waste classification	For preliminary waste classification, representative samples were to be screened for contaminants and full hazardous waste leachate testing performed.	BH001-BH005, TP001-TP002 & WS001-WS004

4.4 Enabling Works

All positions required the use of a breaker/concrete corer to enable site works.

4.5 Dynamic (Windowless) Sampling (DS)

Dynamic Sampling entails 1m long hollow tubes with liners driven into the ground and retracted to obtain samples. The liners are split, logged, tested, and subsampled as required.

4.6 Cable Percussive Boreholes (CP)

Cable Percussion is a traditional drilling technique which essentially involves repeatedly dropping a hollow sampling tube from height and removing any plug of soil that is retrieved. Clay cutters, chisels, a shelling attachment, and casing can also be used down the hole.

4.7 Rotary Boreholes (RO or RC)

Rotary drilling is used to form a deep observation borehole or for obtaining representative samples of rock. The drilling method involves a powered rotary cutting head on the end of a shaft, driven into the ground as it rotates. The system requires lubrication (air, water or drilling mud) to keep the cutting head cool.

4.8 Field Shear Vane (SV)

Field shear vane tests were performed on samples of cohesive materials recovered from the boreholes. The test provides a direct estimate of undrained shear strength (in kN/m^2), and in turn may be used to give an indication of consistency as defined in BS5930.

4.9 Hand Penetrometer (HP)

Hand penetrometer tests were performed on samples of cohesive materials recovered within the boreholes. The test is used to approximate undrained shear strength and in turn has been used to give an indication of consistency as defined in BS5930.

4.10 Falling Head Soakage Testing (FHST)

A test bore is filled with water and the drop in water level over time is recorded, to provide an indication on the likely permeability of different strata.

4.11 Standard Penetration Test (SPT)

The Standard Penetration Test involved driving a cone (SPT(C)) or split spoon sampler (SPT(S)) with a percussive hammer weight and recording the number of blows to penetrate six consecutive intervals of 75mm; the first two are discarded as 'seating blows', while the final four are added together to calculate an N-Value. The procedure is defined under numerous standards including BS5930:2015.

4.12 Monitoring Wells (MW)

Monitoring wells are installations within boreholes that enable return monitoring to be carried out. The pipework was 50mm diameter HDPE, with cased section sealed with bentonite, and the slotted response zone packed with a shingle filter pack.

The monitoring installation is summarised below and is shown on the relevant log in the appendix.

Position	Response zone		Diameter	Strata	Objective
	Top	Bottom			
BH003	2.00m	20.00m	50mm	Till Deposits and Collyhurst Sandstone Formation	Groundwater level monitoring

Post-fieldwork monitoring of groundwater levels was undertaken on one occasion on 22nd February 2024.

4.13 Soil Sampling

Soil samples were recovered from the exploratory holes during the ground investigation and stored/transported in containers appropriate for the laboratory testing undertaken. Sample types and depths are recorded on the relevant exploratory hole records.

4.14 Groundwater Sampling

A groundwater sample was recovered from the well using dedicated bailers and stored/transported in containers appropriate for the laboratory testing undertaken.

4.15 PID Screening (PID)

The samples of soil were screened for VOC's in headspace from all positions in shallow soils using a Photo Ionisation Detector (PID) broadly in accordance with the methodology set-out in CIRIA C682. Due to interference from humidity and other factors, Land Science adopts a method detection limit of 1.0ppm to avoid reporting false positive readings.

5.0 GROUND CONDITIONS

5.1 General

The expected ground conditions were anticipated to comprise Made Ground over Till Deposits over Collyhurst Sandstone to depth. The investigation confirmed the anticipated ground conditions. A thin capping of hardstanding was encountered at surface.

A summary of the encountered conditions is presented below.

Position	Strata Base Depth (mbgl)			
	Hard-standing	Made Ground	Till Deposits	Collyhurst Sandstone
BH001	0.10	0.70	16.50	20.10+
BH002	0.10	0.70	15.00	18.00+
BH003	0.10	0.80	19.50	21.00+
BH004	0.10	0.80	18.50	20.10+
BH005	0.15	1.20	19.50	20.10+
WS001	0.10	0.75	3.00+	-
WS002	0.10	0.70	3.00+	-
WS003	0.15	0.75	3.00+	-
WS004	0.16	0.85	3.00+	-
TP001	0.10	0.70	3.00+	-
TP002	0.10	0.70	3.00+	-

The naming of geological strata is tentative and should be used as a guide. Interpolation between or below investigation points should be treated with caution.

The description of soils and rocks was in accordance with BS5930.

5.2 Hardstandings

All positions were located within hardstanding, which was encountered to depths of between 0.10 and 0.16 mbgl and in summary comprised: CONCRETE (positions BH002-003, WS001-004 and TP001-002), reinforced CONCRETE (position BH005) and ASPHALT (positions BH001, BH004).

5.3 Made Ground

Made Ground was encountered to depths of between 0.70 and 1.20 mbgl and in summary comprised grey brown/black sandy, gravelly CLAY. Sands are fine to medium, gravels are fine to coarse, subangular to subrounded flints, bituminous material, concrete and red brick. Suspected contamination was visually identified (black staining) at positions WS001-004, TP001-002.

5.4 Till Deposits

Till Deposits were encountered to depths of between 15.00 and 19.50 mbgl and in summary comprised grey brown to red brown slightly gravelly CLAY, becoming red brown slightly clayey gravelly SAND at approximately 12.00m depth.

5.5 Collyhurst Sandstone (CS)

Collyhurst Sandstone was proved to a maximum depth of 21.00 mbgl and comprised red fine-grained SANDSTONE.

5.6 Roots and Rootlets

No roots or rootlets were identified in the boreholes.

5.7 Field Evidence of Contamination

Soils at positions WS001-004, TP001-002 from approximately 0.20 to 0.75mbgl were noted to show black staining.

Made Ground was identified 0.70 to 1.20 mbgl, and such materials may be imported from an unknown source or mixed with hazardous materials, and as such may contain a wide range of potential contaminants. All such materials should be treated as suspect unless proven otherwise. Testing has been carried out, as described in section 10.0.

5.8 Groundwater

Groundwater was not encountered during excavation of any of the investigative positions.

5.9 Stability and Casing

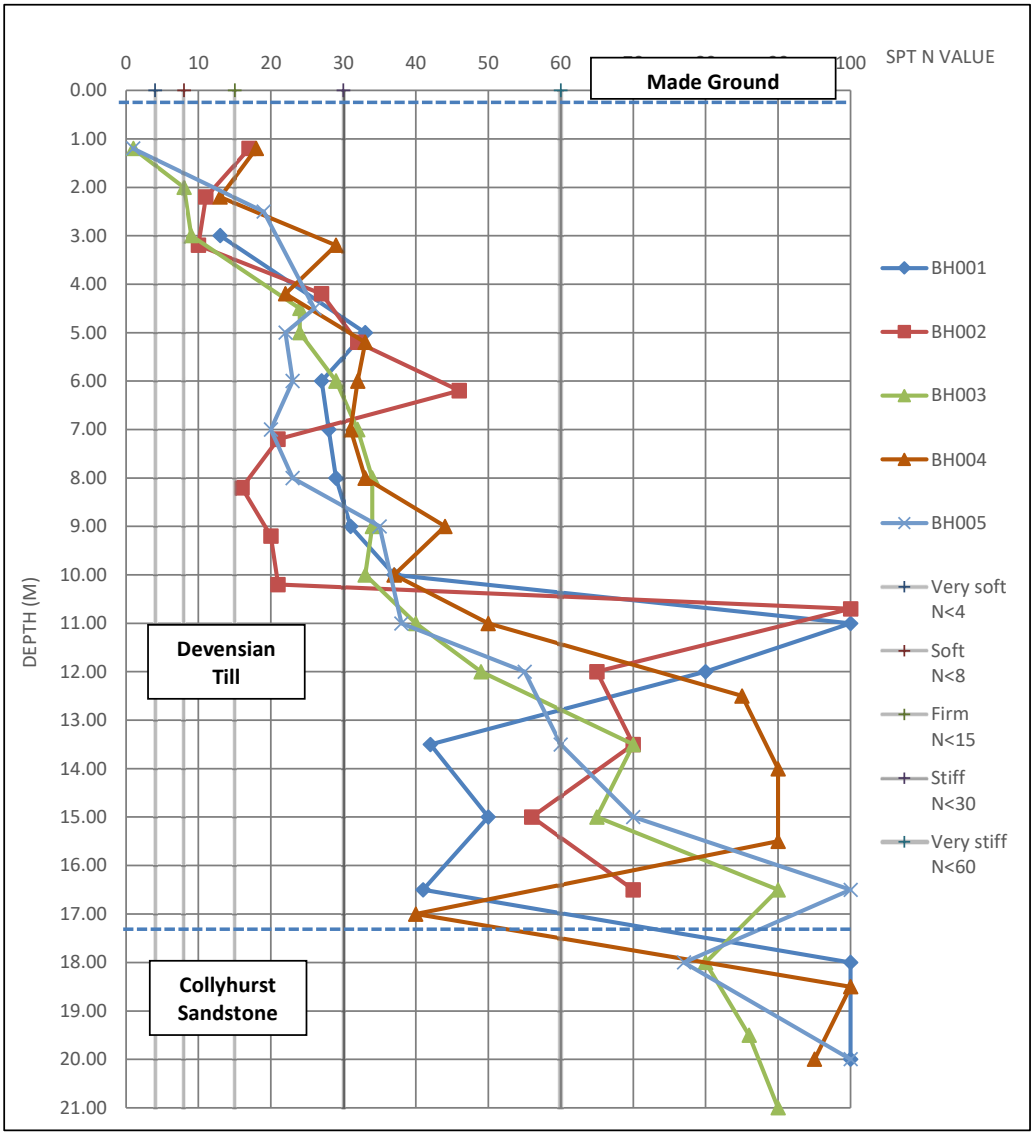
Instability was noted at a depth of 17.00 mbgl at position BH002 due to sand collapse, all other positions were noted to be generally stable. However, casing was used in the rotary boreholes as summarised below:

Position	Casing depth (mbgl)
BH001	18.00
BH002	18.00
BH003	21.00
BH004	18.00
BH005	18.00

6.0 FIELD TESTING

6.1 Standard Penetration Test (SPT)

The SPT results from the rotary cored boreholes are summarised below:

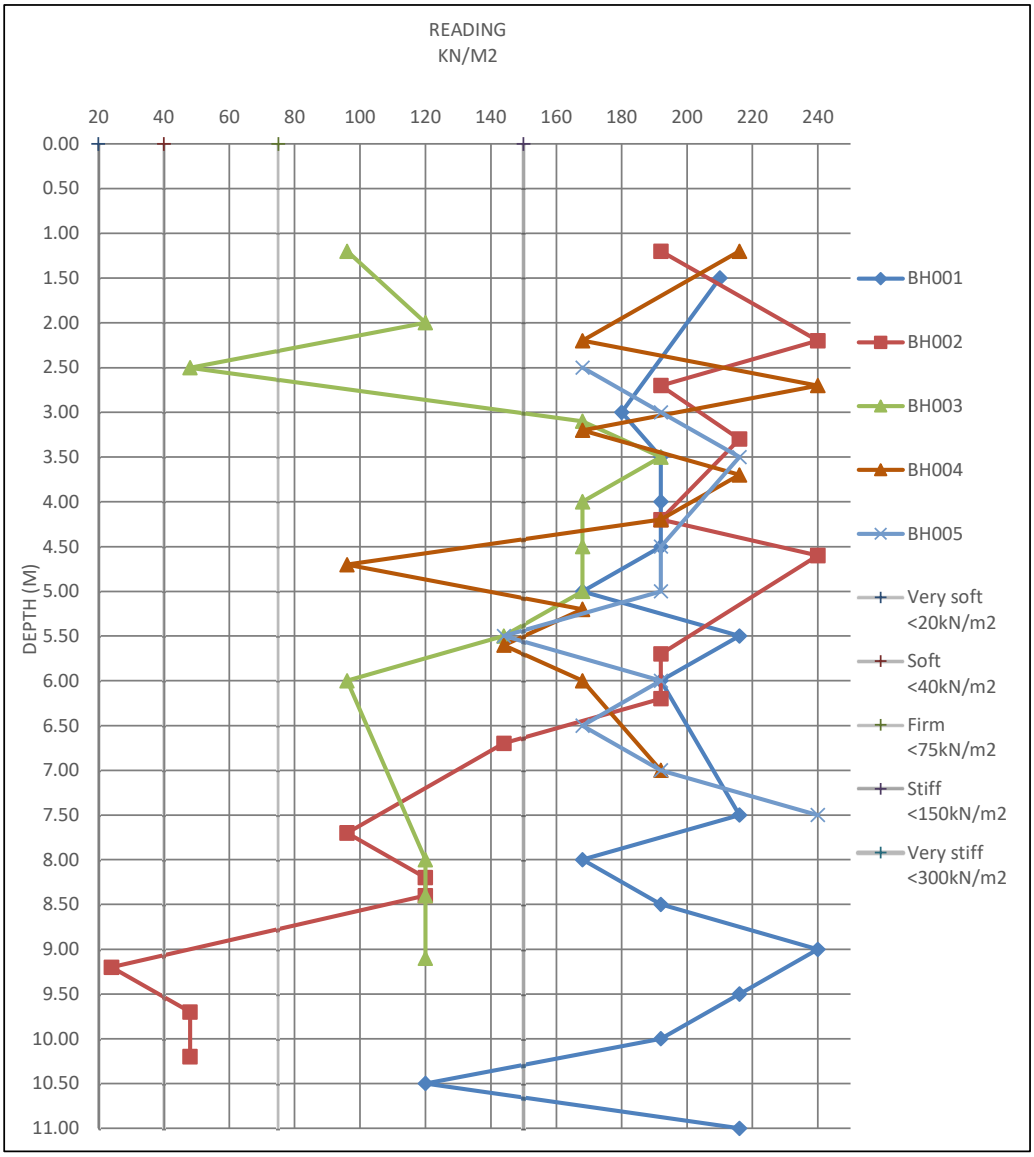


Note: gridlines shown are approximate and indicative only

There was an overall consistent trend of increasing results with depth. The tests refused at depths of between 10.70 and 11.00m on dense gravels within the Till, and at 16.50, 18.00, 18.50 and 20.00m on bedrock.

6.2 Shear Vanes (SV)

The Shear Vane results are summarised below:

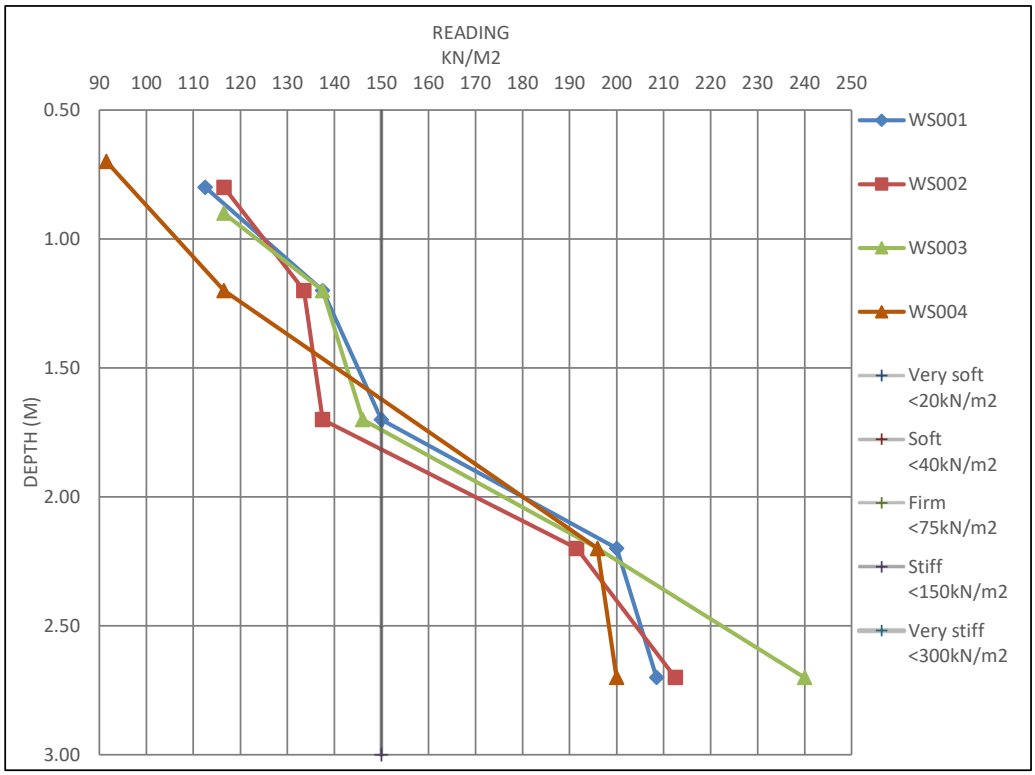


Note: gridlines shown are approximate and indicative only

There was a particularly soft zone encountered from 9.00m within BH002. It was assumed the clayey soils had weakened with the use of water flush from the rotary rig.

6.3 Hand Penetrometers (HP)

The Hand Penetrometer results are summarised below:



Note: gridlines shown are approximate and indicative only

6.4 Falling Head Soakage Testing (FHST)

The results of the Falling Head Soakage Tests are summarised below:

Position	Test	Strata tested	Test depth range	Result	Notes
TP001	Test 1	Till Deposits	0.36-0.65m	Test failed	Water level fell 0.29m in 90 minutes, with the water level remaining at 0.65m for 19 hours.
TP002	Test 1		0.38-0.66m	Test failed	Water level fell 0.28m in 180 minutes, with the water level remaining at 0.66m for 17 hours.

6.5 PID Screening (PID)

None of the samples exhibited VOC's above the detection limit, with the exception of the following tests.

Position	Depth (m)	Strata	Result (ppm)
TP001	0.20	Made Ground	1.8
TP001	0.50		1.1
WS001	0.60		3.8
WS002	0.50		13

Overall the readings were towards the lower end of the unit's detection limit (0.1ppm to 9999ppm).

The purpose of the screening was to identify samples which may be impacted by organic contaminants (such as VOC's, SVOC's, petroleum hydrocarbons, diesel, etc.) and to assist in prioritising samples for laboratory analysis.

7.0 MONITORING DATA

7.1 Groundwater Monitoring

Groundwater was recorded in the single return monitoring visit, standing at a depth of 4.40m.

Position	During drilling	Return monitoring
BH003	Groundwater not encountered	4.40m

Groundwater was not encountered at any of the positions during site works. It should be noted that boreholes BH001 to BH005 were drilled using a water flush and could potentially have masked any groundwater strikes.

8.0 GEOTECHNICAL LABORATORY TESTING

8.1 Geotechnical Laboratory Testing

The client selected samples for geotechnical testing, including the following:

- For general classification purposes, representative cohesive natural samples of soil were analysed for 1pt Atterberg Limit (Plasticity Index) tests (PI).
- Moisture content (MC) determinations were carried out in association with the Atterberg limit tests.
- For general classification purposes, representative samples of granular soils were selected for Particle Size Distribution by wet sieving (PSD).
- Given the fine-grained nature of the soils, the particle size distribution was supplemented by Hydrometer analysis on the silt and clay fractions (HYD).
- For general classification purposes, representative samples of soils were selected for Bulk and Dry Density (BDD) testing.
- To determine the required concrete specification to resist chemical attack, samples of soil and water were tested for pH and soil soluble sulphate (pH/SO4).
- Quick undrained unconsolidated triaxial (UUT) and Uniaxial Compressive Strength (UCS) tests were scheduled on 'undisturbed' samples, to provide further evidence of undrained shear strengths.
- To evaluate the load-settlement behaviour of the soil, representative cohesive samples were selected for oedometer consolidation tests (OED).
- Laboratory CBR compaction tests (CBR) were taken to assist with design parameters for pavements.
- Point Load Tests (PLT) were scheduled on samples to characterise rock materials in terms of strength.
- Direct Shear Box (SB) tests were scheduled on samples, to provide shear strength of the soil materials.

A summary of the testing scheduled is given below:

Sample	Strata	Test										
		MC	PI	PSD	HYD	BDD	pH/SO4	UUT	UCS	OED	PLT	SB
BH001 2.00m	Till							X				
BH001 2.50m		X	X									
BH001 3.00m							X					
BH001 4.00m										X		
BH001 4.25m		X	X									
BH01 5.00m		X										
BH001 6.00m					X							
BH001 8.00m		X	X									
BH01 8.50m								X				
BH001 9.00m					X							

Sample	Strata	Test										
		MC	PI	PSD	HYD	BDD	pH/SO4	UUT	UCS	OED	PLT	SB
BH001 10.00m		X	X									
BH001 12.00m						X						
BH001 18.00m	CS								X		X	
BH001 19.00m									X		X	
BH002 2.20m	Till	X	X									
BH002 2.70m										X		
BH002 3.20m					X							
BH002 4.20m		X										
BH002 4.70m								X				
BH002 5.20m							X					
BH002 6.20m		X	X									
BH002 7.20m		X			X							
BH002 8.70m										X		
BH002 9.20m		X	X									
BH002 10.20m						X						
BH002 13.50m												X
BH002 15.00m	CS								X		X	
BH002 16.00m									X		X	
BH002 17.00m									X		X	
BH003 2.00m	Till	X	X									
BH003 2.70m								X				
BH003 3.00m					X							
BH003 4.00m										X		
BH003 4.50m		X										
BH003 5.00m		X	X									
BH003 6.00m							X					
BH003 7.00m						X						
BH003 8.00m		X	X									
BH003 8.60m								X				
BH003 9.00m						X						
BH003 10.00m		X	X									
BH003 11.00m												X
BH003 12.00m				X								
BH003 13.50m												X
BH003 15.00m				X								
BH003 16.50m						X						
BH003 18.00m												X
BH003 19.50m	CS								X		X	
BH004 2.20m	Till	X	X									
BH004 2.70m										X		
BH004 3.20m		X										

Sample	Strata	Test										
		MC	PI	PSD	HYD	BDD	pH/SO4	UUT	UCS	OED	PLT	SB
BH004 4.20m						X						
BH004 4.70m	Till							X				
BH004 5.20m		X	X									
BH004 6.00m					X							
BH004 7.00m							X					
BH004 8.00m						X						
BH004 9.00m		X	X		X							
BH004 10.00m						X						
BH004 11.00m		X	X									
BH004 14.00m												X
BH004 15.50m				X								
BH004 19.50m	CS										X	
BH005 2.00m	Till							X				
BH005 2.50m		X	X									
BH005 3.00m		X										
BH005 4.00m										X		
BH005 4.50m							X					
BH005 5.00m		X	X									
BH005 6.00m					X							
BH005 7.00m						X						
BH005 7.50m								X				
BH005 9.00m		X	X									
BH005 11.00m												X
BH005 13.50m	Till			X								
BH005 15.00m						X						
BH005 16.50m				X								
BH005 18.00m									X		X	X

The results are discussed in the relevant sections.

8.2 Particle Size Distribution

The results of the Particle Size Distribution analysis are summarised below.

Strata	No. of tests	% Clay/Silt	% Sand	% Gravel	% Cobbles
Till	5	5-11	27-95	0-63	0

8.3 Hydrometer

The results of the Hydrometer Sedimentation analysis are summarised below.

Strata	No. of tests	% Clay	% Silt	% Sand	% Gravel	% Cobbles
Till	8	42-77	6-15	12-40	2-24	0

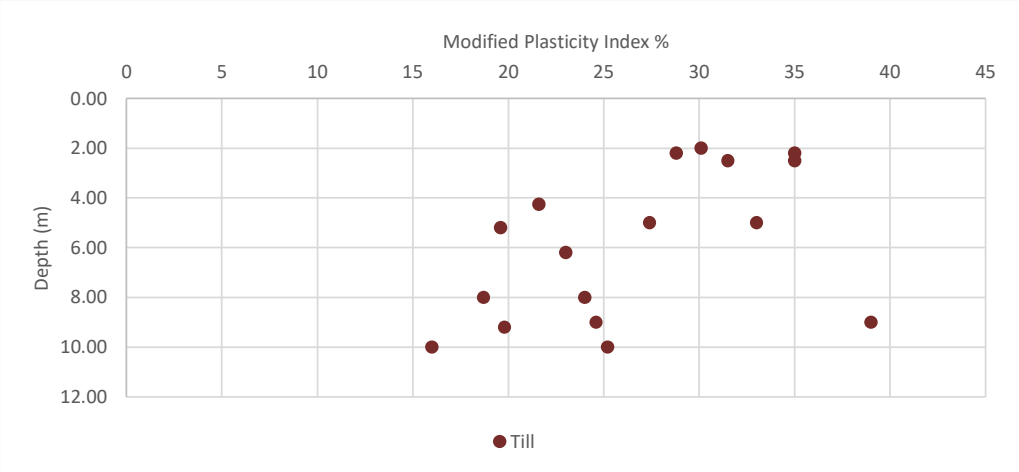
8.4 Plasticity Indexes (Atterberg Limits)

The results of the Atterberg Limit tests are summarised below.

Strata	No. of tests	Plasticity Index %		
		Minimum	Maximum	Average
Till	17	18.0	39.0	28.9

A modified plasticity index (PI') was calculated following the NHBC methodology, to account for any non-shrinkable percentage not passing the 425µm sieve:

Strata	No. of tests	Modified Plasticity Index %		
		Minimum	Maximum	Average
Till	17	16.0	39.0	26.6



8.5 Water Content

The results of the water content (or *moisture content*) tests are summarised below.

Strata	No. of tests	Moisture content %		
		Minimum	Maximum	Average
Till	34	12.0	62.0	23.5

8.6 pH and Sulphate

The results of the pH and water-soluble Sulphate tests are summarised on the following table.

Strata	No. of tests	Water soluble Sulphate (SO_4 g/l)	pH (value)

Made Ground	9	0.0557 – 0.234	7.0 – 8.8
Till	5	0.0471 – 0.0713	8.4 – 8.6
Groundwater	1	0.0323	7.4

8.7 Triaxial Testing

The results of the quick undrained single stage triaxial tests are summarised below.

Strata	No. of tests	Bulk density (Mg/m^3)	Dry density (Mg/m^3)	Shear strength (kPa)	Mode(s) of failure
Till	8	1.94 – 2.48	1.52 – 2.22	19 – 217	7no Plastic 1no Compound

8.8 Bulk and Dry Density

The results of the bulk and dry density tests are summarised below.

Strata	No. of tests	Bulk density (Mg/m^3)	Dry density (Mg/m^3)
Till	10	1.68 – 2.34	1.04 – 1.98

8.9 Oedometer Consolidation

The results of the Oedometer Consolidation tests are summarised below.

Strata	No. of tests	Pressure Range (kPa)	Coefficient of Volume Compressibility (m^2/MN)	Coefficient of Consolidation (m^2/yr)
Till	6	0 – 50	0.32 - 0.96	1.7 - 53
		50 – 100	0.16 - 0.36	0.7 - 5.8
		100 – 200	0.11 - 0.29	0.71 - 2.6
		200 – 400	0.065 - 0.19	1.5 - 3.4
		400 – 800	0.030 - 0.10	1.7 - 6.6

8.10 Point Load Tests

The results of the point load tests on the samples of rock are summarised below.

Strata	No. of tests	Failure Load (kN)	Point Load (kPa)	Point Load Index (kPa)
Collyhurst Sandstone	1	0.09	30	30

8.11 Direct Shear Tests

The results of the shear box tests are summarised below.

Strata	No. of tests	Bulk density (Mg/m^3)	Dry density (Mg/m^3)	Angle of Shearing Resistance	Effective Cohesion (kPa)
Till	7	1.94 - 2.13	1.58 - 1.91	30.5 - 38.5	0.0 - 28.0

9.0 GEOTECHNICAL ASSESSMENT

9.1 General

The proposed development was understood to comprise the demolition of the existing buildings followed by the construction of three- to six-storey purpose-built student accommodation.

Groundwater was encountered in the monitoring well at BH003 at a depth of 4.40m. Groundwater levels may vary seasonally. Water may also become perched upon cohesive strata or around features such as foundations, and may also occur from leaking drains and water mains etc.

Cohesive soils were identified, which are susceptible to heave and shrinkage through changes in moisture content, such as seasonally or trees.

Given the proposed height of the structure up to 6 storeys, it was anticipated that consideration will be given to the use of piled foundations. Shallow foundations might be suitable for smaller structures with lighter loadings.

The final foundation scheme will depend on other constraints and should be evolved in consultation with the design team.

9.2 Volume Change Potential

Reference may be given to the NHBC standards or similar guidance for designing and constructing foundations in the zone of influence of trees and hedgerows that currently exist, are to be planted, or have recently been felled.

Strata	Modified PI'	Shrinkability classification
Devensian Till	20-40%	Medium volume change potential

Specifications for heave precautions are summarised below. In addition to the depths marked *, localised deepening of foundations will be required in the influence of trees; it will be necessary to evaluate tree species and height in relation to the proposed building footprints.

Volume Change Potential		Medium
Minimum void dimension	Against side of ground beams etc.	25mm
	Beneath ground beam and suspended in-situ concrete ground floors etc.	100mm
	Beneath suspended precast concrete or timber floors etc.	250mm
Minimum allowance for potential ground movement for new drains		100mm

All foundations should extend below any major root zones or desiccated soil encountered, and trenches should be carefully inspected accordingly.

9.3 Piled Foundations

The construction of piled foundations is a specialist job and the advice of a reputable contractor should be sought prior to finalising the design.

Pile working loads will depend on the ground and groundwater conditions, the installation technique, the dimensions of the individual piles, and any pile grouping.

Whilst driven piles may give a higher working load compared to a bored pile, their use may be prevented due to the proximity of adjacent structures. Preliminary working load capacities have been calculated for varying diameters of bored piles taken into the Devensian Till or Collyhurst Sandstone, below:

Depth (m)	300mm diameter	450mm diameter	600mm diameter
12	180	310	480
15	260	430	640
18	380	630	920
20	450	740	1070

These working loads have been calculated on the basis of the ground and groundwater conditions encountered within the boreholes and based on the following assumptions:

- The contribution to the working load on the upper 3.00m has been ignored.
- A factor of safety of 3 was used on the skin friction and end bearing working loads respectively.

Piles should be taken at least five times the pile diameter into the founding strata.

The working loads above apply to single vertically loaded piles. Where groups of piles are to be constructed, the bearing value of each individual pile should be reduced by a factor of 0.8 and a calculation made to check for the factor of safety against block failure.

The piling contractor should be aware that the boreholes were cased to depths of 18.0mbgl in order to prevent collapse as drilling progressed.

9.4 Excavations

The risks arising from excavation works should be properly assessed and appropriate safety precautions should be adopted. Reference may be made to various guidance including BS8000-1:1989, BS6031:2009 and CIRIA C97.

The likelihood of excavation instability through different strata has been assessed as summarised below. It should be noted that all open unsupported excavations have the potential to collapse.

Strata	Stability
Topsoil/Made Ground	Generally unstable. May be battered back to a safe angle. Deeper excavations may require trench support.
Devensian Till	Generally stable in the short to medium term.

Excavations which are to remain open for prolonged periods will require trench support. It is considered that normal-rated plant and machinery will be sufficient for undertaking excavations. Breakers will be required for removing any former foundations, retaining walls etc. Care should be taken so as not to undermine existing structures, services, or adjacent property.

Adjacent excavations should generally be tackled in order of depth with the deepest first. Vehicles and spoil heaps etc. should not surcharge excavations, and edge protection and fencing should be used as appropriate. Frozen materials should generally not be used as backfill.

9.5 Pavements

The design of pavements will depend on the performance requirements and specification, as well as the ground conditions and finished levels etc. The suitability of shallow soils encountered as a formation level for pavements is summarised as follows:

Strata	Base Depth (m)	Suitability
Made Ground	0.70 – 1.20	Only suitable for pavements with low performance requirements. CBR values for these materials will not reflect the possible settlements that may occur. The materials will be frost susceptible so a minimum pavement thickness of 450mm will be required. The formation should be subject to a suitable programme of treatment and the sub-bases appropriately engineered.
Till	10.50 – 12.00	These materials are generally a suitable formation level. The formation is non-frost susceptible and therefore no minimum pavement thickness required. TRRL 1132 suggests a CBR of around 5%, assuming average construction conditions and a high water table. Cohesive formations will degrade rapidly if exposed to standing water and should be protected.

The formation level should be carefully inspected, and any soft or loose zones should be removed and replaced with engineering fill, well-compacted in layers to a suitable specification. Consideration might be given to installing geotextiles. All engineering fill should be granular and non-frost susceptible (i.e. <10% fine material passing 425µm sieve).

Any hard spots in the formation level such as old foundations may induce reflective cracking in the pavement and allowance should be made for removing any slabs or other hard spots etc. that may be present.

9.6 Building Materials

All sub surface concrete should be designed and specified in accordance with BS8500-1:2015+A1:2016. The results of the Sulphate and pH analyses fell into Class DS-1 and an ACEC class AC-1 is appropriate.

Buried plastics used for potable water supplies should not require any special specification in order to resist chemical contamination. No pipework should be laid where there is evidence of hydrocarbons.

9.7 Surface Water Drainage

The preliminary falling head soakage tests failed, and an infiltration rate could not be calculated for the Till. It is unlikely that soakaways will perform satisfactorily in these materials. Consideration should be given to an alternative drainage solution. Borehole soakaways are not considered appropriate given that the sandstone is saturated (below the water table) and usually these are positioned 10m away from structures (and in sufficient room is available).

Evidence of contamination was identified within the shallow soils. Discharges of surface water run-off to ground at sites affected by land contamination may not be acceptable. This may prevent the use of SUDs such as permeable surfacing.

10.0 CONTAMINATION LABORATORY TESTING

10.1 Scheduled Testing

The client selected samples for geochemical (contamination) analysis, as detailed below:

- Waste classification testing on samples to provide a preliminary assessment for waste handling.
- Made Ground was encountered, which may contain a wide range of contaminants. Selected samples from the trial pits and dynamic sampling from depths ranging between 0.20m and 0.60m were tested for a routine screening suite (LS1) screened for Asbestos and tested for TPH7.
- Further soil samples from the trial pits and dynamic sampling between depths of 0.30m and 2.70m were tested for TPH1.
- Further soil samples from the trial pits and dynamic sampling between depths of 0.20m and 0.60m were tested for TPH7.
- A sample of groundwater was obtained from the monitoring well in BH003, based on the CSM, potential contamination resulting from the historic garage workshop. The water sample was analysed for a routine screening suite (LS1- water).

Sample / Depth (m)	Strata	LS1-Soil	TPH1	TPH7	Asbestos	LS2	LS1-Water
TP001 0.20	Made Ground	X	-	X	X	-	-
TP001 0.50	Made Ground	X	-	X	X	X	-
TP001 0.60	Made Ground	-	X	-	-	-	-
TP001 1.00	Till	-	X	-	-	X	-
TP002 0.50	Made Ground	X	-	X	X	X	-
TP002 0.60	Made Ground	-	X	-	-	-	-
TP002 0.90	Till	-	X	-	-	X	-
WS001 0.40	Made Ground	X	-	X	X	-	-
WS001 0.60	Made Ground	X	X	X	X	X	-
WS001 1.20	Till	-	-	-	-	X	-
WS002 0.20	Made Ground	X	-	X	X	-	-
WS002 0.50	Made Ground	X	-	X	X	X	-
WS002 0.60	Made Ground	-	X	-	-	-	-
WS002 1.20	Till	-	-	-	-	X	-
WS002 1.70	Till	-	X	-	-	-	-
WS002 2.20	Till	-	X	-	-	-	-
WS002 2.70	Till	-	X	-	-	-	-
WS003 0.30	Made Ground	-	X	-	-	-	-
WS003 0.50	Made Ground	X	-	X	X	X	-
WS004 0.30	Made Ground	-	X	-	-	-	-
WS004 0.40	Made Ground	-	-	-	-	X	-
WS004 0.60	Made Ground	X	-	X	X	-	-
BH001 1.20	Till	-	-	-	-	X	-
BH002 1.20	Till	-	-	-	-	X	-
BH003 1.20	Till	-	-	-	-	X	-

BH004 1.20	Till	-	-	-	-	X	-
BH005 1.20	Till	-	-	-	-	X	-
BH003	Groundwater	-	-	-	-	-	X

The relevant screening suites are defined below. Where duplicate analysis exists between suites, each test is performed only once:

Suite	Definition
LS1 (soil)	Screening suite: pH, fraction of organic carbon, Metals and Non Metals, water soluble Sulphate, Sulphide, total Cyanide, total Phenols, speciated PAH's.
TPH1	TPH screen: Total petroleum hydrocarbons EC10-EC40.
TPH7	Speciated TPH: Total petroleum hydrocarbons CWG banding incl. aliphatic and aromatic split plus BTEX and MTBE.
Asbestos	Asbestos screen: Laboratory screening for fibres and Asbestos Containing Materials; identification where identified. Using polarising light and dispersion staining as described in HSG 248, HSE Contract Research Report No 83/1996and in Davies et al, 1996.
LS2	Waste Acceptance Criteria: Total Organic Carbon, Loss on Ignition, BTEX, speciated PCB's, Mineral Oil (EC10 – EC40), pH, Acid Neutralisation Capacity, speciated PAH's, 10:1 leachable Metals and Non Metals.
LS1 (water)	Screening suite: pH, Metals and Non Metals, total Sulphate, Sulphide, total Cyanide, total Phenols, speciated PAH's.

The results are discussed in the relevant sections.

11.0 HUMAN HEALTH SCREENING

11.1 Screening Values

As the basis of a generic tier 1 screening assessment, the results have been compared directly against published standards for human health.

Several different partly overlapping schemes are currently in use in the UK, based on the Environment Agency's CLEA Model but with differing toxicological parameters. For this report, these schemes have and have been applied in the following hierarchy:

- Suitable For Use levels (S4UL) recently published by LQM in association with the CIEH.
- Category 4 Screening Levels (C4SL) recently published by the DEFRA and CL:AIRE.

Whilst other standards exist, such as the LQM Generic Assessment Criterion and the Environment Agency's Soil Guideline Values, these are deemed superseded by the above documents.

The soil chemical analysis results have been compared against respective screening values for residential land uses without plant uptake (i.e. residential properties without private gardens, where produce is unlikely to be homegrown for consumption).

For contaminants where the respective screening value is dependent on Soil Organic Matter (SOM), the corresponding value for 2.50% was used (the arithmetic mean SOM value for the soil was 4.96%).

Where no standard exists, the contaminant is either not considered a priority in terms of human health (at least in the scenario being considered), or no screening value has been published.

11.2 Screening results

Some of the results were deviating due to extra tests being scheduled by the client following the completion of the site works.

None of the results exceeded the screening criteria, with the exception of the following:

Determinand	Screening value (mg/kg)	Results exceeding the screening value (mg/kg)
Lead	310	WS001 0.40m (380), WS001 0.60m (320), WS002 0.50m (340), WS003 0.50m (320)
Mercury (elemental)	1.2	TP001 0.50m (1.4)
Beryllium	1.7	TP001 0.50m (1.9), WS001 0.40m (1.8), WS001 0.60m (2.2), WS002 0.20m (2.2), WS002 0.50m (2.3)
Naphthalene	5.6	WS003 0.50m (5.7)
Benzo(a) anthracene	14	WS002 0.20m (15), WS003 0.50m (62), WS004 0.60m (14)
Chrysene	31	WS003 0.50m (58)
Benzo(b) fluoranthene	4	TP002 0.50m (11), WS001 0.40m (11), WS002 0.20m (16), WS003 0.50m (57), WS004 0.60m (17)

Determinand	Screening value (mg/kg)	Results exceeding the screening value (mg/kg)
Benzo(a)pyrene	3.2	TP001 0.20m (3.4), TP002 0.50m (8.7), WS001 0.40m (9.2), WS002 0.20m (14), WS003 0.50m (56), WS004 0.60m (13)
Di-benzo(a,h) anthracene	0.32	TP001 0.20m (0.4), TP002 0.50m (1.2), WS001 0.40m (1.2), WS001 0.60m (0.39), WS002 0.20m (2), WS003 0.50m (7.9), WS004 0.60m (1.8)

11.3 Elemental Mercury

The screening value for Mercury was based on the assessment for elemental Mercury as this was the most conservative (lowest) value for the different species of Mercury. However, elemental Mercury (i.e. the liquid form) itself is very unlikely to occur in soils and there is no known history of Mercury usage at the site. Consequently, the less conservative screening values for Inorganic Mercury (56mg/kg) or Methyl Mercury (15mg/kg) are more appropriate in this instance. None of the results exceeded the higher thresholds. Specialist speciated Mercury testing is not warranted.

11.4 Benzo(a)Pyrene

With respect to Polycyclic Aromatic Hydrocarbons (PAH's) Land Science have adopted the surrogate marker approach described in Appendix E of the C4SL suite of documents i.e. using benzo(a)pyrene as a representative compound for all genotoxic PAH's. This approach was used as benzo(a)pyrene was detected in the samples, and the other PAH's identified above the individual screening values were all classed as genotoxic. The table below summarises the revised screening assessment:

Determinand	GAC	Concentration		Results above GAC value
		Mean	Max	
Benzo(a)Pyrene (as surrogate marker)	5.3	7.8	56	TP002 0.50m (8.7), WS001 0.40m (9.2), WS002 0.20m (14), WS003 0.50m (56), WS004 0.60m (13)

11.5 Bioaccessible Metals

The screening values for Lead and Beryllium assumes all ingested contaminant will be fully soluble in stomach acid and therefore available to enter the body. However, this seldom the case in practice, and can be measured through Physiological Based Extraction Testing (PBET). The method in current use is known as the Unified BARGE Method (UBM) as devised by Bio-Accessibility Research Group Europe (BARGE) which was led by the UK. This data can then be applied as part of a detailed quantitative risk assessment.

11.6 Speciated TPH

The risks from TPH's are assessed differently from other contaminants. The ratio of an individual group of carbon bands to the respective GAC is calculated (a Hazard Quotient) and these are totalled to derive a sample specific Hazard Index. A Hazard Index exceeding 1.0 suggests a potential significant risk to human health in the exposure scenario considered. The calculated Hazard Indexes are summarised below.

Sample & Depth	Total TPH (mg/kg)	Hazard Index	Notes
TP001 0.20m	104	0.05	No exceedances identified
TP001 0.50m	326	0.08	
TP002 0.50m	210	0.10	
WS001 0.40m	240	0.08	
WS001 0.60m	305	0.07	
WS002 0.20m	1720	0.27	
WS0020.50m	1970	0.32	
WS003 0.50m	587	0.30	
WS004 0.60m	217	0.10	

A large part of the TPH split is in the heavy end of the classification and would be non-volatile. TPH1 tests were undertaken and based on a ratio the hazard indexes were all below 1.0.

11.7 Asbestos

There are no published screening values for asbestos in soil, however, nine soil samples were tested and asbestos was not detected.

11.8 Groundwater Vapour Screening

Although VOCs were detected within the samples taken from the shallow trial pits and dynamic sampling boreholes, VOCs were not recorded when monitoring BH003. Using the SOBRA 2017 guidance for assessing the potential vapour risk from groundwater the concentrations were significantly low enough that no potential risk from vapours would be present.

12.0 BUILT ENVIRONMENT SCREENING

12.1 Soft Landscaping

A number of documents include guidance on screening levels of phytotoxic contaminants within soils, including:

- BS3882:2015 "Specification for topsoil and requirements for use" (although stipulated as not to be used in contaminated land risk assessment).
- ICRCL in publication 70/90 1990 'Notes on the Restoration and Aftercare of Metalliferous Mining Sites for Pasture and Grazing' (although indirectly withdrawn) (where marked *).
- Code of Practice for Agricultural Use of Sewage Sludge (England and Wales 1996) for arable use (as opposed to grazing) and relating to priority phytotoxic elements only.

The results of the chemical analysis for determinands known to pose a potential phytotoxic risk to plant growth are summarised on the following table, together with the respective adopted screening values for plant growth. The results of the chemical analysis were evaluated singularly without the use of statistical tools.

Element	Phytotoxicity Value (mg/kg)			Arable (grassland)	Results exceeding screening value
	pH <6.0	pH 6.0-7.0	pH >7.0	pH >5.2	
Zinc	200	200	300	300 (300)	WS002 0.20m (310mg/kg)
Copper	100	135	200	200 (330)	None
Nickel	60	75	110	110 (180)	None
Cadmium	50*			3.0 (3.0)	None
Arsenic	1,000*			50 (50)	None

12.2 Structural Concrete

Recommendations with respect to Sulphate and buried concrete are made in section 9.6. It is noted that no onerous precautions in this respect are warranted.

12.3 Potable Water Supplies

The risk of chemical attack on water supply pipework has been assessed following the general Principals set out in the joint Water UK/HBF *Contaminated Land Assessment Guidance* dated January 2014. A summary of the main chemical criteria is reproduced below.

Test group (in mg/kg)	Poly-ethylene (PE)	Polyvinyl Chloride (PVC)	Metal or Barrier pipe	Results exceeding
VOC's	0.5	0.125	No limit	-
VOC's + BTEX & MTBE	0.1	0.03	No limit	-
SVOC's (excl. PAH's etc.)	2.0	1.4	No limit	-
SVOC's + Phenols	2.0	0.4	No limit	-

Test group (in mg/kg)	Poly-ethylene (PE)	Polyvinyl Chloride (PVC)	Metal or Barrier pipe	Results exceeding
SVOC's + Cresols & Chlorinated Phenols	2.0	0.04	No limit	-
Mineral oil EC11-20	10	No limit	No limit	None
Mineral oil EC21-40	500	No limit	No limit	None

Redox potential and conductivity should be checked where metal pipework is to be installed. aluminium barrier pipework is acceptable under all conditions. no pipework should be laid where there is evidence of petrol, diesel etc.

13.0 CONTROLLED WATERS SCREENING

13.1 General

The relevant analytical results have been compared directly against the standard set out in the water framework directive for surface waters, and the current UK potable water supply regulations.

13.2 Soil leachate screening

In comparison to the adopted surface water standards, the following determinands exceeded the respective thresholds:

Determinand	EQS	Units	Samples
Chromium	0.0047	mg/l	WS004 0.40m (0.0077)
Copper	0.001	mg/l	All samples (0.0023-0.026)
Lead	0.0012	mg/l	BH001 1.20m (0.0015), BH004 1.20m (0.0014), TP001 0.50m (0.0019), WS002 0.50m (0.0081), WS003 0.50m (0.0057), WS004 0.40m (0.018),
Zinc	0.0109	mg/l	TP001 0.50m (0.013), WS002 0.50m (0.02), WS003 0.50m (0.026), WS004 0.40m (0.022),

In comparison to the adopted drinking water standards, the following determinands exceeded the respective thresholds:

Determinand	DWS	Units	WS004 0.40m
Lead	0.01	mg/l	0.018

13.3 Groundwater screening

In comparison to the adopted surface water standards, the following determinands exceeded the respective thresholds:

Determinand	EQS	Units	BH003 4.40m
Copper	1	ug/l	3.2

In comparison to the adopted drinking water standards, none were found to exceed the respective standards.

14.0 TIER 1 SOIL CONTAMINATION ASSESSMENT

14.1 End Users

The chemical results identified elevated heavy metals in the north-western half of site and PAHs in all shallow locations tested.

Whilst the majority of the site will lie under the building / hardstanding footprint some of the PAH determinands are volatile or semi-volatile and part of the exposure risk is through the inhalation of indoor vapours, so there may remain a risk, especially considering the sites commercial land uses.

Consideration should be given to either conducting further investigation or proceeding to possible remediation measures which would include either source removal or creation of a barrier (e.g. ventilation and/or membrane).

14.2 Adjacent Land Users

The site has not been identified as a risk of ongoing pollution to neighbouring land. Measures should always be taken to prevent and control any dust, run-off and mud etc generated during groundworks, as part of good site management.

14.3 Soft Landscaping

Zinc exceeded the phytotoxicity screening values in samples at WS002 0.2m. No evidence of potentially phytotoxic effects was noted during the site walkover survey inspection.

The physical composition of the Made Ground which contained concrete, asphalt, brick and concrete was such that it was unlikely to be a suitable medium for landscaping and planting. Clean imported topsoil and subsoil will be required in accordance with appropriate British Standards.

14.4 Concrete specification

The chemical results and ground conditions have been appraised as part of the geotechnical report and reference should be made to section 9.6. No issues relating to man-made (contamination) sources have been identified.

14.5 Potable Water Supplies

No organic contaminants exceeding the screening values were identified. Subject to confirmation from the water utility, it appears there is no restriction on pipework material selection.

14.6 Ground Water Protection

The preliminary conceptual site model identified possible source pathway-receptor-linkages with respect to groundwater. The site overlies a Secondary aquifer over a Principal aquifer, but no groundwater Source Protection Zones were identified on site or in the vicinity. Contamination may be mobilised through the infiltration and percolation of water downwards through the soil column

and into the water table. This may then in turn migrate with the water table and impact directly on potential abstraction points.

Comparing the soil-leachate data directly to drinking water standards, Lead exceeded the respective standards (WS004 0.4m 0.018mg/l).

Overall, the screening does not suggest a significant risk of impact on groundwater quality.

14.7 Surface Water Protection

No surface water bodies were identified in the local area, and therefore no source-pathway-receptor linkages exist in this regard.

14.8 Conclusions

The updated conceptual site model has identified the following potential risks:

- End users; inhalation of vapours.
- Soft landscaping; risk of phytotoxicity and poor soil conditions for landscaping and planting.

Further investigation may be considered in order to determine the distribution of PAHs across the site and their variance with depth. This will enable a detailed quantitative risk assessment including use of statistical evaluation.. Further investigation may reduce or even eliminate the need for remediation.

Alternatively, if remediation is considered this should comprise an organic vapour resistant membrane within the floor slab construction. A ventilated subfloor void is unlikely to be appropriate given the expected piled foundation solution.

15.0 PRELIMINARY WASTE ASSESSMENT

15.1 General

Waste may be defined as any substance or object in Annex 1 of the Waste Framework Directive which the holder discards, intends to discard, or is required to discard. Subject to compliance with waste regulations, soils may either be handled as either:

- Non-Waste, and re-used (either on-site or on another site), or
- Waste, and disposed of (to a waste management facility).

Given the confines of the site, it was anticipated that all materials would be disposed of from site.

The waste producer has a legal duty of care to ensure that waste materials are handled properly and sent to the appropriate licenced facility. Substantial tax penalties and fines are being levied by the regulators. Inspection, testing, segregation etc will be required on site, and the support of a suitably qualified consultant should be sought; therefore, the advice in this section is preliminary only.

15.2 Waste Disposal

Where materials are not re-used they must be handled as Waste, and must be sent to a licenced waste management facility. Waste is classified as follows:

- Step 1: Does the material contain dangerous substances that qualify as Hazardous Waste as prescribed under the Waste Framework Directive.
- Step 2: Does the leachability criteria allow the materials to be sub-classified as Stable Non Reactive Waste (SNRHW) or as Inert Waste.

A material is therefore either Hazardous or Non-Hazardous Waste; Hazardous may be sub-classified as SNRHW and Non- Hazardous Waste may be sub-classified as Inert.

The results of the soil analysis have been classified as follows:

Soil	Soil	Waste designation	Details
TP001 0.50m WS001 0.60m	Made Ground	Inert	The soil analysis was not identified as hazardous and the WAC test met the requirements for Inert. Interpretation: Inert Waste.
TP002 0.50m	Made Ground	Non-hazardous	The soil analysis was not identified as hazardous but the WAC test did not meet the requirements for Inert waste. Interpretation: Non Hazardous waste. The test failing the criteria was Total PAH (Limit: 100mg/kg, Result: 119mg/kg).

WS003 0.50m			The soil analysis was not identified as hazardous but the WAC test did not meet the requirements for Inert waste. Interpretation: Non Hazardous waste. The test failing the criteria was: Total PAH (Limit: 100mg/kg, Result: 810mg/kg).
WS004 0.40m			The soil analysis was not identified as hazardous but the WAC test did not meet the requirements for Inert waste. Interpretation: Non Hazardous waste. The test failing the criteria was: Total PAH (Limit: 100mg/kg, Result: 467mg/kg).
WS002 0.50m	Made Ground	SNRHW	The soil analysis was identified as Hazardous waste due to TPH, although the WAC test met the criteria for Stable Non-reactive Hazardous Waste.

Soil	Soil	Waste designation	Details
BH001 1.20m	Till	Inert	The soil analysis was not identified as hazardous and the WAC test met the requirements for Inert. Interpretation: Inert Waste.
BH002 1.20m			
BH003 1.20m			
BH004 1.20m			
BH005 1.20m			
TP001 1.00m			
TP002 0.90m			
WS001 1.20m			
WS002 1.20m			

Further testing may be considered for soils identified as Non-Hazardous, as the tests may enable those materials to be re-classified as Inert and therefore represent a potential saving on disposal costs.

With reference to the current List of Wastes (formerly European Waste Catalogue), waste soils and stone derived from construction and demolition sites may be disposed of under either of the following codes as appropriate:

Waste	Code	Description
Hazardous	17 05 03*	soil and stones containing dangerous substances
Non-Hazardous	17 05 04	soil and stones other than those mentioned in 17 05 03

(Note, the asterix is a Mirror Entry, as defined in the List of Wastes, conferring the relationship with the non-hazardous code 17-05-04).

REFERENCES

A number of technical references have been referred to in the preparation of this document, including:

- Smith, I. (2014) Smith's Elements of Sil Mechanics. Chichester. Wiley Blackwell. 9th Edition.
- Highways England 2009. Interim Advice Note 73/06 revision 1: Design Guidance for Road Pavement foundations (draft HD25)
- BRE Design Guide 365. Soakaway design ("DG365")
- Radon: Guidance on protective measures for new buildings, BRE Report BR 211, 2015 2ND edition
- Groundwater protection: Principles and practice (GP3) August 2013 Version 1.1
- Revised EU Waste Framework Directive 2008 2008/98/EC [transposed into English law under The Waste (England and Wales) Regulations 2011]
- European Community (EC) Directive 1999/31/EC [transposed into English law under the Landfill (England and Wales) Regulations 2002]
- Defining Waste Recovery - Permanent Deposit of Waste on Land, EPR13 v1.0, EA 2010
- The definition of waste: Development Industry Code of Practice, v2, CL:AIRE 2011
- Guidance on the classification and assessment of waste Technical Guidance WM3 ("WM3") EA publication (1st edition 2015)

REPORT CONDITIONS

The Client

This report may also be used only by the client named in section 1 and their appointed project team for the purpose of design, obtaining planning, building regulations approval, and in connection with finance. This report must not be used by any other persons or for other purposes without express written agreement of Land Science.

General

Land Science takes all reasonable professional care in preparation of this report, using current standards and industry practice. However, the evaluation of ground conditions depends on an interpretation and extrapolation of the conditions revealed by a limited data set. The level of risk is related to the extent of investigation and no site is ever free of risk. The client should understand their risks and liabilities. We accept no liability whatsoever in respect of:

- The scope, extent or design of an investigation.
- Any conditions not directly revealed by the investigation.
- Published standards or methodologies used or adopted in this report.
- The opinion of any other party including any regulator, authority or stakeholder.
- Any dispute, claim or consequential loss arising from any findings of this report.
- Third party information and data.

This report relates solely to ground-related matters as set out in the objectives and makes no representation on other matters such as ecology, arboriculture, invasive plant species, the condition of buildings and structures, hazardous building materials such as insulation or asbestos, the locations of boundaries, unexploded ordnance, and or planning constraints etc. Further reports should be commissioned in this respect as appropriate.

Regulators and Approvals

This (and any other) report should be submitted to relevant authorities for their own assessments and to provide their approval or comments accordingly. This should be in good time before commencing on site in case additional work is to be carried out.

Standards, technical guidance and regulatory positions change over time and which may therefore affect the findings and recommendations made in this report; this should be verified by the client prior to any critical project milestones. Where this information is used in design, the designer should verify that the information is appropriate and has been used correctly.

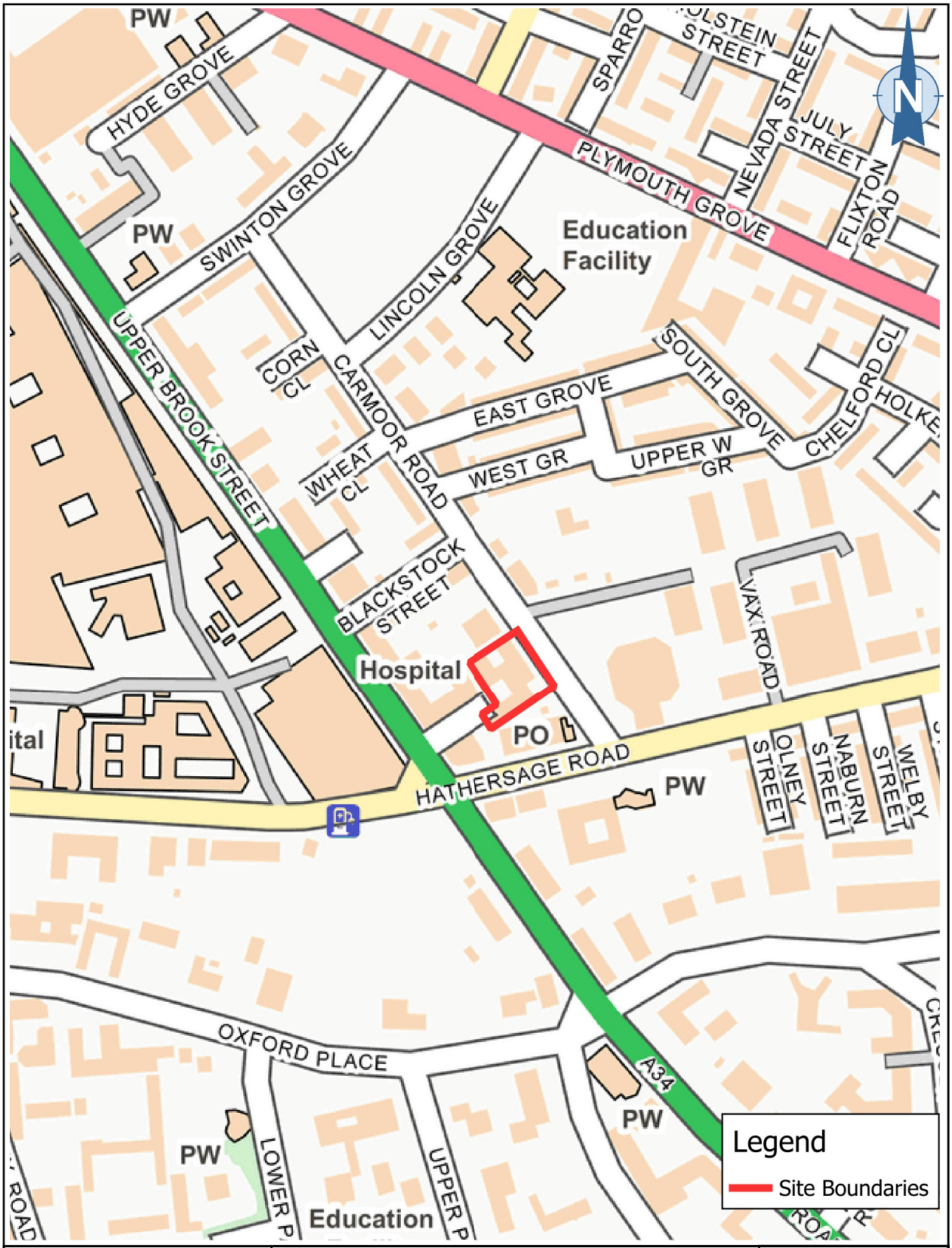
Variations with time

The report relates to conditions revealed at the time of the investigation and any monitoring visits. Some parameters may vary over time or seasonally; groundwater levels, ground gas compositions, or concentrations of contaminants are particularly variable in this respect. Further monitoring or verification should be considered as appropriate.

GLOSSARY OF TERMS

ACM	Asbestos Containing Material
BGS	British Geological Survey
BRE	Building Research Establishment
BS	British Standard
C4SL	Category 4 Screening Level
CBR	California Bearing Ratio
CDM	Construction Design and Management regulations
CIRIA	Construction Industry Research and Information Association
CL:AIRE	Contaminated Land: Applications in Real Environments
CLEA	Contaminated Land Exposure Assessment model
CSM	Conceptual Site Model
EA	Environment Agency
EQS	Environmental Quality Standards
FOC	Fraction of Organic Carbon
GAC	Generic Assessment Criterion
GQRA	Generic Quantitative Risk Assessment
mbgl	Meters Below Ground Level
NHBC	National House Building Council
mOD	Metres above Ordnance Datum
PAH's	Polycyclic Aromatic Hydrocarbons
PHE	Public Health England
PID	Photo-Ionisation Detector
PQRA	Preliminary Quantitative Risk Assessment
PSD	Particle Size Distribution Test
RMS	Remediation Method Statement
S4UL	Suitable for Use Level
SOM	Soil Organic Matter
SPZ	Source Protection Zone
SPT	Standard Penetration Test
SSSI	Sites of Special Scientific Interest
ST-WEL	Short Term Workplace Exposure Limit
SVOC's	Semi-Volatile Organic Compounds
TPH	Total Petroleum Hydrocarbons
TRRL / TRL	Transport Road Research Laboratory
TWA-WEL	Time Weighted Average Workplace Exposure Limit
UK HBF	United Kingdom House Building Federation
VOC's	Volatile Organic Compounds
WAC	Waste Acceptance Criteria

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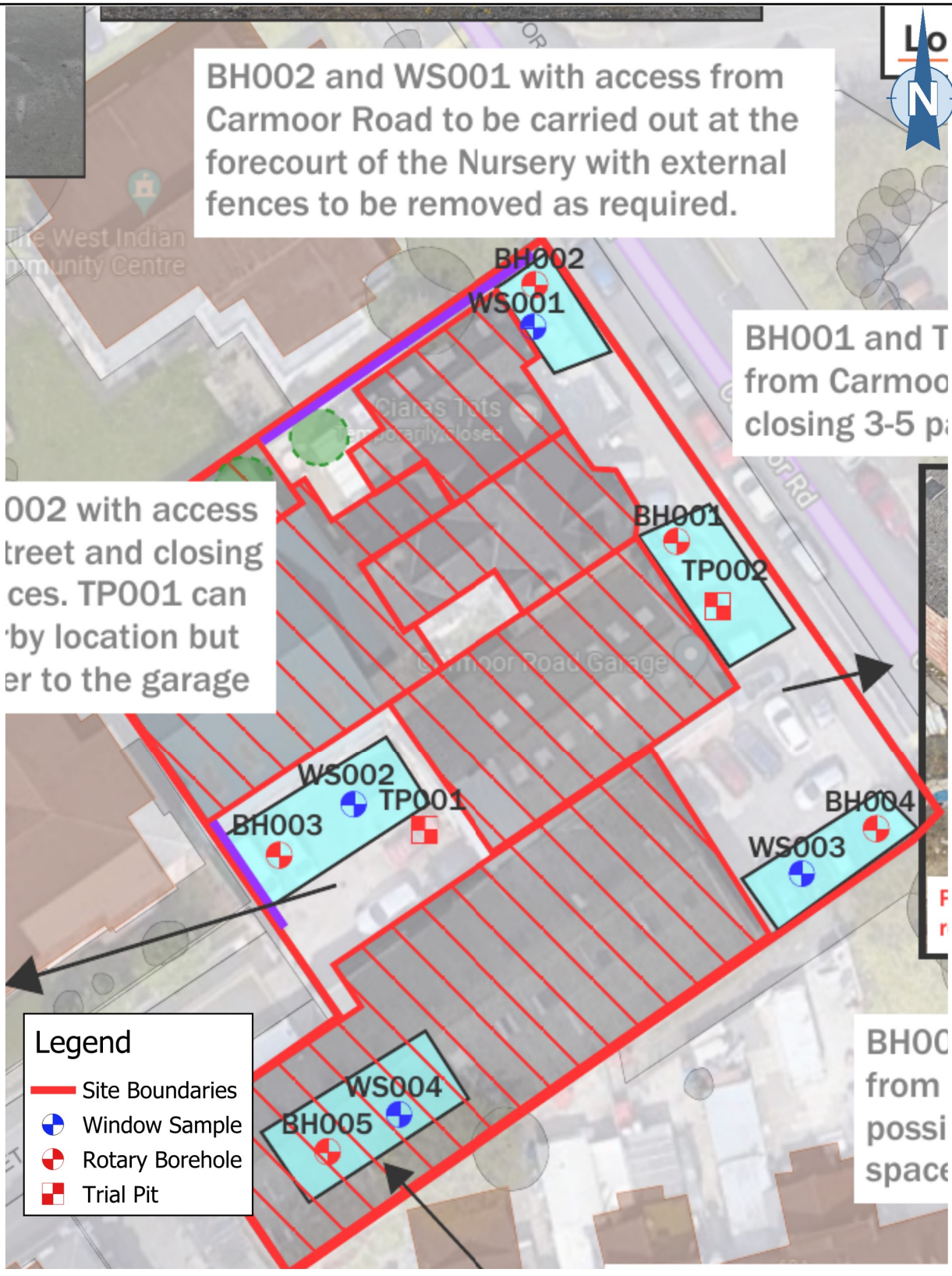
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Land Science	Title: Site Location		Reference: LS7347
	Project: 90 Carmoor Road, Manchester, M13 0FB		Figure: 1
	Client: Tiger Develpoments Ltd		Date: 15/02/2024
	Prepared by: BM	Checked by: ET	Version: 01	Sheet: 1

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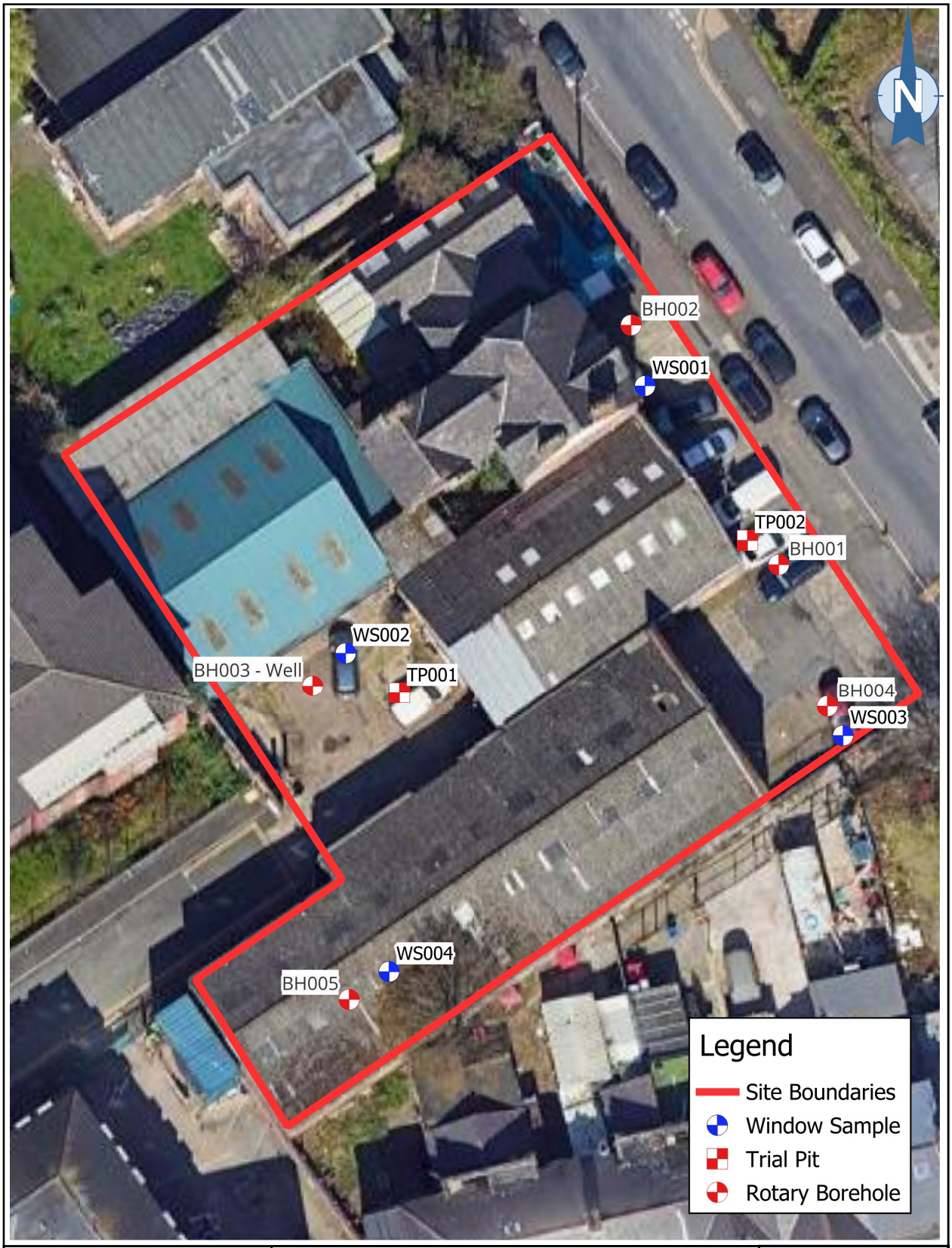
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Land Science	Title: Proposed Investigation Layout			Reference: LS7347
	Project: 90 Carmoor Road, Manchester, M13 0FB			Figure: 2
	Client: Tiger Develpoments Ltd			Date: 15/02/2024
	Prepared by: BM	Checked by: ET	Version: 01	Sheet: 1

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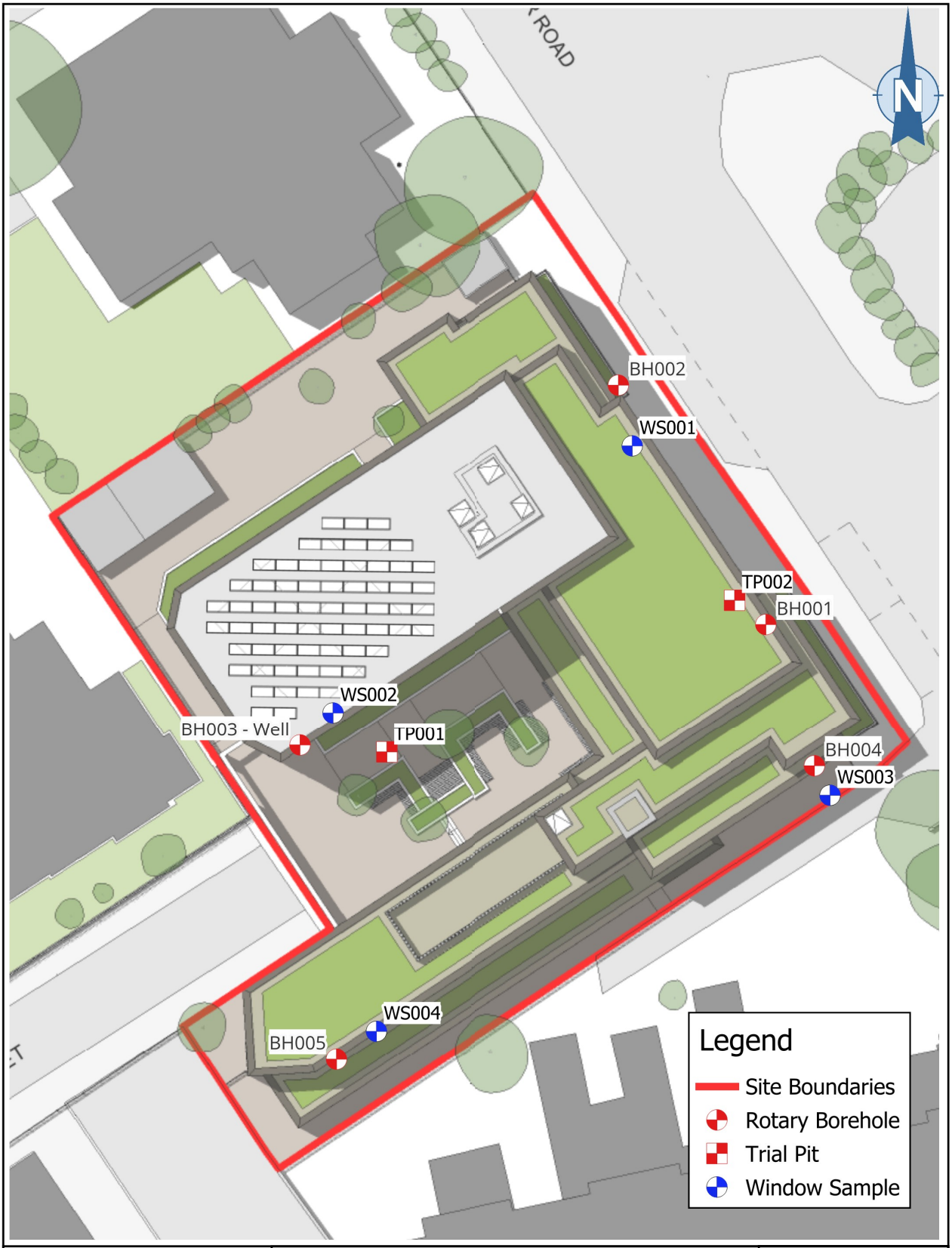
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Land Science	Title: Actual Investigation Layout		Reference: LS7347
	Project: 90 Carmoor Road, Manchester, M13 0FB		Figure: 3
	Client: Tiger Develpoments Ltd		Date: 15/02/2024
	Prepared by: BM	Checked by: ET	Version: 01	Sheet: 1

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Land Science	Title: Proposed Development Layout		Reference: LS7347
	Project: 90 Carmoor Road, Manchester, M13 0FB		Figure: 4
	Client: Tiger Develpoments Ltd		Date: 18/03/2024
	Prepared by: BM	Checked by: ET	Version: 01 / Sheet: 1

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APPENDIX A

SITE WALKOVER RECORD

The walkover is restricted only to aspects related to the Land Science report and the stated objectives therein. The walkover does not replace other surveys such as asbestos, arboriculture, ecology, utilities etc which the client should consider. The client should review the walkover and provide any further relevant information where available.

SITE DETAILS			
Project	*90 Carmoor Road, Manchester, M13 0FB*		
Reference	*LS7347*	**Date of walkover**	*22/01/24*
Engineer	*BM*		
CURRENT USE			
Existing land uses	*Site is a large square commercial garage with concrete forecourt for parking and concrete rear exit for vehicles leaving the garage. The garage is the central building a large storage warehouse adjoining to south and extending southwest, a adjoining house next door to the north. A second building at the rear of the garage to the west, also conducts automobile work and stores multiple vehicles. A children's nursery is located adjoining the house to the north and is fenced off from the rest of the site by large metal fencing. The is flat with the rear of the site (southwest) sloping slightly from northeast to southwest.*		
Status	*Active.*		
Suspected asbestos	*No immediate evidence but possibly within the storage warehouses (roofs, walls, plaster etc)*		
Below ground structures	*No immediate evidence. Drains observed at front (northeast) and rear (southwest) of site.*		
Hardstandings	*A wide concrete forecourt extends from north to south in front of the house, garage and warehouse on the Carmoor Road side of the site. To the southwest (at rear of site) a smaller concrete square area surrounded by the garage exit and two warehouses is noted. The garage and warehouses are built a top more concrete bases which also act as the floor of the buildings.*		
Soft landscaping	*There is no soft landscaping on this site.*		
General condition	*The site is generally unkept with multiple cars parked on both concrete forecourts to the northeast and southwest. Small amounts of litter are noted including crisp bags, sweet wrappers, plastic bottles, oil rags, paper, plastic bags. Inside the buildings is also unkempt and the large warehouse to the south is also littered with cardboard boxes, cars, jerry*		

	cans and occasional pigeons roosting in the roof. Tyres are also noted stacked at the rear of the garage (southwest). A large metal bin for scrap metal is located at the rear exit of the garage (southwest).
Boundaries	*The site is bordered to the northeast by Carmoor Road and to the south by houses and shops.. Autumn Street extends from the rear of the garage (southwest) and student accommodation buildings are on the west and southwest borders. The north is bordered by the children's nursery and the West Indian Community Centre.*
Adjacent land uses	*To the north is West Indian Community Centre. To the west and southwest are two student accommodation buildings. To the south is residential houses and shops.*
TOPOGRAPHY	
General lie of the land	*The site is on a relative flat low lying plane with a gently slope at rear of site (southwest) sloping from northeast to southwest.*
General lie of the site	*Sensibly flat and level with gently low slope in the west of the site.*
Abrupt changes in slope	*None recorded.*
Excavations and Depressions	*None recorded.*
Raised ground	*None recorded.*
GROUND STABILITY	
Signs of landslip	None recorded.
Cracking in buildings and walls etc	*The large warehouse to the south of the garage shows cracking outer walls and evidence of broken bricks falling from the walls of the warehouse to the floor. Whilst onsite, some small pieces of brick were observed falling from the top of the walls near the roof. Cracks and gaps in the brick walls of the warehouse were also observed.*
Subsidence on ground surface	*None recorded.*
GROUND CONDITIONS	
Possible filled-in ground	*None recorded.*
Possible built-up ground	*None recorded*
Exposed soils	*None recorded.*
Desiccation	*Occasional cracks in the concrete forecourt and rear were noted on the ground. These were mostly noted around the drains.*
Disturbance	*None recorded.*
WATER CONDITIONS	
Wet boggy ground	*None recorded.*
Wells and ditches	*None recorded.*
Ponds or ponding	*None recorded.*
Streams / Rivers	*None recorded.*

ECOLOGY	
Burrows	*None recorded.*
VEGETATION	
Reeds or water loving plants	*None recorded.*
Sparse growth or die back	*None recorded.*
Invasive species	*None recorded.*
TREES	
Relevant trees height/species	*None recorded.*
Off-site	*A semi mature tree was observed to the southeast corner off the site in the neighbouring property.*
Hedgerows	*None recorded.*
Recent felling and older stumps	*None recorded.*
CONTAMINATION	
Tipped materials	*Litter is noted around the site including, bottles (plastic, bags, crisp bags, paper, cardboard).*
Areas of possible fill	*None recorded.*
Discolouration/sheens of waterbodies	*Small oil sheens were noted in some areas around the site on concrete forecourt and in the large warehouse. Other small waterbodies from drips and spillages were noted around jerry cans and drums within the large warehouse in the south of the site.*
Surface staining	*None recorded.*
Chemicals storage	*Unknown chemicals in jerry cans within warehouse. Anti-freeze, oil cans, fuel/oil within cars stored in warehouse,*
Drums and tanks	*None recorded.*
Petrol interceptor	*None recorded.*
Soakaways	*Drains and manholes are noted on the concrete forecourts on the northeast and southwest of the site.*
LOCAL INFORMATION	
Place/road names	*Carmoor Road borders the east of the site trending northwest to southeast. Autumn Street trends from the southwest of the site.*
3rd party information	*None recorded.*
OTHER INFORMATION	

APPENDIX B









Land Science	**TITLE:**	Site Photographs	**REF:** LS7347	**PREPARED:**	JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:** 1 of 6	**CHECKED:**	ET
	CLIENT:	Tiger Developments Ltd	**DATE:** 26/03/2024	**VERSION**	V1

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UNIT 10, 19 ALBERT DRIVE BURGESS HILL, **WEST SUSSEX**, RH15 9TN









Land Science	**TITLE:**	Site Photographs	**REF:** LS7347	**PREPARED:**	JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:** 2 of 6	**CHECKED:**	ET
	CLIENT:	Tiger Developments Ltd	**DATE:** 26/03/2024	**VERSION**	V2









Land Science	**TITLE:**	Site Photographs	**REF:** LS7347	**PREPARED:**	JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:** 3 of 6	**CHECKED:**	ET
	CLIENT:	Tiger Developments Ltd	**DATE:** 26/03/2024	**VERSION**	V1









Land Science	**TITLE:**	Site Photographs	**REF:** LS7347	**PREPARED:**	JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:** 4 of 6	**CHECKED:**	ET
	CLIENT:	Tiger Developments Ltd	**DATE:** 26/03/2024	**VERSION**	V1





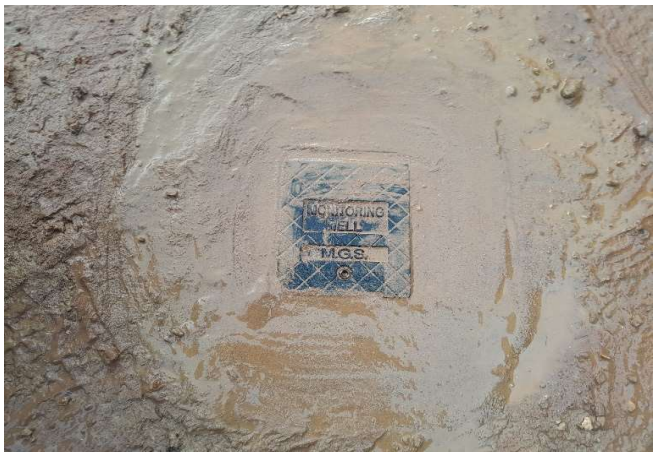




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	PROJECT:	90 Carmoor Road, Manchester	**SHEET:** 5 of 6	**CHECKED:**	ET
	CLIENT:	Tiger Developments Ltd	**DATE:** 26/03/2024	**VERSION**	V1









Land Science	**TITLE:**	Site Photographs	**REF:** LS7347	**PREPARED:**	JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:** 6 of 6	**CHECKED:**	ET
	CLIENT:	Tiger Developments Ltd	**DATE:** 26/03/2024	**VERSION**	V1



Land Science	**TITLE:**	BH001 Photographs	**REF:**	LS7347	**PREPARED:** JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:**	1	**CHECKED:** ET
	CLIENT:	Tiger Developments Ltd	**DATE:**	13/03/2024	**VERSION** V1

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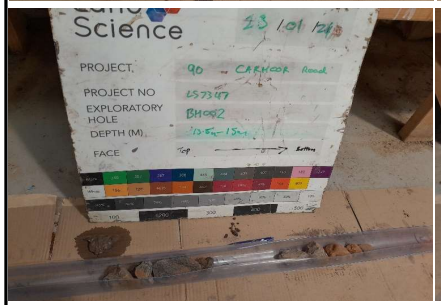
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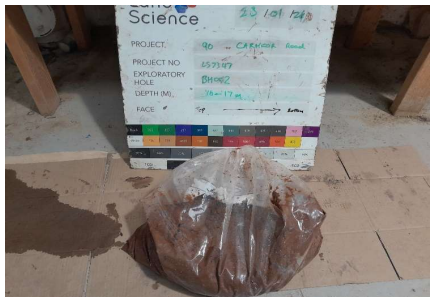














Land Science	**TITLE:**	BH002 Photographs	**REF:**	LS7347	**PREPARED:** JM
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	CLIENT:	Tiger Developments Ltd	**DATE:**	13/03/2024	**VERSION** V1









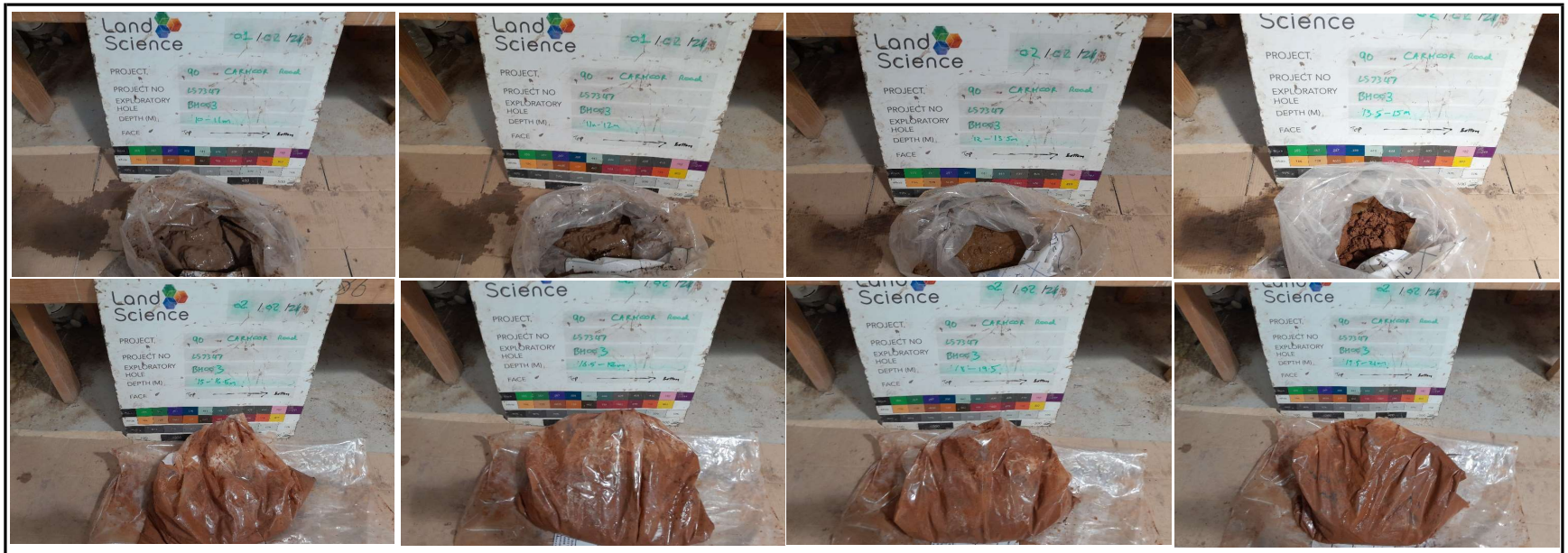








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	CLIENT:	Tiger Developments Ltd	**DATE:** 13/03/2024	**VERSION**	V1



Land Science	**TITLE:**	BH003 Photographs	**REF:**	LS7347	**PREPARED:** JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:**	2 of 2	**CHECKED:** ET
	CLIENT:	Tiger Developments Ltd	**DATE:**	13/03/2024	**VERSION** V1

















Land Science	**TITLE:**	BH004 Photographs	**REF:** LS7347	**PREPARED:**	JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:** 1 of 2	**CHECKED:**	ET
	CLIENT:	Tiger Developments Ltd	**DATE:** 13/03/2024	**VERSION**	V1





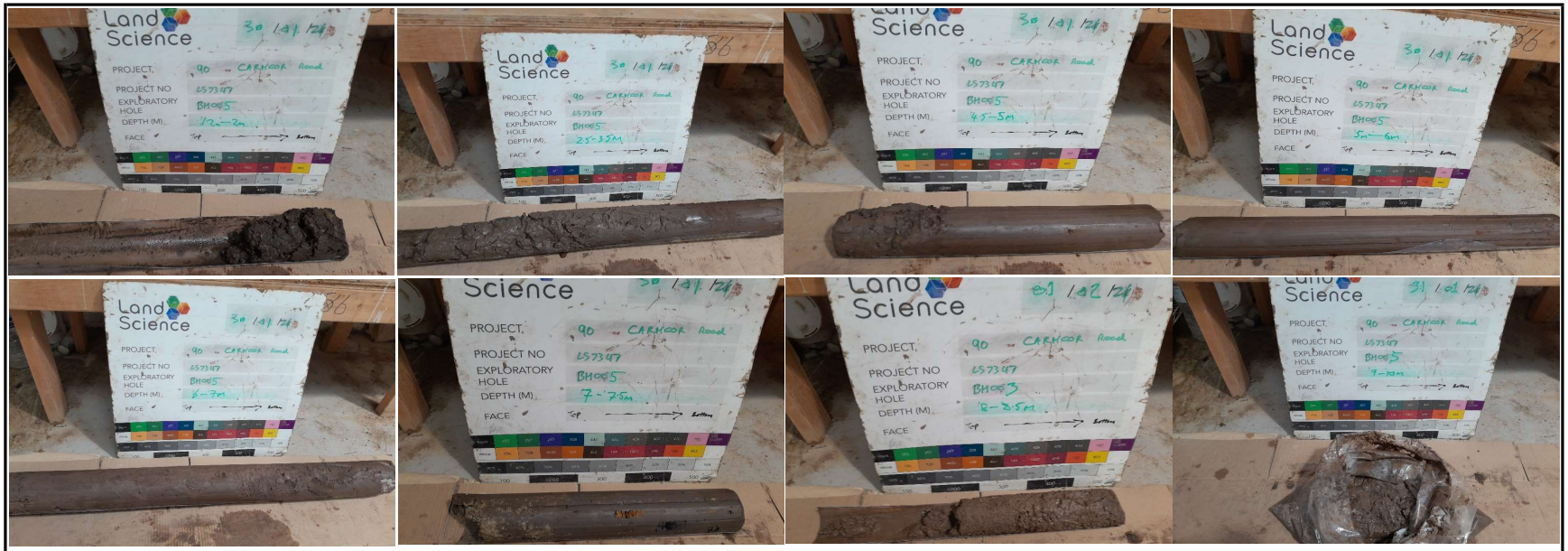








Land Science	**TITLE:**	BH004 Photographs	**REF:**	LS7347	**PREPARED:** JM
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Land Science	**TITLE:**	BH005 Photographs	**REF:** LS7347	**PREPARED:**	JM
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	CLIENT:	Tiger Developments Ltd	**DATE:** 13/03/2024	**VERSION**	V1

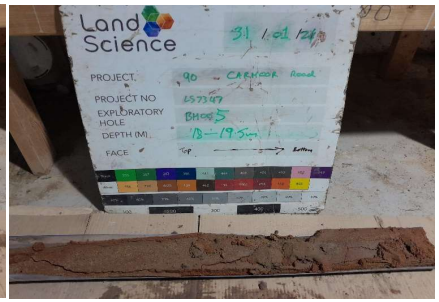


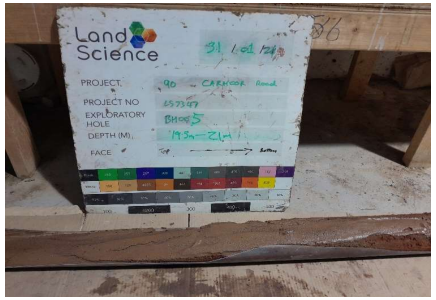












Land Science	**TITLE:**	BH005 Photographs	**REF:**	LS7347	**PREPARED:** JM
	PROJECT:	90 Carmoor Road, Manchester	**SHEET:**	2 of 2	**CHECKED:** ET
	CLIENT:	Tiger Developments Ltd	**DATE:**	13/03/2024	**VERSION** V1

APPENDIX C

Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Borehole Number **BH001**

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Flush :			Tiger Developments Ltd	LS7347
Core Dia : mm	Location	Dates	Project Contractor	Sheet
Method : Rotary Cored		25/01/2024- 29/01/2024	Land Science	1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
							0.10	ASPHALT (HARDSTANDING)		
							(0.60)	Grey black, gravelly CLAY. Gravels are fine to coarse flints, concrete, red brick. (MADE GROUND)		
							0.70			
1.20-2.00					D			Grey brown, silty CLAY with occasional gravels. Gravels are fine to coarse flints, sandstone and mudstones. (DEVENSIAN TILL)		
1.50	IV(P) 210 kPa									
							(2.30)			
2.00-2.50					UT 38 blows					
2.50-3.00					D					
3.00	IV(P) 180 kPa				1,2/3,2,4,4		3.00			
3.00-3.45					SPT N=13			Brown, silty CLAY with occasional gravels. Gravels are fine to coarse flints, sandstone and mudstones. (DEVENSIAN TILL)		
3.00-4.00					D					
3.50	IV(P) 192 kPa									
4.00	IV(P) 192 kPa									
4.00-4.25					UT Refused blows					
4.25-5.00					D					
4.50	IV(P) 192 kPa									
5.00	IV(P) 168 kPa				2,4/5,7,9,12					
5.00-5.45					SPT N=33					
5.00-6.00					D					
5.50	IV(P) 216 kPa									
6.00	IV(P) 192 kPa				2,4/5,7,7,8					
6.00-6.45					SPT N=27					
6.00-7.00					D		(7.00)			
					3,6/7,7,6,8					
7.00-7.45					SPT N=28					
7.00-8.00					D					
7.50	IV(P) 216 kPa									
8.00	IV(P) 168 kPa				3,5/6,6,8,9					
8.00-8.45					SPT N=29					
8.00-8.50					D					
8.50	IV(P) 192 kPa									
8.50-9.00					UT N/A blows					
9.00	IV(P) 240 kPa				5,8/8,9,6,8					
9.00-9.45					SPT N=31					
9.00-10.00					D					
9.50	IV(P) 216 kPa									
10.00	IV(P) 192 kPa				3,7/7,7,9,14		10.00			
10.00-10.45					SPT N=37			Red brown, sandy CLAY with occasional gravels. Sands are fine to coarse. Gravels are fine to coarse flints, sandstone and mudstones. (DEVENSIAN TILL)		
10.00-11.00					D					
10.50	IV(P) 120 kPa									
							(2.00)			
11.00	IV(P) 216 kPa				18,0/7,15,30,50					
11.00-11.45					SPT N=102					
					15,10/25,41,9,5		12.00			
12.00-12.45					SPT N=80			Red yellow slightly clayey, gravelly SAND. Sands are fine to coarse. Gravels are fine to coarse sandstone. (DEVENSIAN TILL)		
12.00-12.40					D					
					8,12/10,12,10,10					
13.50-13.95					SPT N=42					
							(4.50)			
					12,12/10,12,18,10					
15.00-15.45					SPT N=50					

Remarks
GROUNDWATER: No groundwater encountered.
CASING: Casing from 0 to 18m.
INSTALLATION: No installation.
BACKFILLED: Backfilled with clean arisings.
SLOW PROGRESS: Progress was slow.
NOTES: Borehole completed at 20.10m

Scale (approx)	Logged By
1:75	BM

Figure No.
LS7347.BH001

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Borehole Number **BH001**
Machine : **Flush :** **Core Dia :** mm **Method :** Rotary Cored	**Casing Diameter**	**Ground Level (mOD)**	**Client** Tiger Developments Ltd **Job Number** LS7347
	Location	**Dates** 25/01/2024- 29/01/2024	**Project Contractor** Land Science **Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
16.50-16.95					4,8/8,7,14,12 SPT N=41		16.50	Red fine grained SANDSTONE (COLLYHURST SANDSTONE)		
18.00-18.45 18.00-19.00					15,10/50,29,21,40 SPT N=140 D		(3.60)			
19.00-20.00					D					
20.00-20.10					25,50/50,50,0,0 SPT 75*/100 100/0		20.10	Complete at 20.10m		

Remarks

Scale (approx)	Logged By
1:75	BM

Figure No.
LS7347.BH001

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Site	Borehole Number
90 Carmoor Road, Manchester, M13 0FB	BH002

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Flush :			Tiger Developments Ltd	LS7347
Core Dia : mm	Location	Dates	Project Contractor	Sheet
Method : Rotary Cored		22/01/2024-23/01/2024	Land Science	1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
							0.10	CONCRETE (HARDSTANDING)		
							(0.60)	Grey black, silty, gravelly CLAY. Gravels are fine to coarse flints, concrete, red brick. (MADE GROUND)		
							0.70			
1.20	IV(P) 192 kPa				2,2/4,4,5,4			Grey brown, silty CLAY with occasional gravels. Gravels are fine to cobbles flints, sandstone and mudstones. (DEVENSIAN TILL)		
1.20-1.65					SPT N=17					
1.20-2.20					D					
							(2.30)			
2.20	IV(P) 240 kPa				1,3/2,3,3,3					
2.20-2.65					SPT N=11					
2.20-2.70					D					
2.70	IV(P) 192 kPa				2,2/3,2,2,3		3.00			
2.70-3.20					UT			Brown, silty CLAY with occasional gravels. Gravels are fine to cobbles flints, sandstone and mudstones. (DEVENSIAN TILL)		
3.20-3.65					SPT N=10					
3.20-4.20					D					
3.30	IV(P) 216 kPa									
4.20	IV(P) 192 kPa				2,4/6,6,8,7					
4.20-4.65					SPT N=27					
4.20-4.70					D					
4.60	IV(P) 240 kPa									
4.70-5.20					UT					
					2,4/5,7,9,11					
5.20-5.65					SPT N=32					
5.20-6.20					D					
5.70	IV(P) 192 kPa									
6.20	IV(P) 192 kPa				9,12/15,8,12,11					
6.20-6.65					SPT N=46					
6.20-7.20					D					
6.70	IV(P) 144 kPa						(7.70)			
					6,5/6,6,5,4					
7.20-7.65					SPT N=21					
7.20-8.20					D					
7.70	IV(P) 96 kPa									
8.20	IV(P) 120 kPa				1,3/2,4,5,5					
8.20-8.65					SPT N=16					
8.20-8.70					D					
8.40	IV(P) 120 kPa									
8.70-9.20					UT					
9.20	IV(P) 24 kPa				4,6/6,4,5,5					
9.20-9.65					SPT N=20					
9.20-10.20					D					
9.70	IV(P) 48 kPa									
					9,9/17,15,18,60					
10.20	IV(P) 48 kPa				5,6/6,5,5,5					
10.20-10.65					SPT N=21					
10.20-10.70					D					
10.70-11.15					SPT N=110		10.70	Red brown, sandy CLAY with occasional gravels. Sands are fine to coarse. Gravels are fine to cobbles flints, sandstone and mudstones. (DEVENSIAN TILL)		
							(1.30)			
11.60-12.00					D					
					6,9/9,21,15,20		12.00			
12.00-12.45					SPT N=65			Red yellow slightly clayey, gravelly SAND. Sands are fine to coarse. Gravels are fine to cobbles, sandstones. (DEVENSIAN TILL)		
					10,13/26,24,20,0					
13.50-13.95					SPT N=70		(3.00)			
13.50-13.60					D					
					6,13/16,10,16,14					
15.00-15.45					SPT N=56					

Remarks
GROUNDWATER: No groundwater encountered.
CASING: Casing from 3 to 18m.
INSTALLATION: No installation.
BACKFILLED: Backfilled with clean arisings.
SLOW PROGRESS: Progress was slow.
NOTES: Borehole refused at 18.0m

Scale (approx)	Logged By
1:75	BM

Figure No.
LS7347.BH002

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Site 90 Carmoor Road, Manchester, M13 0FB			**Borehole Number** BH002
Machine : **Flush :** **Core Dia :** mm **Method :** Rotary Cored	**Casing Diameter**	**Ground Level (mOD)**	**Client** Tiger Developments Ltd	**Job Number** LS7347
	Location	**Dates** 22/01/2024-23/01/2024	**Project Contractor** Land Science	**Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
15.00-16.00					B		15.00			
								Red fine grained SANDSTONE (COLLYHURST SANDSTONE)		
16.00-17.00					B					
16.50-16.95					10,8/12,12,16,30 SPT N=70		(3.00)			
17.00-18.00					B					
							18.00	Refused at 18.00m		

Remarks

Scale (approx)	Logged By
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Figure No. LS7347.BH002

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Borehole Number **BH003**

Machine : Flush : Core Dia : mm Method : Rotary Cored	Casing Diameter	Ground Level (mOD)	Client Tiger Developments Ltd	Job Number LS7347
	Location	Dates 31/01/2024- 02/02/2024	Project Contractor Land Science	Sheet 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
							0.15	CONCRETE (HARDSTANDING)			
							(0.65)	Grey black silty, gravelly CLAY. Gravels are fine to coarse flints, concrete, red brick. (MADE GROUND)			
							0.80				
1.20	IV(P) 96 kPa				1,0/0,0,0,1			Brown, silty CLAY with occasional gravels. Gravels are fine to cobbles flints, sandstone and mudstones. (DEVENSIAN TILL)			
1.20-1.65					SPT N=1						
1.20-2.00					D						
2.00	IV(P) 120 kPa				1,2/2,2,2,2						
2.00-2.45					SPT N=8						
2.00-2.50					D						
2.50	IV(P) 48 kPa				1,0/2,1,3,3						
2.70-3.00					UT						
3.00-3.45					SPT N=9						
3.00-4.00					D						
3.10	IV(P) 168 kPa										
3.50	IV(P) 192 kPa										
4.00	IV(P) 168 kPa										
4.00-4.50					UT 73 blows						
4.50	IV(P) 168 kPa				3,4/6,4,7,7						
4.50-4.95					SPT N=24						
4.50-5.00					D						
5.00	IV(P) 168 kPa				5,4/4,5,7,8						
5.00-5.45					SPT N=24						
5.00-6.00					D						
5.50	IV(P) 144 kPa						(10.20)				
6.00	IV(P) 96 kPa				7,7/6,7,8,8						
6.00-6.45					SPT N=29						
6.00-7.00					D						
					3,4/6,9,9,8						
7.00-7.45					SPT N=32						
7.00-8.00					D						
8.00	IV(P) 120 kPa				7,6/8,9,9,8						
8.00-8.45					SPT N=34						
8.00-8.50					D						
8.40	IV(P) 120 kPa				7,9/9,8,9,8						
8.60-9.00					UT						
9.00-9.45					SPT N=34						
9.00-10.00					B						
9.10	IV(P) 120 kPa										
					7,9/9,9,8,7						
10.00-10.45					SPT N=33						
10.00-11.00					B						
					7,9/12,10,9,9		11.00				
11.00-11.45					SPT N=40			Red yellow, slightly clayey, gravelly SAND. Sands are fine to coarse. Gravels are fine to cobbles, sandstones. (DEVENSIAN TILL)			
11.00-12.00					B						
					6,4/12,11,14,12						
12.00-12.45					SPT N=49						
12.00-13.50					B		(2.50)				
					8,12/50,20,0,0		13.50				
13.50-13.95					SPT N=70			Red SAND. Sands are fine to coarse. (COLLYHURST SANDSTONE)			
13.50-15.00					B						
					7,9/10,40,15,0						
15.00-15.45					SPT N=65						

Remarks
GROUNDWATER: No groundwater encountered.
CASING: Casing from 4 to 21m.
INSTALLATION: 50mm diameter HDPE standpipe to 20.00; plain casing to 2.00m, slotted response zone 2.00m to 20.00m.
BACKFILLED: Backfilled with clean arisings.
SLOW PROGRESS: Progress was slow.
NOTES: Borehole completed at 21.0m

Scale (approx)	Logged By
1:75	BM

Figure No.
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Site	Borehole Number
90 Carmoor Road, Manchester, M13 0FB	BH003

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Flush :			Tiger Developments Ltd	LS7347
Core Dia : mm	Location	Dates	Project Contractor	Sheet
Method : Rotary Cored		31/01/2024-02/02/2024	Land Science	2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
15.00-16.50					B						
16.50-16.95 16.50-18.00					25,60/50,40,0,0 SPT N=90 B		(6.00)				
18.00-18.45 18.00-19.50					25,60/50,30,0,0 SPT N=80 B						
19.50-19.95 19.50-21.00					25,40/50,36,0,0 SPT N=86 B		19.50	Red fine grained SANDSTONE (COLLYHURST SANDSTONE)			
							(1.50)				
21.00-21.45					25,30/50,40,0,0 SPT N=90		21.00	Complete at 21.00m			

Remarks

Scale (approx)	Logged By
1:75	BM

Figure No. LS7347.BH003

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Site	Borehole Number
90 Carmoor Road, Manchester, M13 0FB	BH004

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Flush :			Tiger Developments Ltd	LS7347
Core Dia : mm	Location	Dates	Project Contractor	Sheet
Method : Rotary Cored		24/01/2024-25/01/2024	Land Science	1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
							0.10	ASPHALT (HARDSTANDING)		
							(0.70)	Grey black, silty, gravelly CLAY. Gravels are fine to coarse flints, concrete, red brick. (MADE GROUND)		
							0.80			
1.20	IV(P) 216 kPa				1,2/4,4,4,6			Grey brown, silty CLAY with occasional gravels. Gravels are fine to coarse flints, sandstone and mudstones. (DEVENSIAN TILL)		
1.20-1.65					SPT N=18					
1.20-2.20					D					
2.20	IV(P) 168 kPa				3,2/3,3,3,4					
2.20-2.65					SPT N=13					
2.20-2.70					D					
2.70	IV(P) 240 kPa									
2.70-3.20					UT N/A blows					
3.20	IV(P) 168 kPa				6,6/7,7,6,9					
3.20-3.65					SPT N=29					
3.20-4.20					D					
3.70	IV(P) 216 kPa						(6.20)			
4.20	IV(P) 192 kPa				6,5/6,6,5,5					
4.20-4.65					SPT N=22					
4.20-4.70					D					
4.70	IV(P) 96 kPa									
4.70-5.20					UT N/A blows					
5.20	IV(P) 168 kPa				6,9/8,9,8,8					
5.20-5.65					SPT N=33					
5.20-6.00					D					
5.60	IV(P) 144 kPa									
6.00	IV(P) 168 kPa				7,7/6,9,8,9					
6.00-6.45					SPT N=32					
6.00-7.00					D					
7.00	IV(P) 192 kPa				7,7/6,9,8,8		7.00	Grey brown, sandy CLAY with occasional gravels. Sands are fine to coarse. Gravels are fine to cobbles flints, sandstone and mudstones. (DEVENSIAN TILL)		
7.00-7.45					SPT N=31					
7.00-8.00					D					
8.00-8.45					5,5/8,8,8,9					
8.00-9.00					SPT N=33					
					B		(3.00)			
9.00-9.45					8,7/8,15,9,12					
9.00-10.00					SPT N=44					
					B					
10.00-10.45					6,7/7,12,10,8		10.00	Brown, sandy CLAY with occasional gravels. Sands are fine to coarse. Gravels are fine to cobbles flints, sandstone and mudstones.(DEVENSIAN TILL)		
10.00-11.00					SPT N=37					
					B					
11.00-11.45					19,6/17,10,11,12					
11.00-12.50					SPT N=50		(2.50)			
					B					
12.50-12.95					10,15/30,41,9,5		12.50	Red yellow, gravelly SAND. Sands are fine to coarse. Gravels are fine to coarse, sandstones. (DEVENSIAN TILL)		
					SPT N=85					
14.00-14.45					25,20/50,40,0,0					
14.00-15.50					SPT N=90					
					B					

Remarks
GROUNDWATER: No groundwater encountered.
CASING: Casing from 3 to 18m.
INSTALLATION: No installation.
BACKFILLED: Backfilled with clean arisings.
SLOW PROGRESS: Progress was slow.
NOTES: Borehole complete at 20.1m

Scale (approx)	Logged By
1:75	BM

Figure No.
LS7347.BH004

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Borehole Number **BH004**
Machine : **Flush :** **Core Dia :** mm **Method :** Rotary Cored	**Casing Diameter**	**Ground Level (mOD)**	**Client** Tiger Developments Ltd **Job Number** LS7347
	Location	**Dates** 24/01/2024- 25/01/2024	**Project Contractor** Land Science **Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
15.50-15.95 15.50-17.00					6,8/29,21,40,0 SPT N=90 B		(6.00)			
17.00-17.45					9,7/21,6,7,6 SPT N=40					
18.50-18.95					15,10/50,50,50,0 SPT N=150		18.50	Red fine grained SANDSTONE (COLLYHURST SANDSTONE)		
19.50-20.00					D		(1.60)			
20.00-20.45					25,25/50,45,0,0 SPT N=95		20.10	Complete at 20.10m		

Remarks

Scale (approx)	Logged By
1:75	BM

Figure No.
LS7347.BH004

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Borehole Number **BH005**

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Flush :			Tiger Developments Ltd	LS7347
Core Dia : mm				
Method : Rotary Cored	Location	Dates 29/01/2024- 31/01/2024	Project Contractor Land Science	Sheet 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
							0.15	Reinforced CONCRETE (HARDSTANDING)		
							(1.05)	Grey black silty, gravelly CLAY. Gravels are fine to coarse flints, concrete, red brick. (MADE GROUND)		
1.20-1.65					0,0/1,0,0,0 SPT N=1		1.20			
1.20-2.00					D			Grey brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse flints, sandstone and mudstones. (DEVENSIAN TILL)		
2.00-2.50					UT 58 blows					
2.50	IV(P) 168 kPa				2,4/4,5,4,6					
2.50-2.45					SPT N=19					
2.50-3.00					D					
3.00	IV(P) 192 kPa									
3.00-4.00					D					
3.50	IV(P) 216 kPa									
4.00-4.50					UT 66 blows					
4.50	IV(P) 192 kPa				3,6/6,6,7,7					
4.50-4.95					SPT N=26					
4.50-5.00					D					
5.00	IV(P) 192 kPa				3,3/5,5,6,6					
5.00-5.45					SPT N=22					
5.00-6.00					D					
5.50	IV(P) 144 kPa						(9.30)			
6.00	IV(P) 192 kPa				2,4/4,6,6,7					
6.00-6.45					SPT N=23					
6.00-7.00					D					
6.50	IV(P) 168 kPa									
7.00	IV(P) 192 kPa				4,3/4,4,6,6					
7.00-7.45					SPT N=20					
7.00-7.50					D					
7.50	IV(P) 240 kPa									
7.50-8.00					UT N/A blows					
8.00-8.45					3,3/5,5,6,7 SPT N=23					
9.00-9.45					7,6/8,10,9,8 SPT N=35					
9.00-10.00					B					
10.00-11.00					B					
							10.50	Red brown slightly clayey, gravelly SAND. Sands are fine to coarse. Gravels are fine to coarse, sandstones. (DEVENSIAN TILL)		
11.00-11.45					10,9/9,11,9,9 SPT N=38					
11.00-12.00					B					
12.00-12.45					4,16/50,5,0,0 SPT N=55					
12.00-13.50					B					
13.50-13.95					8,6/7,43,10,0 SPT N=60		(6.00)			
13.50-15.00					B					
15.00-15.30					4,4/5,14,21,30 SPT 70/150					

Remarks
GROUNDWATER: No groundwater encountered.
CASING: Casing from 6 to 18m.
INSTALLATION: No installation.
BACKFILLED: Backfilled with clean arisings.
SLOW PROGRESS: Progress was slow.
NOTES: Borehole completed at 21.0m

Scale (approx)	Logged By
1:75	BM

Figure No.
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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Borehole Number **BH005**

Machine :	Casing Diameter	Ground Level (mOD)	Client	Job Number
Flush :			Tiger Developments Ltd	LS7347
Core Dia : mm	Location	Dates	Project Contractor	Sheet
Method : Rotary Cored		29/01/2024- 31/01/2024	Land Science	2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
15.00-16.50					B					
16.50-16.95 16.50-18.00					18,7/20,50,30,0 SPT N=100 B		16.50	Red SAND. Sands are fine to coarse. (COLLYHURST SANDSTONE)		
18.00-18.45 18.00-19.50					15,10/25,43,7,2 SPT N=77 B		(3.00)			
19.50-20.10					B		19.50 (0.50)	Red fine grained SANDSTONE. (COLLYHURST SANDSTONE)		
20.00-20.45					25,55/50,55,50,50 SPT N=205		20.00	Complete at 20.10m		

Remarks	Scale (approx)	Logged By
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	Figure No.	
	LS7347.BH005	

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Site	Trial Pit Number
90 Carmoor Road, Manchester, M13 0FB	TP001

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	0.50m x 0.50m		Tiger Developments Ltd	LS7347

Location	Dates	Project Contractor	Sheet
	22/01/2024-23/01/2024	Land Science	1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.10) 0.10	CONCRETE (HARDSTANDING)		
0.20	D				(0.20)	Grey brown, sandy, gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints, tarmac, concrete and red brick. (MADE GROUND)		
0.20	T		PID = 1.8ppm		0.30			
0.50	T				(0.40)	Grey brown, sandy, gravelly CLAY with black staining. Sands are fine to coarse. Gravels are fine to coarse subangular to subrounded, flints, asphalt, concrete and red brick. (MADE GROUND)		
0.60	D		PID = 1.1ppm		0.70			
						Grey brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
1.00	B							
1.20	D				(1.30)			
					2.00	Red brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
2.20	D				(1.00)			
2.70	D				3.00	Complete at 3.00m		

Plan

Remarks

GROUNDWATER: No groundwater encountered.
CASING: No casing used.
INSTALLATION: No installation.
BACKFILL: Backfilled clean with arisings.
SLOW PROGRESS: None.
NOTES: Trial Pit completed at 3.00m

Scale (approx)	Logged By	Figure No.
1:25	BM	LS7347.TP001

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Land Science

Brighton | London | Bristol
0845 604 6494
www.landscience.co.uk

Site	Trial Pit Number
90 Carmoor Road, Manchester, M13 0FB	TP002

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit	0.50m x 0.50m		Tiger Developments Ltd	LS7347

Location	Dates	Project Contractor	Sheet
	22/01/2024-23/01/2024	Land Science	1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.10) 0.10	CONCRETE (HARDSTANDING)		
					(0.25)	Grey brown, gravelly, sandy CLAY. Gravels are fine to coarse subangular to subrounded, flints, tarmac, concrete and red brick. Sands are fine to medium. (MADE GROUND)		
0.30	D				0.35			
0.50	T				(0.35)	Grey brown, sandy, gravelly CLAY with black staining. Sands are fine to coarse. Gravels are fine to coarse subangular to subrounded, flints, asphalt, concrete and red brick. (MADE GROUND)		
0.60	D		PID = 0.5ppm		0.70			
0.80-1.00	B					Grey brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
0.90	D							
1.20	D				(1.30)			
1.80	D				2.00	Red brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
2.50	D				(1.00)			
					3.00	Complete at 3.00m		

Plan

Remarks

GROUNDWATER: No groundwater encountered.
CASING: No casing used.
INSTALLATION: No installation.
BACKFILL: Backfilled clean with arisings.
SLOW PROGRESS: None.
NOTES: Trial Pit completed at 3.00m

Scale (approx)	Logged By	Figure No.
1:25	BM	LS7347.TP002

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Number **WS001**
Excavation Method Drive-in Windowless Sampler	**Dimensions**	**Ground Level (mOD)**	**Client** Tiger Developments Ltd	**Job Number** LS7347
	Location	**Dates** 22/01/2024- 23/01/2024	**Project Contractor** Land Science	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.10)	CONCRETE (HARDSTANDING)		
					0.10			
0.20	D					Grey brown, sandy, gravelly CLAY with black staining. Sands are fine to coarse. Gravels are fine to coarse subangular to subrounded, flints, asphalt, concrete and red brick. (MADE GROUND)		
0.40	T		PID = 0.9ppm		(0.65)			
0.50	D							
0.60	T		PID = 3.8ppm					
					0.75			
0.80	HP 112.5kPa		2.00, 2.25, 2.5/Av. 2.25			Grey brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
0.80	D							
1.00-1.45	SPT N=5		1,2/1,1,1,2					
1.20	HP 137.5kPa		2.5, 2.75, 3.0 /Av. 2.75					
1.20	D							
					(1.35)			
1.70	HP 150kPa		2.75, 3.0, 3.25/Av. 3.00					
1.70	D							
2.00-2.45	SPT N=21		3,3/4,5,5,7					
					2.10			
2.20	HP 200kPa		3.75, 4.00, 4.25/Av. 4.00			Red brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
2.20	D							
					(0.90)			
2.70	HP 208.5kPa		4.00, 4.25, 4.25/Av. 4.17					
2.70	D							
					3.00			
3.00-3.45	SPT N=23		3,4/5,6,6,6			Complete at 3.00m		

Remarks
GROUNDWATER: No groundwater encountered.
CASING: No casing used.
INSTALLATION: No installation.
BACKFILL: Backfilled clean with arisings.
SLOW PROGRESS: None.
NOTES: Borehole completed at 3.00m.

Scale (approx)	Logged By
1:25	BM

Figure No.
LS7347.WS001

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Number **WS002**
Excavation Method Drive-in Windowless Sampler	**Dimensions**	**Ground Level (mOD)**	**Client** Tiger Developments Ltd	**Job Number** LS7347
	Location	**Dates** 22/01/2024- 23/01/2024	**Project Contractor** Land Science	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.10) 0.10	CONCRETE (HARDSTANDING)		
0.20 0.20	D T		PID = 0.3ppm		(0.20) 0.30	Grey brown, sandy, gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints, bituminous material, concrete and red brick. (MADE GROUND)		
0.50 0.60	T D		PID = 13ppm		(0.40) 0.70	Grey brown, sandy, gravelly CLAY with black staining. Sands are fine to coarse. Gravels are fine to coarse subangular to subrounded, flints, bituminous material, concrete and red brick. (MADE GROUND)		
0.80 0.80 0.80-1.00 1.00-1.45	HP 116.5kPa D B SPT N=12		2.00, 2.5, 2.5/Av. 2.33 2,2/2,2,4,4			Grey brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
1.20 1.20	HP 133.5kPa D		2.5, 2.5, 3.0 /Av. 2.67		(1.30)			
1.70 1.70	HP 137.5kPa D		2.5, 2.75, 3.0/Av. 2.75					
2.00-2.45	SPT N=24		4,6/6,6,6,6		2.00	Red brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
2.20 2.20	HP 191.5kPa D		3.5, 3.75, 4.25/Av. 3.83		(1.00)			
2.70 2.70	HP 212.5kPa D		4.0, 4.25, 4.5/Av. 4.25					
3.00-3.45	SPT N=50		5,7/10,14,16,10		3.00	Complete at 3.00m		

Remarks
GROUNDWATER: No Groundwater encountered.
CASING: No casing used.
INSTALLATION: No installation.
BACKFILL: Backfilled clean with arisings.
SLOW PROGRESS: None.
NOTES: Borehole completed at 3.00m

Scale (approx)	Logged By
1:25	BM

Figure No.
LS7347.WS002

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Number **WS003**
Excavation Method Drive-in Windowless Sampler	**Dimensions**	**Ground Level (mOD)**	**Client** Tiger Developments Ltd	**Job Number** LS7347
	Location	**Dates** 22/01/2024- 23/01/2024	**Project Contractor** Land Science	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.15)	CONCRETE (HARDSTANDING)		
					0.15			
0.20	D				(0.10)	Grey brown, sandy, gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints, bituminous material, concrete and red brick. (MADE GROUND)		
0.30	T		PID = 0.2ppm		0.25			
0.50	T		PID = 0.3ppm		(0.50)	Grey brown, sandy, gravelly CLAY with black staining. Sands are fine to coarse. Gravels are fine to coarse subangular to subrounded, flints, bituminous material, concrete and red brick. (MADE GROUND)		
					0.75			
0.90	HP 116.5kPa		2.00, 2.5, 2.5/Av. 2.33			Grey brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
0.90	D							
1.00-1.45	SPT N=12		1,1/2,3,3,4					
1.20	HP 137.5kPa		2.5, 2.75, 3.0 /Av. 2.75					
1.20	D							
					(1.35)			
1.70	HP 146kPa		2.5, 3.0, 3.25/Av. 2.92					
1.70	D							
2.00-2.45	SPT N=24		3,4/5,5,7,7					
					2.10			
2.20	HP 196kPa		3.5, 4.00, 4.25/Av. 3.92			Red brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
2.20	D							
					(0.90)			
2.70	HP 240kPa		3.5, 4.00, 4.25/Av. 3.92					
2.70	D							
3.00-3.45	SPT N=36		8,7/8,9,10,9		3.00	Complete at 3.00m		

Remarks
GROUNDWATER: No groundwater encountered.
CASING: No casing used.
INSTALLATION: No installation.
BACKFILL: Backfilled clean with arisings.
SLOW PROGRESS: None.
NOTES: Borehole completed at 3.00m.

Scale (approx)	Logged By
1:25	BM

Figure No.
LS7347.WS003

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site 90 Carmoor Road, Manchester, M13 0FB	Number **WS004**

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Drive-in Windowless Sampler			Tiger Developments Ltd	LS7347
	Location	**Dates** 22/01/2024- 23/01/2024	**Project Contractor** Land Science	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.16)	CONCRETE (HARDSTANDING)		
					0.16			
0.20	D				(0.09)	Grey brown, sandy, gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints, bituminous material, concrete and red brick. (MADE GROUND)		
0.30	T		PID = 0.2ppm		0.25			
0.40	D							
					(0.60)	Grey brown, sandy, gravelly CLAY with black staining. Sands are fine to coarse. Gravels are fine to coarse subangular to subrounded, flints, bituminous material, concrete and red brick. (MADE GROUND)		
0.60	T		PID = 0.2ppm					
0.70	HP 91.5kPa		1.75, 1.75, 2.0/Av. 1.83					
0.70	D				0.85			
1.00-1.45	SPT N=4		1,1/1,1,1,1			Grey brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
1.20	HP 116.5kPa		2.0, 2.25, 2.75/Av. 2.33					
1.20	D				(1.15)			
					2.00			
2.00-2.45	SPT N=14		1,2/3,3,4,4			Red brown, sandy, slightly gravelly CLAY. Sands are fine to medium. Gravels are fine to coarse subangular to subrounded, flints. (DEVENSIAN TILL)		
2.20	HP 196kPa		3.5, 4.00, 4.25/Av. 3.92					
2.20	D				(1.00)			
2.70	HP 200kPa		3.5, 4.25, 4.25/Av. 4.00					
2.70	D							
3.00-3.45	SPT N=27		5,5/7,7,6,7		3.00	Complete at 3.00m		

Remarks
GROUNDWATER: No groundwater encountered.
CASING: No casing used.
INSTALLATION: No installation.
BACKFILL: Backfilled clean with arisings.
SLOW PROGRESS: None.
Borehole completed at 3.00m.

Scale (approx)	Logged By
1:25	BM

Figure No.
LS7347.WS004

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Soakaway Test (BRE Digest 365)

Site : 90 Carmoor Road, Manchester, M13 0FB

Client : Tiger Developments Ltd

Project Contractor : BM

Job Number LS7347

Sheet 1 / 1

Location	Date	Level	Location
TP001	22/01/2024	3.00 mOD	

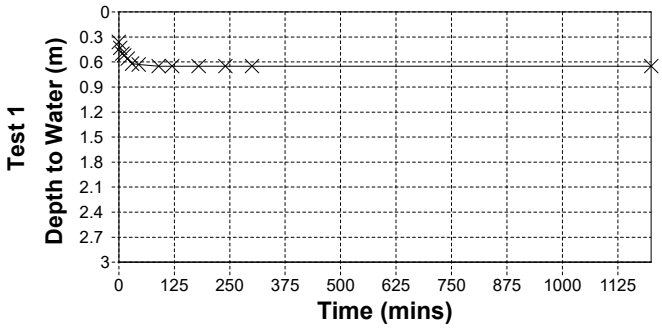
Pit Width (m)	0.50
Pit Depth (m)	3.00
Pit Length (m)	0.50

Soil type at test level	CLAY
Groundwater	None
Drain discharge depth	
Sidewall stability	Stable
Stone filled or open pit	Open pit

	1
Effective depth (m)	2.64
Volume outflowing between 75% & 25% (m3)	
Mean surface area through which outflow occurs (m2)	
Time for outflow between 75% & 25% (min)	
SOIL INFILTRATION RATE (ms-1), f	Test Failed

Remarks

Elapsed time (mins)	Depth to Water Test 1
3	0.43
8	0.50
12	0.52
20	0.56
30	0.62
45	0.63
90	0.65
120	0.65
180	0.65
240	0.65
300	0.65
1200	0.65
0	0.36



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Soakaway Test (BRE Digest 365)

Site : 90 Carmoor Road, Manchester, M13 0FB

Client : Tiger Developments Ltd

Project Contractor : BM

Job Number LS7347

Sheet 1 / 1

Location	Date	Level	Location
TP002	23/01/2024	3.00 mOD	

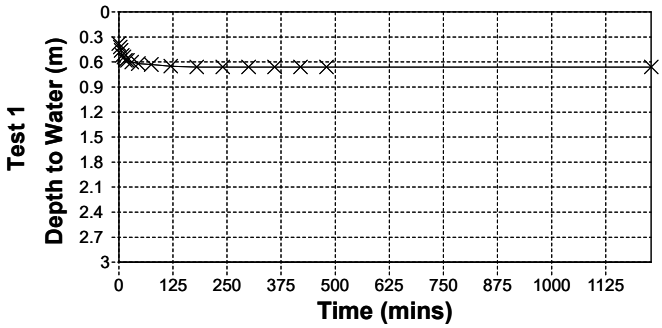
Pit Width (m)	0.50
Pit Depth (m)	3.00
Pit Length (m)	0.50

Soil type at test level	CLAY
Groundwater	None
Drain discharge depth	
Sidewall stability	Stable
Stone filled or open pit	Open pit

	1
Effective depth (m)	2.62
Volume outflowing between 75% & 25% (m3)	
Mean surface area through which outflow occurs (m2)	
Time for outflow between 75% & 25% (min)	
SOIL INFILTRATION RATE (ms-1), f	Test Failed

Remarks

Elapsed time (mins)	Depth to Water Test 1
3	0.42
5	0.46
8	0.52
12	0.54
15	0.58
20	0.58
30	0.60
45	0.62
75	0.63
120	0.65
180	0.66
240	0.66
300	0.66
360	0.66
420	0.66
480	0.66
1230	0.66
0	0.38



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APPENDIX D

GROUND GAS AND GROUNDWATER MONITORING

Project:	90 Carmoor Road, M13 0FB	**Ref:**	LS7347
Date:	22/02/2024	**Visit:**	1 of 1
Engineer:	CH	**Check:**	JM
Weather:	Rain	**Page:**	1 of 1
Atmospheric Pressure		**before:**	994mB
		after:	984mB
Published pressure trend:		Falling	
Remarks:	Equipment used: GFM 435, Phocheck TigerLT PID, Dipmeter		



Position	Flow (l/hr)		Common Gases (%)				VOC's (ppm)	Groundwater (m)				Remarks
	High	Low	Time	CO2	CH4	O2		LNAPL	Water	DNAPL	Base	
Calibration Check	0.0	0.0	15s	0.0	0.0	20.5		-	-	-	-	
			30s	0.0	0.0	20.3						
			60s	0.0	0.0	20.2						
BH003	0.0	0.0	15s	0.0	0.0	20.4	0.0	-	4.40	-	17.55	Water sample collected for laboratory testing
			30s	0.0	0.0	20.3						
			60s	0.0	0.0	20.2						
			120s	0.0	0.0	20.2						
			180s	0.0	0.0	20.1						
			240s	0.0	0.0	20.1						
			300s	0.1	0.0	20.0						
			15s					-		-		
			30s									
			60s									
			120s									
			180s									
			240s									
			300s									
			15s					-		-		
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Calibration Check			15s					-	-	-	-	
			30s									
			60s									

Land Science Ltd., Unit 10, 19 Albert Drive, Burgess Hill, West Sussex, RH15 9TN
T: 01444 882 084 **E:** info@landscience.co.uk

APPENDIX E

Laboratory Report

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES A PHENNA GROUP COMPANY

Contract Number: 71772

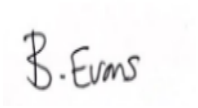
Client Ref: **LS7347**
Client PO: **LS7347**

Date Received: **14-03-2024**
Date Completed: **26-03-2024**
Report Date: **26-03-2024**

Client: **Land Science**

Contract Title: **90 Carmoor Road, Manchester, M13 0FB**
For the attention of: **INFO**

This report has been checked and approved by:



Brendan Evans
Office Administrator

Description	Qty
Moisture Content BS 1377:1990 - Part 2 : 3.2 - * UKAS	24
4 Point Liquid & Plastic Limit BS 1377:1990 - Part 2 : 4.3 & 5.3 - * UKAS	18
PSD Wet Sieve method BS 1377:1990 - Part 2 : 9.2 - * UKAS	13
PSD: Sedimentation by pipette carried out with Wet Sieve (Wet Sieve must also be selected) BS 1377:1990 - Part 2 : 9.4 - * UKAS	8
Density by Linear Measurement BS 1377:1990 - Part 2 : 7.2 - * UKAS	10
Disposal of samples for job	1

Notes: **Observations and Interpretations are outside the UKAS Accreditation**
*** - denotes test included in laboratory scope of accreditation**
 # - denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This test report/certificate shall not be reproduced except in full, without the approval of GEO Site & Testing Services Ltd. Any opinions or interpretations stated - within this report/certificate are excluded from the laboratories UKAS accreditation.

Approved Signatories:
Brendan Evans (Office Administrator) - Darren Bourne (Quality Senior Technician) - Paul Evans (Director)
Richard John (Quality/Technical Manager) - Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager)
Wayne Honey (HR & HSE Manager)

GEO Site & Testing Services Ltd
Unit 3-4 Heol Aur, Dafen Ind Est, Llanelli, Carmarthenshire SA14 8QN
Tel: 01554 784 040 Fax: 01554 784 040 info@gstl.co.uk https://gstl.co.uk

GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

Natural Moisture Content
(BS 1377:1990 - Part 2 : 3.2)
DESCRIPTIONS

Contract Number	71772
Site Name	90 Carmoor Road, Manchester, M13 0FB
Date Tested	24/03/2024

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Descriptions
BH001	0	D	5.00	-		Brown silty CLAY
BH002	0	D	4.20	-		Brown silty CLAY
BH002	0	D	7.20	-		Brown slightly gravelly fine to coarse sandy silty CLAY
BH003	0	D	4.50	-		Brown GRAVEL
BH004	0	D	3.20	-		Brown silty CLAY
BH005	0	D	3.00	-		Brown silty CLAY
				-		
				-		
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Operators
Clayton Jenkins

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES

Natural Moisture Content
(BS 1377:1990 - Part 2 : 3.2)

Contract Number	71772	
Project Name	90 Carmoor Road, Manchester, M13 0FB	
Date Tested	24/03/2024	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Moisture Content %	Remarks
BH001	0	D	5.00	-		15	
BH002	0	D	4.20	-		17	
BH002	0	D	7.20	-		19	
BH003	0	D	4.50	-		19	
BH004	0	D	3.20	-		31	
BH005	0	D	3.00	-		32	
				-			
				-			
				-			
				-			
				-			
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Operator
Clayton Jenkins

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377:1990 - Part 2 : 4.3 & 5.3)	
Contract Number	71772	
Project Name	90 Carmoor Road, Manchester, M13 0FB	
Date Tested	23/03/2024	
	DESCRIPTIONS	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Descriptions
BH001	0	D	2.50	-		Brown silty CLAY
BH001	0	D	4.25	-		Brown fine to medium gravelly sandy silty CLAY
BH001	0	D	8.00	-		Brown fine to medium gravelly silty CLAY
BH001	0	D	10.00	-		Brown fine to medium gravelly silty CLAY
BH002	0	D	2.20	-		Brown silty CLAY
BH002	0	D	6.20	-		Brown sandy silty CLAY
BH002	0	D	9.20	-		Brown fine to medium gravelly sandy silty CLAY
BH003	0	D	2.00	-		Brown fine to medium gravelly silty CLAY
BH003	0	D	5.00	-		Brown fine to medium gravelly silty CLAY
BH003	0	D	8.00	-		Brown fine to medium gravelly silty CLAY
BH003	0	D	10.00	-		Brown fine to medium gravelly silty CLAY
BH004	0	D	2.20	-		Brown fine to medium gravelly silty CLAY
BH004	0	D	5.20	-		Brown fine to medium gravelly sandy silty CLAY
BH004	0	D	9.00	-		Brown silty CLAY
BH004	0	D	11.00	-		Brown SAND
BH005	0	D	2.50	-		Brown fine to medium gravelly clayey SILT
BH005	0	D	5.00	-		Brown sandy silty CLAY
BH005	0	D	9.00	-		Brown fine to medium gravelly clayey SILT
				-		
				-		
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				-		
				-		

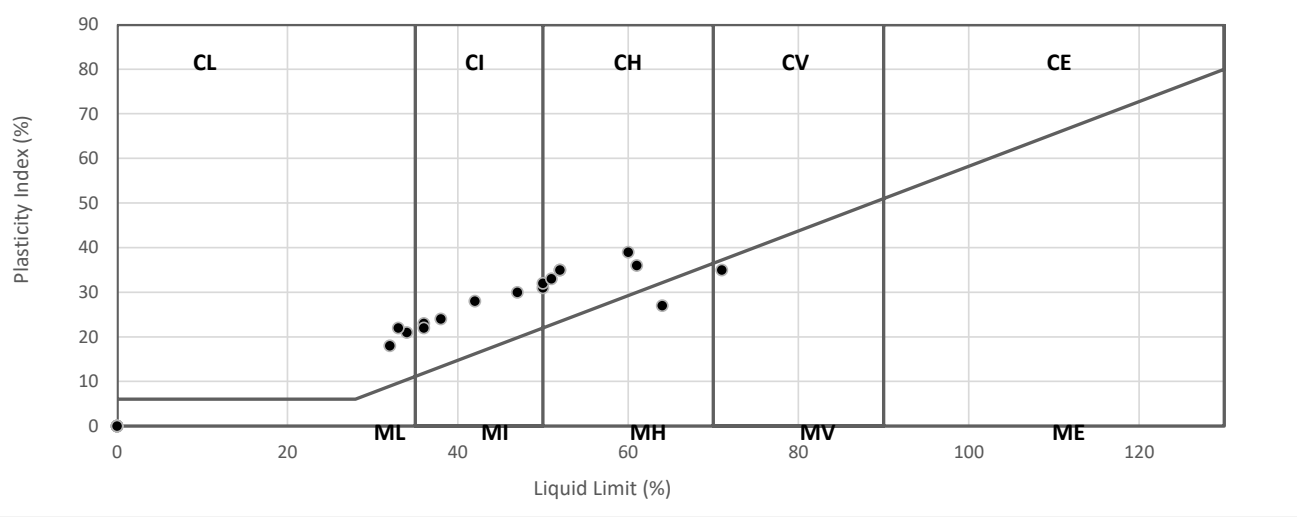
Operator
Clayton Jenkins

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	NATURAL MOISTURE, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377:1990 - Part 2 : 4.3 & 5.3)	
Contract Number	71772	
Project Name	90 Carmoor Road, Manchester, M13 0FB	
Date Tested	23/03/2024	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing 0.425mm %	Remarks
BH001	0	D	2.50	-		22	52	17	35	100	CH High Plasticity
BH001	0	D	4.25	-		15	38	14	24	90	CI Intermediate Plasticity
BH001	0	D	8.00	-		12	34	13	21	89	CL Low Plasticity
BH001	0	D	10.00	-		12	32	14	18	89	CL Low Plasticity
BH002	0	D	2.20	-		20	52	17	35	100	CH High Plasticity
BH002	0	D	6.20	-		15	36	13	23	100	CI Intermediate Plasticity
BH002	0	D	9.20	-		13	33	11	22	90	CL Low Plasticity
BH003	0	D	2.00	-		27	50	19	31	97	CI/H Inter/High Plasticity
BH003	0	D	5.00	-		18	42	14	28	98	CI Intermediate Plasticity
BH003	0	D	8.00	-		20	50	18	32	84	CI/H Inter/High Plasticity
BH003	0	D	10.00	-		30	61	25	36	80	CH High Plasticity
BH004	0	D	2.20	-		18	47	17	30	96	CI Intermediate Plasticity
BH004	0	D	5.20	-		17	36	14	22	89	CI Intermediate Plasticity
BH004	0	D	9.00	-		25	60	21	39	100	CH High Plasticity
BH004	0	D	11.00	-		16		NP		100	
BH005	0	D	2.50	-		49	71	36	35	90	MV Very High Plasticity
BH005	0	D	5.00	-		23	51	18	33	100	CH High Plasticity
BH005	0	D	9.00	-		44	64	37	27	91	MH High Plasticity
				-							
				-							
				-							
				-							
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				-							

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION
BS 5930:2015+A1:2020



Operator
Clayton Jenkins

UKAS TESTING 2788

GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

SUMMARY OF SOIL DENSITY TESTS
(BS 1377 : PART 2 : 7.2 : 1990)

Contract Number	71772
Project Name	90 Carmoor Road, Manchester, M13 0FB
Date Tested	21/03/2024

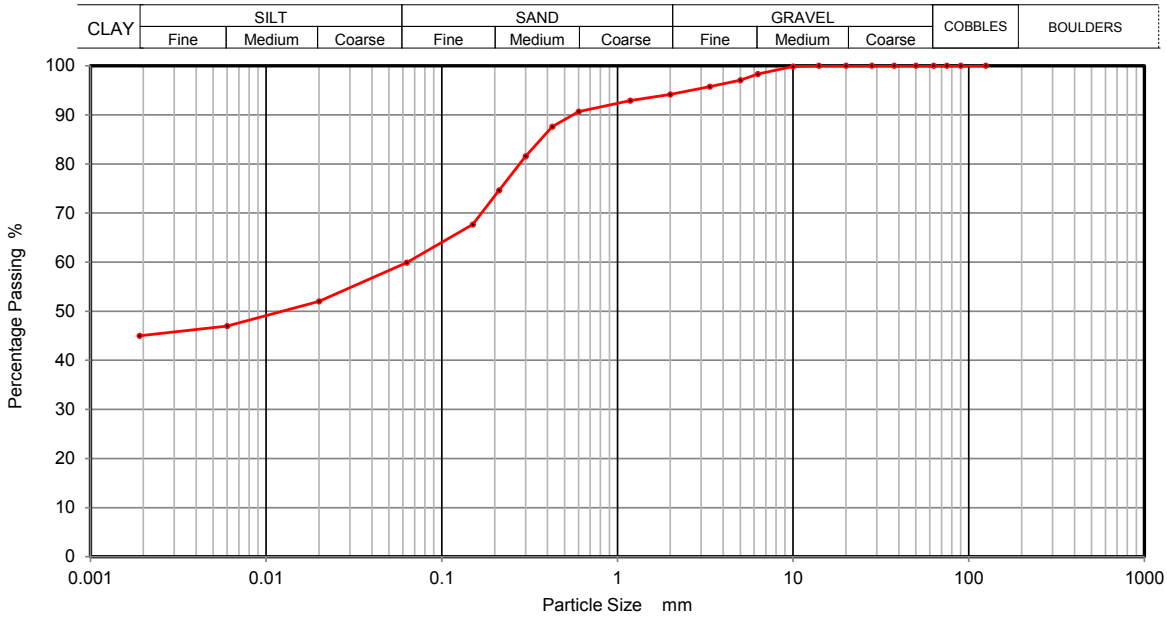
Hole Reference	Sample Number	Sample Type	Depth (m)			Moisture Content	Bulk Density	Dry Density	Compaction Method /Natural Condition		Estimated Air Voids	Remarks
BH001	0	D	12.00	-		21	1.70	1.40	Natural			
BH002	0	D	10.20	-		16	2.08	1.79	Natural			
BH003	0	D	7.00	-		26	1.80	1.43	Natural			
BH003	0	D	9.00	-		62	1.68	1.04	Natural			
BH003	0	D	16.50	-		18	2.34	1.98	Natural			
BH004	0	D	4.20	-		27	1.80	1.41	Natural			
BH004	0	D	8.00	-		21	1.72	1.42	Natural			
BH004	0	D	10.00	-		16	2.08	1.80	Natural			
BH005	0	D	7.00	-		23	1.79	1.46	Natural			
BH005	0	D	15.00	-		18	2.12	1.80	Natural			
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Key	Reported As
Moisture Content	%
Bulk Density	Mg/m^3
Dry Density	Mg/m^3
Particle Density	Mg/m^3
Air Voids	%

Operator
Conor Davison

UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH001
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown slightly gravelly fine to coarse sandy silty CLAY	Depth Top	6.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	52
90	100	0.0060	47
75	100	0.0020	45
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	98		
5	97		
3.35	96		
2	94		
1.18	93		
0.6	91		
0.425	88		
0.3	82		
0.212	75		
0.15	68		
0.063	60		

Sample Proportions	% dry mass
Cobbles	0
Gravel	6
Sand	34
Silt	15
Clay	45

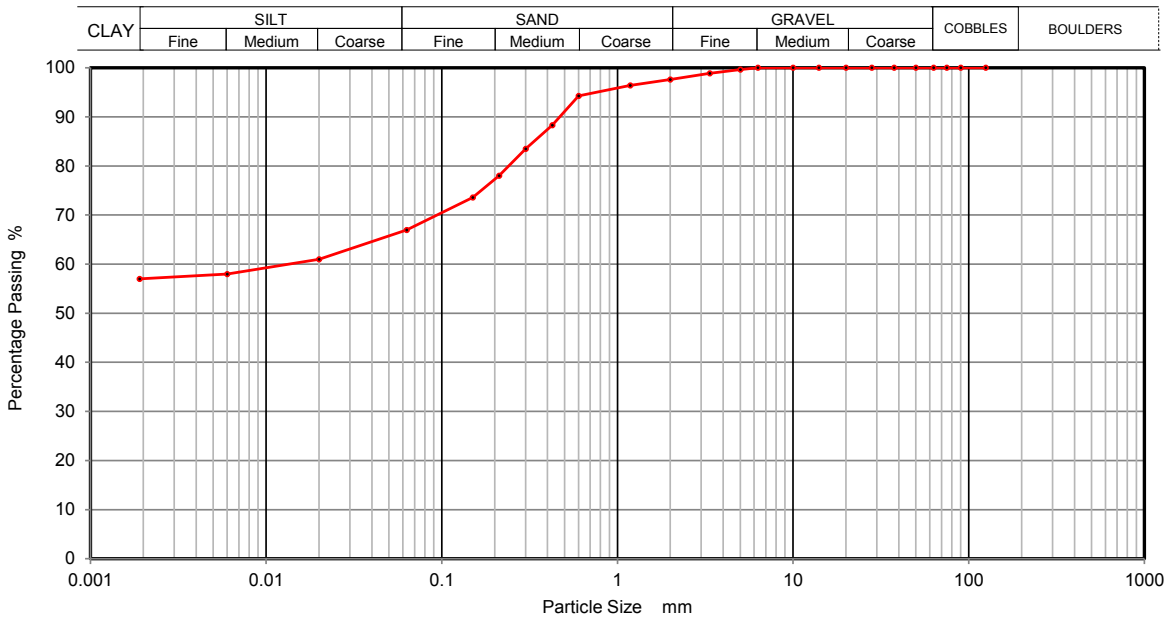
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377 Part 2:1990 Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH001
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown slightly gravelly fine to coarse sandy silty CLAY	Depth Top	9.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	61
90	100	0.0060	58
75	100	0.0020	57
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	98		
1.18	96		
0.6	94		
0.425	88		
0.3	83		
0.212	78		
0.15	74		
0.063	67		

Sample Proportions	% dry mass
Cobbles	0
Gravel	2
Sand	31
Silt	10
Clay	57

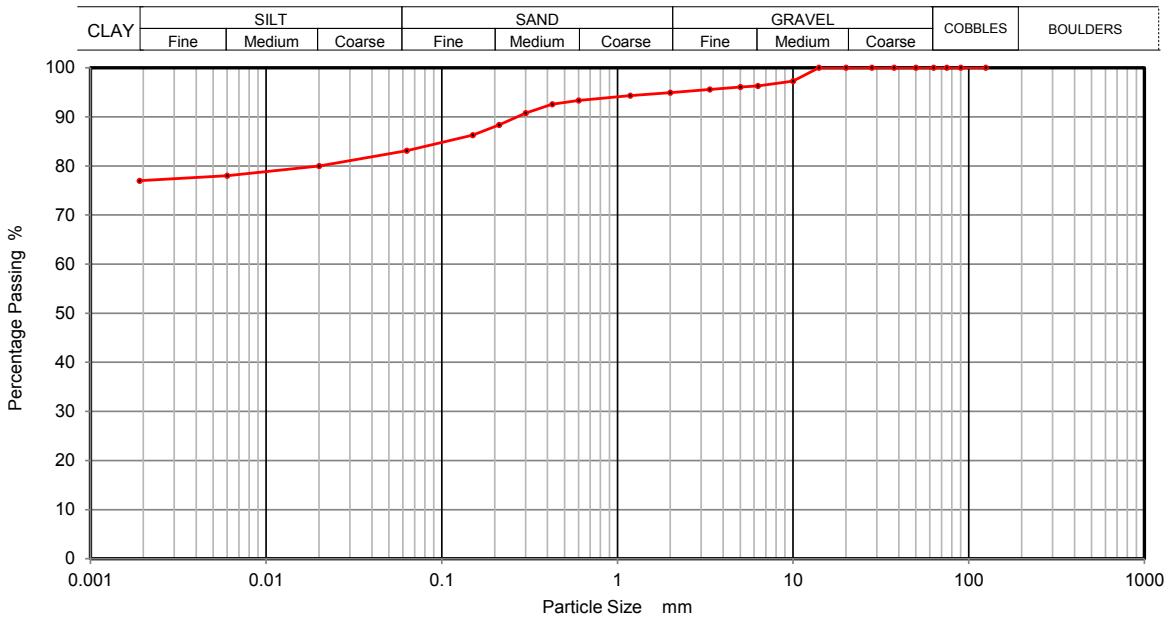
Remarks

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Operator
Cameron Thomas

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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH002
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown slightly gravelly fine to coarse sandy silty CLAY	Depth Top	3.20
		Depth Base	
Date Tested	22/03/2024	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	80
90	100	0.0060	78
75	100	0.0020	77
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	97		
6.3	96		
5	96		
3.35	96		
2	95		
1.18	94		
0.6	93		
0.425	93		
0.3	91		
0.212	88		
0.15	86		
0.063	83		

Sample Proportions	% dry mass
Cobbles	0
Gravel	5
Sand	12
Silt	6
Clay	77

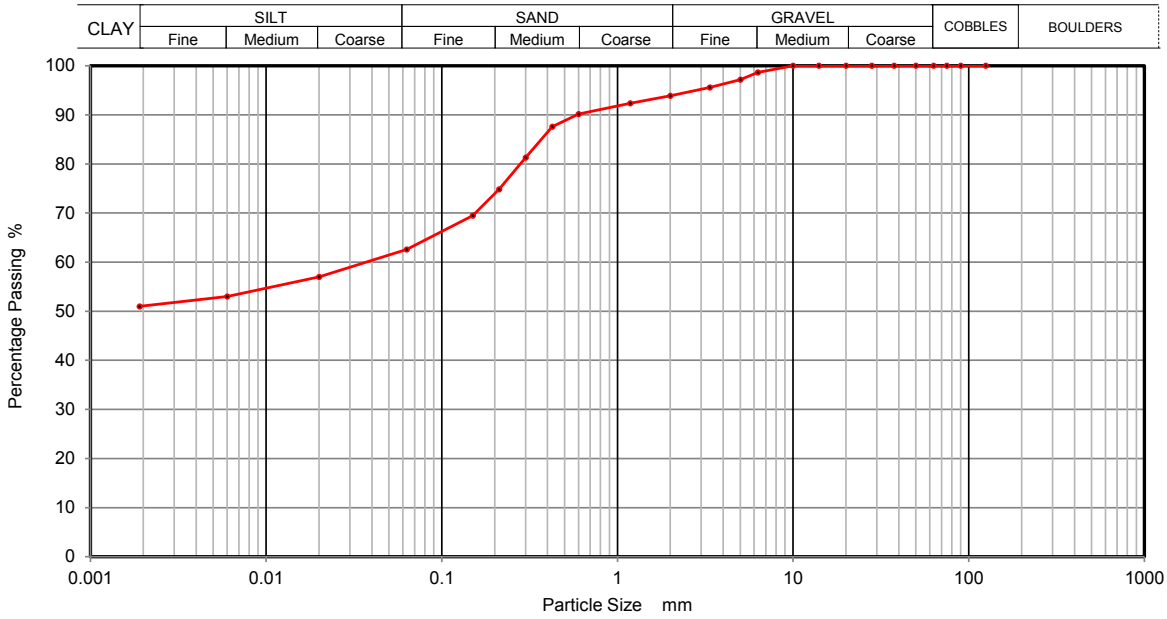
Remarks

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Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377 Part 2:1990 Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH002
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown slightly gravelly fine to coarse sandy silty CLAY	Depth Top	7.20
		Depth Base	
Date Tested	22/03/2024	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	57
90	100	0.0060	53
75	100	0.0020	51
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	97		
3.35	96		
2	94		
1.18	92		
0.6	90		
0.425	88		
0.3	81		
0.212	75		
0.15	69		
0.063	63		

Sample Proportions	% dry mass
Cobbles	0
Gravel	6
Sand	31
Silt	12
Clay	51

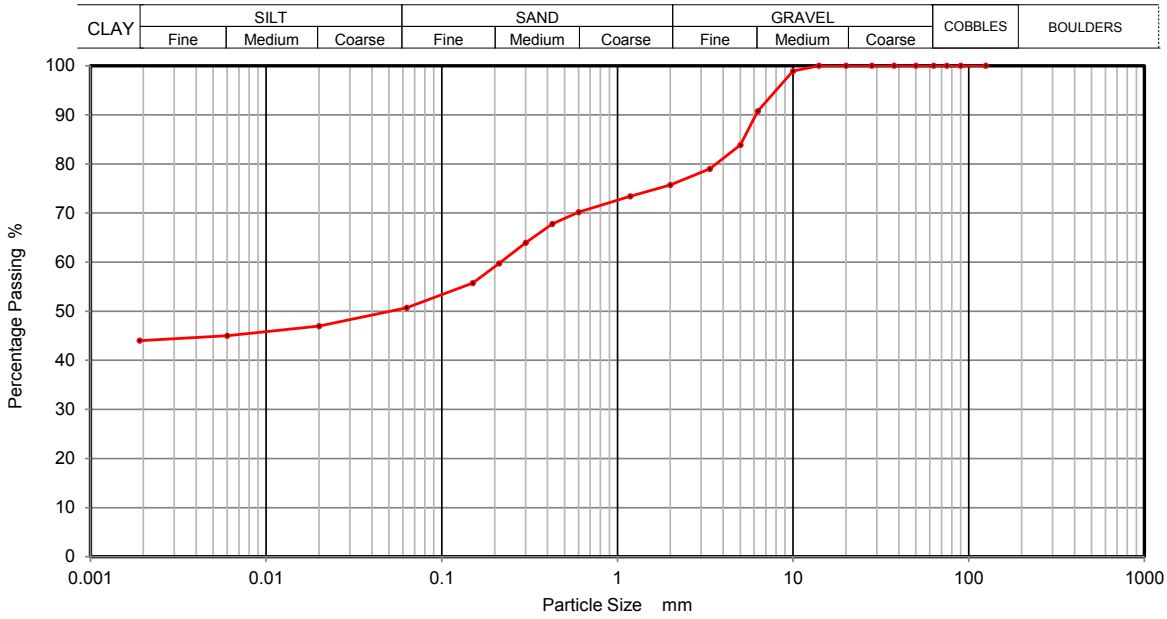
Remarks

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Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH003
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown fine to coarse gravelly fine to coarse sandy silty CLAY	Depth Top	3.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	47
90	100	0.0060	45
75	100	0.0020	44
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	99		
6.3	91		
5	84		
3.35	79		
2	76		
1.18	73		
0.6	70		
0.425	68		
0.3	64		
0.212	60		
0.15	56		
0.063	51		

Sample Proportions	% dry mass
Cobbles	0
Gravel	24
Sand	25
Silt	7
Clay	44

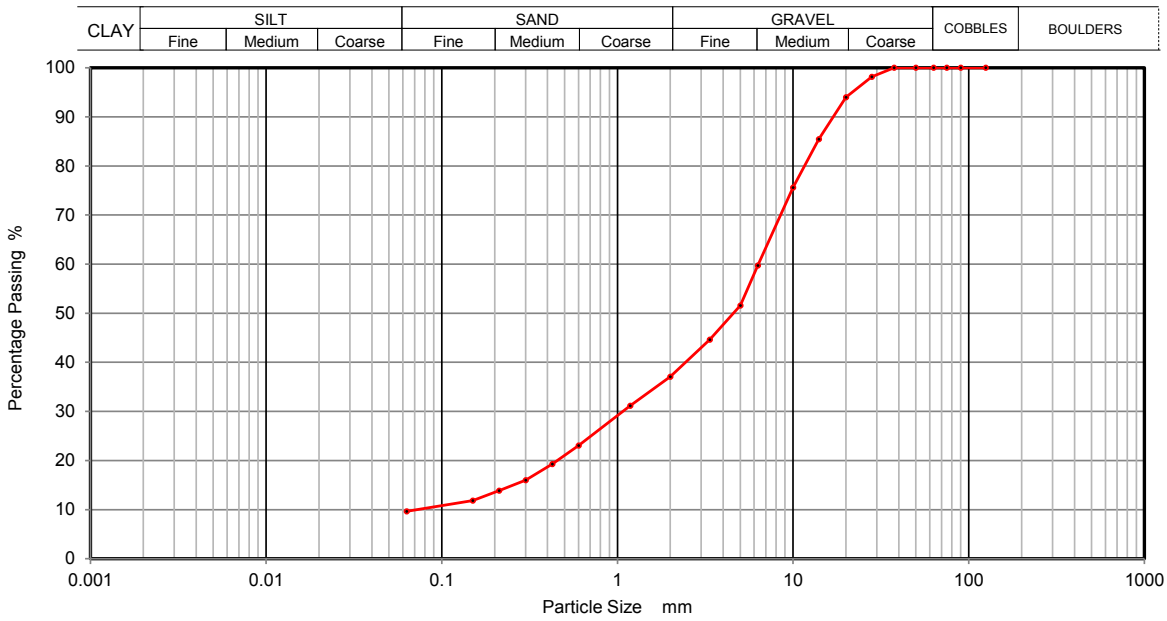
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve, Clause 9.2**	Contract Number	71772
		Borehole/Pit No.	BH003
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown silty/ clayey fine to coarse sandy fine to coarse GRAVEL	Depth Top	12.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	98		
20	94		
14	85		
10	76		
6.3	60		
5	52		
3.35	45		
2	37		
1.18	31		
0.6	23		
0.425	19		
0.3	16		
0.212	14		
0.15	12		
0.063	10		

Sample Proportions	% dry mass
Cobbles	0
Gravel	63
Sand	27
Silt and Clay	10

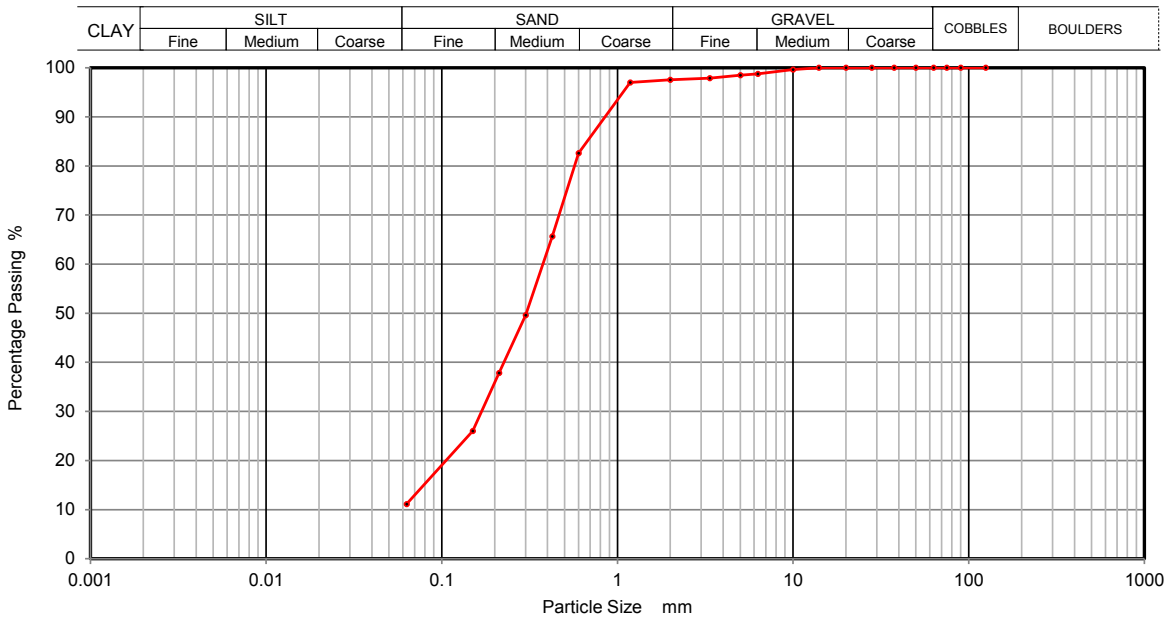
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve, Clause 9.2**	Contract Number	71772
		Borehole/Pit No.	BH003
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Red/ brown slightly gravelly silty/ clayey fine to coarse SAND	Depth Top	15.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	98		
3.35	98		
2	98		
1.18	97		
0.6	83		
0.425	66		
0.3	50		
0.212	38		
0.15	26		
0.063	11		

Sample Proportions	% dry mass
Cobbles	0
Gravel	2
Sand	87
Silt and Clay	11

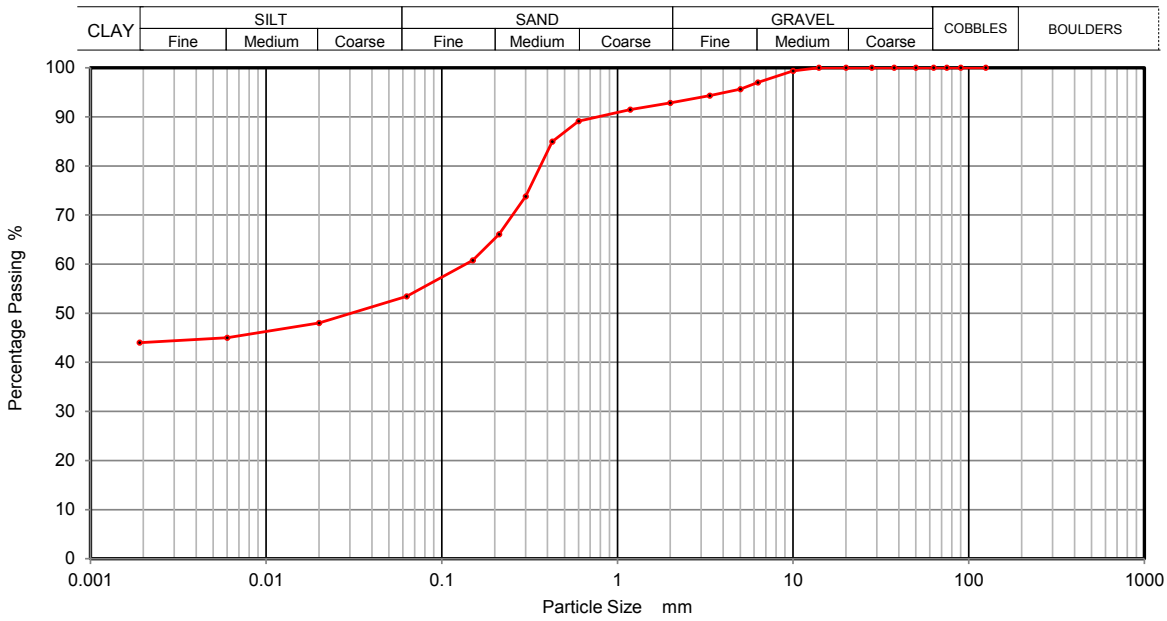
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377 Part 2:1990 Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH004
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown slightly gravelly fine to coarse sandy silty CLAY	Depth Top	6.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	48
90	100	0.0060	45
75	100	0.0020	44
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	99		
6.3	97		
5	96		
3.35	94		
2	93		
1.18	91		
0.6	89		
0.425	85		
0.3	74		
0.212	66		
0.15	61		
0.063	53		

Sample Proportions	% dry mass
Cobbles	0
Gravel	7
Sand	40
Silt	9
Clay	44

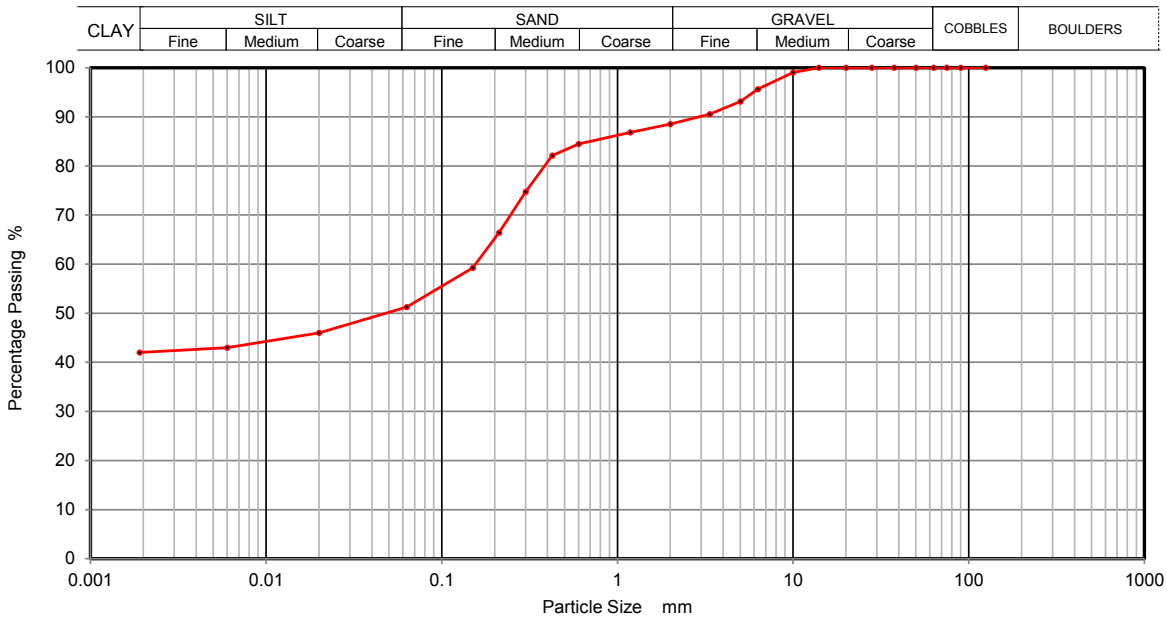
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377 Part 2:1990 Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH004
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown fine to coarse gravelly fine to coarse sandy silty CLAY	Depth Top	9.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	46
90	100	0.0060	43
75	100	0.0020	42
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	99		
6.3	96		
5	93		
3.35	91		
2	89		
1.18	87		
0.6	84		
0.425	82		
0.3	75		
0.212	66		
0.15	59		
0.063	51		

Sample Proportions	% dry mass
Cobbles	0
Gravel	11
Sand	38
Silt	9
Clay	42

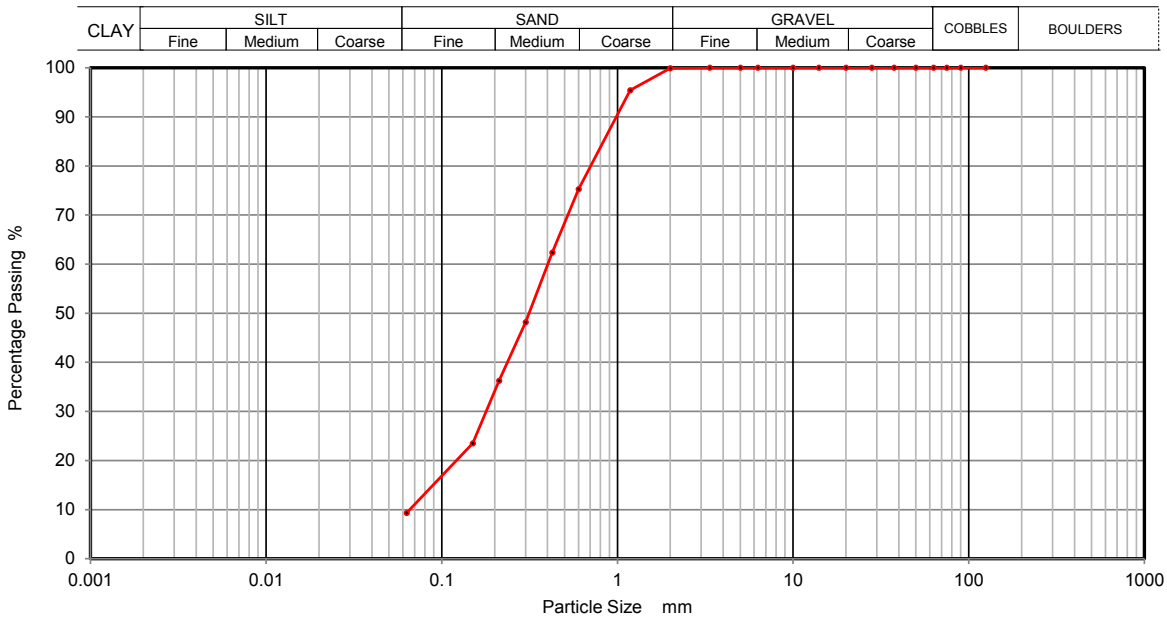
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve, Clause 9.2**	Contract Number	71772
		Borehole/Pit No.	BH004
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown slightly silty/ clayey fine to coarse SAND	Depth Top	15.50
		Depth Base	
Date Tested	22/03/2024	Sample Type	B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	95		
0.6	75		
0.425	62		
0.3	48		
0.212	36		
0.15	24		
0.063	9		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	91
Silt and Clay	9

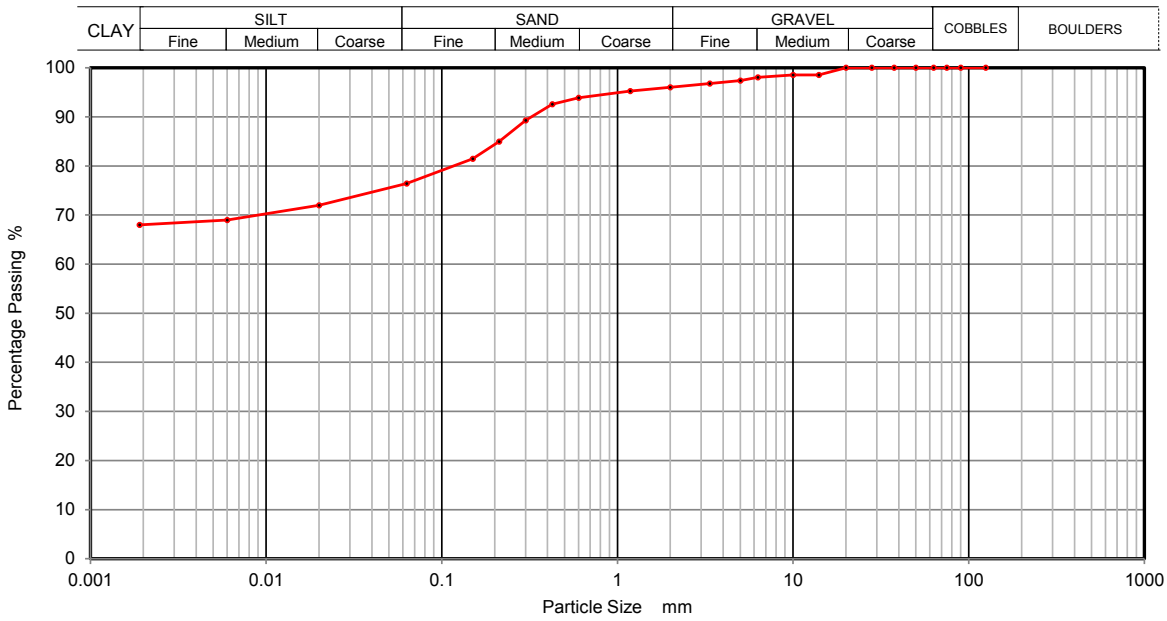
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION BS 1377 Part 2:1990 Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4**	Contract Number	71772
		Borehole/Pit No.	BH005
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown slightly gravelly fine to coarse sandy silty CLAY	Depth Top	6.00
		Depth Base	
Date Tested	22/03/2024	Sample Type	D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0200	72
90	100	0.0060	69
75	100	0.0020	68
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	99		
6.3	98		
5	97		
3.35	97		
2	96		
1.18	95		
0.6	94		
0.425	93		
0.3	89		
0.212	85		
0.15	81		
0.063	76		

Sample Proportions	% dry mass
Cobbles	0
Gravel	4
Sand	20
Silt	8
Clay	68

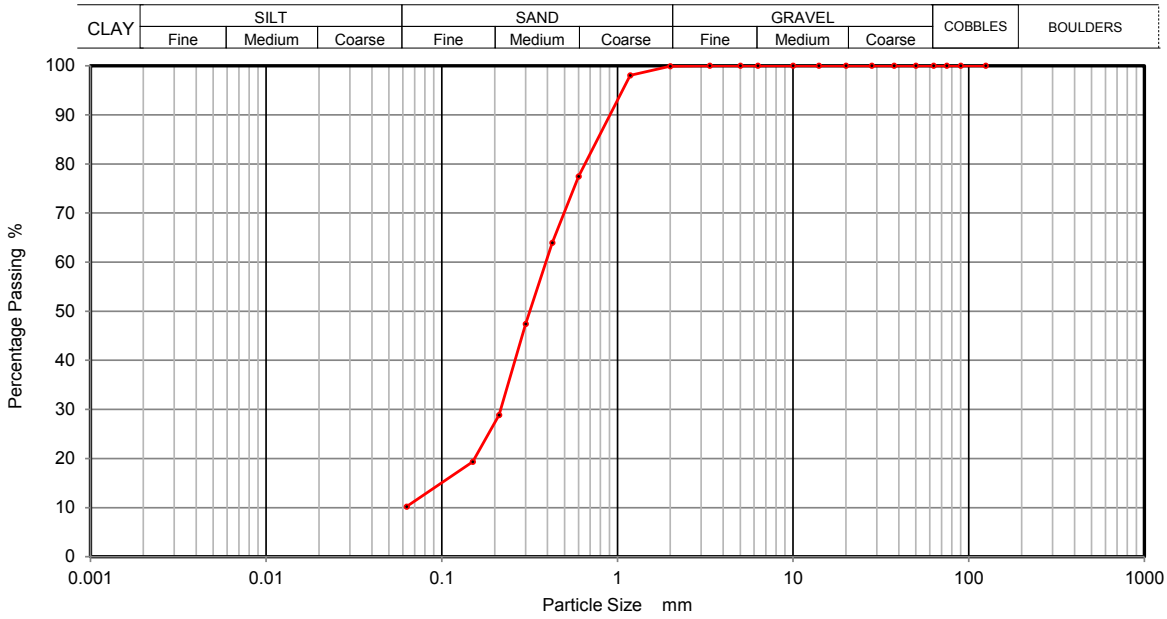
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve, Clause 9.2**	Contract Number	71772
		Borehole/Pit No.	BH005
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Brown silty/ clayey fine to coarse SAND	Depth Top	13.50
		Depth Base	
Date Tested	22/03/2024	Sample Type	B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	98		
0.6	77		
0.425	64		
0.3	47		
0.212	29		
0.15	19		
0.063	10		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	90
Silt and Clay	10

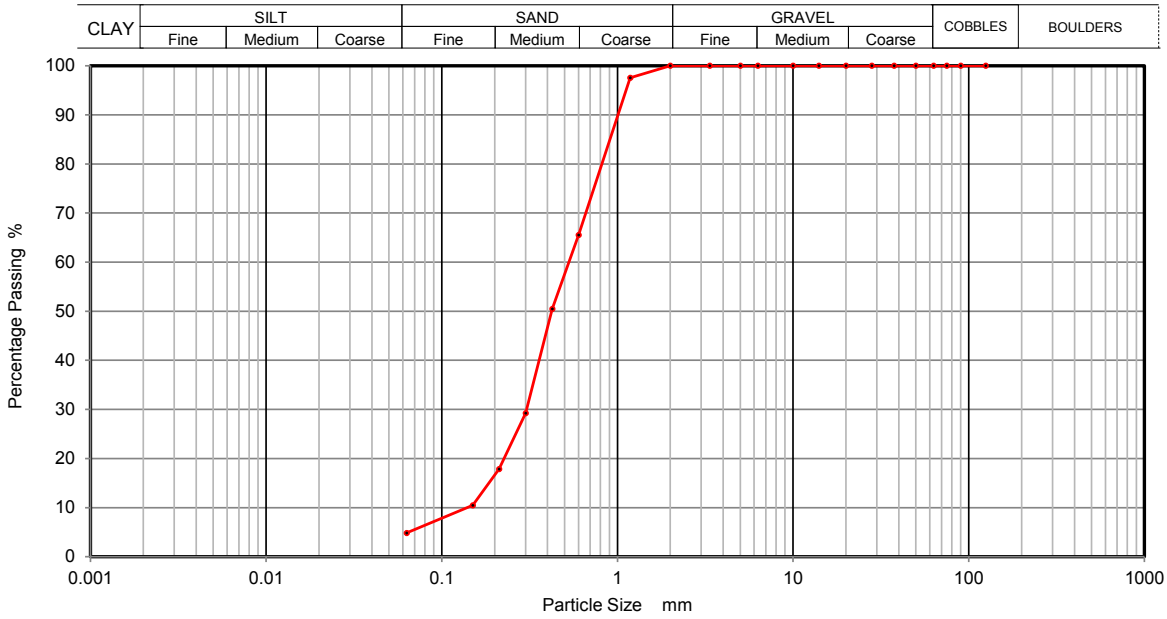
Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**PARTICLE SIZE DISTRIBUTION** **BS 1377 Part 2:1990** **Wet Sieve, Clause 9.2**	Contract Number	71772
		Borehole/Pit No.	BH005
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	0
Soil Description	Red/ brown slightly silty/ clayey fine to coarse SAND	Depth Top	16.50
		Depth Base	
Date Tested	22/03/2024	Sample Type	B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	98		
0.6	66		
0.425	50		
0.3	29		
0.212	18		
0.15	10		
0.063	5		

Sample Proportions	% dry mass
Cobbles	0
Gravel	0
Sand	95
Silt and Clay	5

Remarks

Preparation and testing in accordance with BS1377 unless noted below

Operator
Cameron Thomas

UKAS TESTING 2788

Laboratory Report

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES A PHENNA GROUP COMPANY

Contract Number: 71227

Client Ref: **LS7347**
Client PO:

Date Received: **23-02-2024**
Date Completed: **14-03-2024**
Report Date: **14-03-2024**

Client: **Land Science**

Contract Title: **90 Carmoor Road, Manchester, M13 0FB**
For the attention of: **Jocelyn**

This report has been checked and approved by:

[redacted]

Paul Evans
Director

Description	Qty
One-dimensional Consolidation 75mm or 50mm diameter specimens (up to 5 stages/days) BS 1377:1990 - Part 5 : 3 - * UKAS	6
Quick Undrained Triaxial Compression test - single specimen at one confining pressure (100mm or 38mm diameter) BS 1377:1990 - Part 7 : 8 - * UKAS	8
Direct Shearbox - set of 3 - 60 x 60mm (3 days) BS 1377:1990 - Part 7 : 4 - * UKAS	7
Determination of Point Load Value Axial or Diametrical including WC ***Please note GSTL is not accredited for the water content of rock*** ISRM Suggested Method for Point Load Strength - * UKAS	1
Disposal of samples for job	1

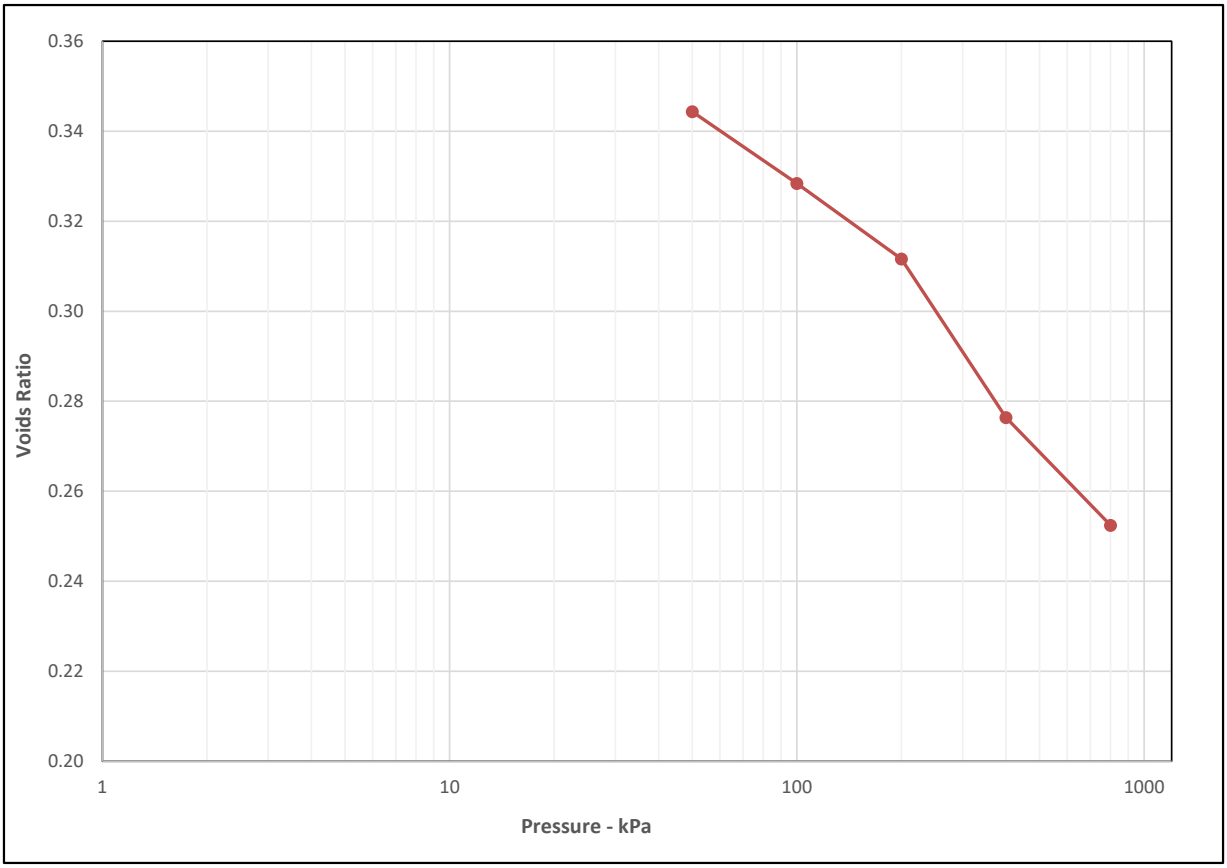
Notes: **Observations and Interpretations are outside the UKAS Accreditation**
*** - denotes test included in laboratory scope of accreditation**
 # - denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This test report/certificate shall not be reproduced except in full, without the approval of GEO Site & Testing Services Ltd. Any opinions or interpretations stated - within this report/certificate are excluded from the laboratories UKAS accreditation.

Approved Signatories:
Brendan Evans (Office Administrator) - Darren Bourne (Quality Senior Technician) - Paul Evans (Director)
Richard John (Quality/Technical Manager) - Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager)
Wayne Honey (HR & HSE Manager)

GEO Site & Testing Services Ltd
Unit 3-4 Heol Aur, Dafen Ind Est, Llanelli, Carmarthenshire SA14 8QN
Tel: 01554 784 040 Fax: 01554 784 040 info@gstl.co.uk https://gstl.co.uk

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	ONE DIMENSIONAL CONSOLIDATION TEST BS1377:Part 5:1990, clause 3	Contract Number	71227
		Borehole/Trialpit No.	BH001
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	
Soil Description	Mottled brown gravelly sandy silty CLAY.	Depth Top (m)	4.00
		Depth Base (m)	
Lab Temperature	20°c	Sample Location	Top
Remarks	Cv Calculated Using T90 Particle Density Assumed Unless Stated Otherwise	Sample Type	UT
Date Tested	01/03/2024		

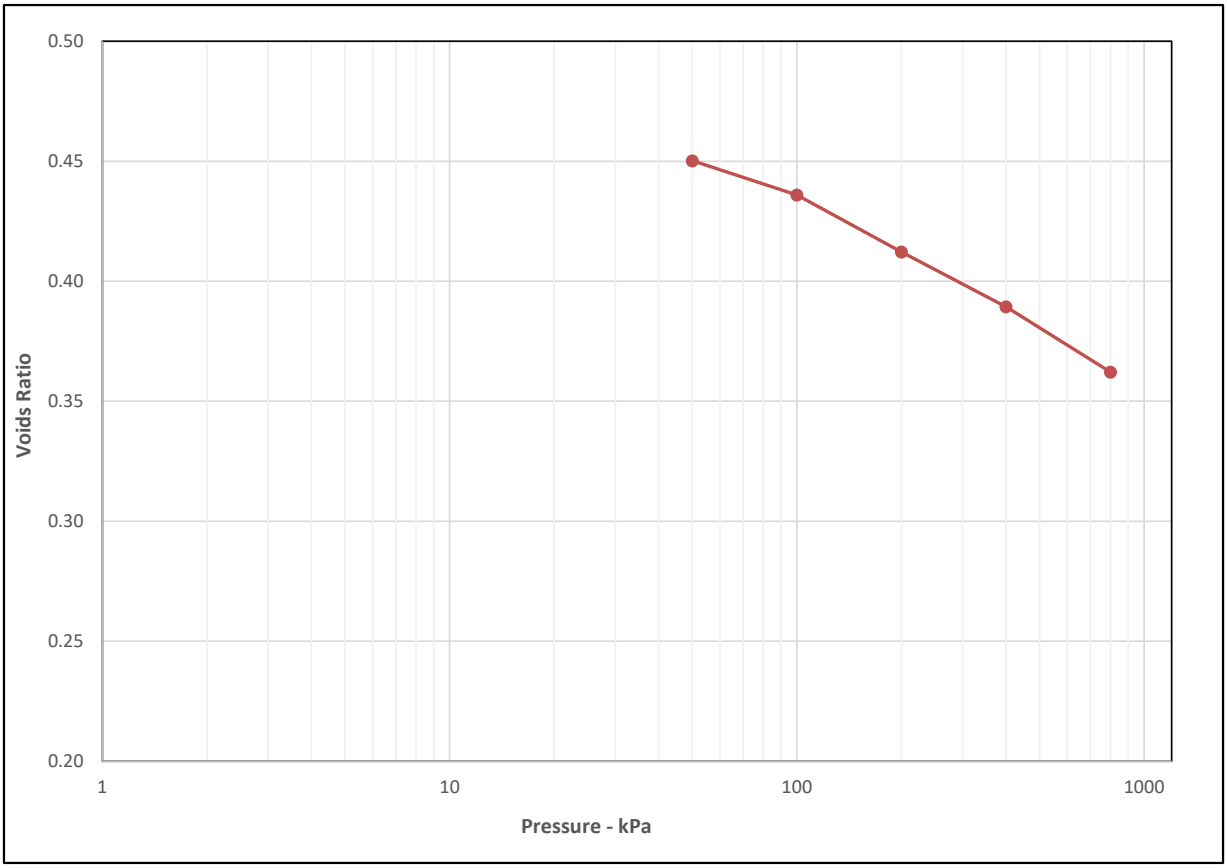


Initial Sample Conditions		Pressure Range			Mv m2/MN	Cv m2/yr	Pressure Range			Mv m2/MN	Cv m2/yr
Moisture Content (%)	18	0	-	50	0.78	12		-			
Bulk Density (Mg/m3)	2.23	50	-	100	0.24	0.70		-			
Dry Density (Mg/m3)	1.89	100	-	200	0.13	2.1		-			
Voids Ratio	0.3989	200	-	400	0.13	2.9		-			
Degree of saturation	117.3	400	-	800	0.047	3.1		-			
Height (mm)	19.93		-					-			
Diameter (mm)	74.96		-					-			
Particle Density (Mg/m3)	2.65		-					-			

Operator
Wayne W

UKAS TESTING
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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**ONE DIMENSIONAL CONSOLIDATION TEST BS1377:Part 5:1990, clause 3**	Contract Number	71227
		Borehole/Trialpit No.	BH002
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	
Soil Description	Brown silty CLAY.	Depth Top (m)	2.70
		Depth Base (m)	
Lab Temperature	20°c	Sample Location	Top
Remarks	Cv Calculated Using T90 Particle Density Assumed Unless Stated Otherwise	Sample Type	UT
Date Tested	01/03/2024		

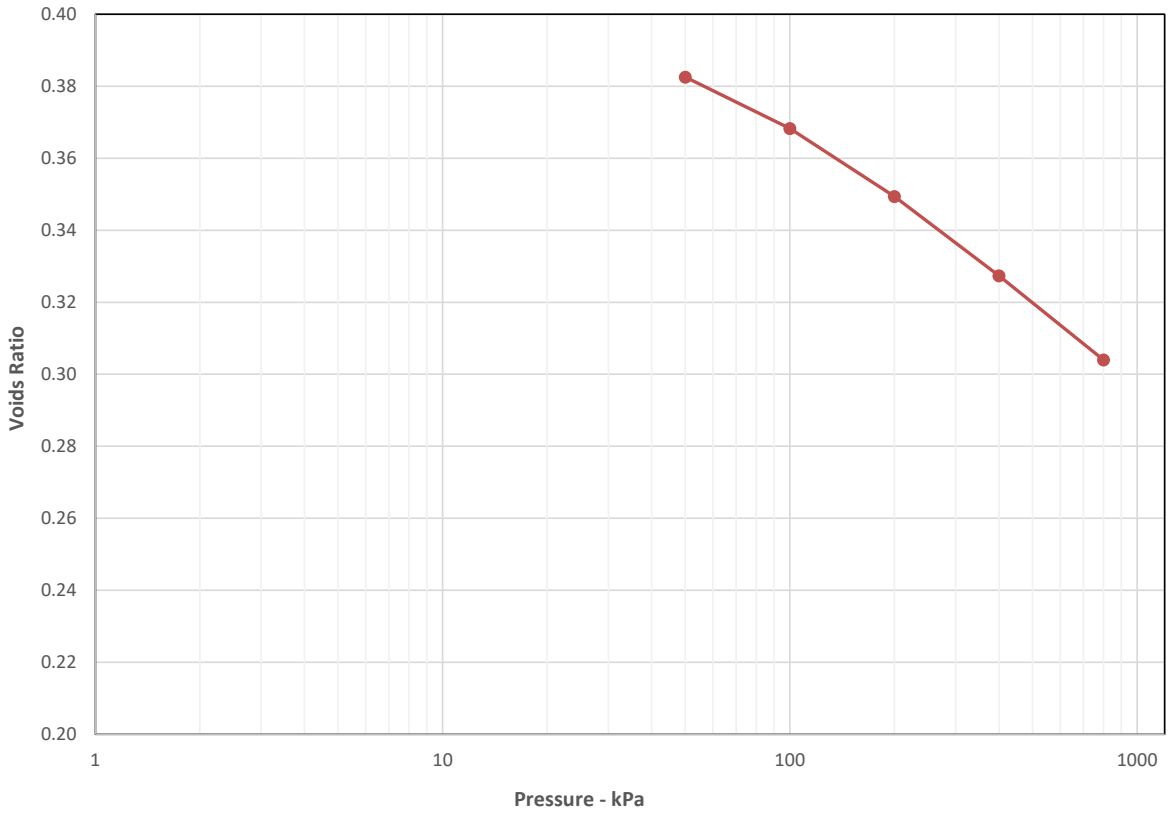


Initial Sample Conditions		Pressure Range			Mv m2/MN	Cv m2/yr	Pressure Range			Mv m2/MN	Cv m2/yr
Moisture Content (%)	21	0	-	50	0.32	53		-			
Bulk Density (Mg/m3)	2.17	50	-	100	0.20	5.8		-			
Dry Density (Mg/m3)	1.80	100	-	200	0.16	2.6		-			
Voids Ratio	0.4740	200	-	400	0.081	2.1		-			
Degree of saturation	115.2	400	-	800	0.049	2.4		-			
Height (mm)	20.07		-					-			
Diameter (mm)	74.98		-					-			
Particle Density (Mg/m3)	2.65		-					-			

Operator
Wayne W

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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**ONE DIMENSIONAL CONSOLIDATION TEST BS1377:Part 5:1990, clause 3**	Contract Number	71227
		Borehole/Trialpit No.	BH002
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	
Soil Description	Brown silty CLAY.	Depth Top (m)	8.70
		Depth Base (m)	
Lab Temperature	20°c	Sample Location	Top
Remarks	Cv Calculated Using T90 Particle Density Assumed Unless Stated Otherwise	Sample Type	UT
Date Tested	01/03/2024		

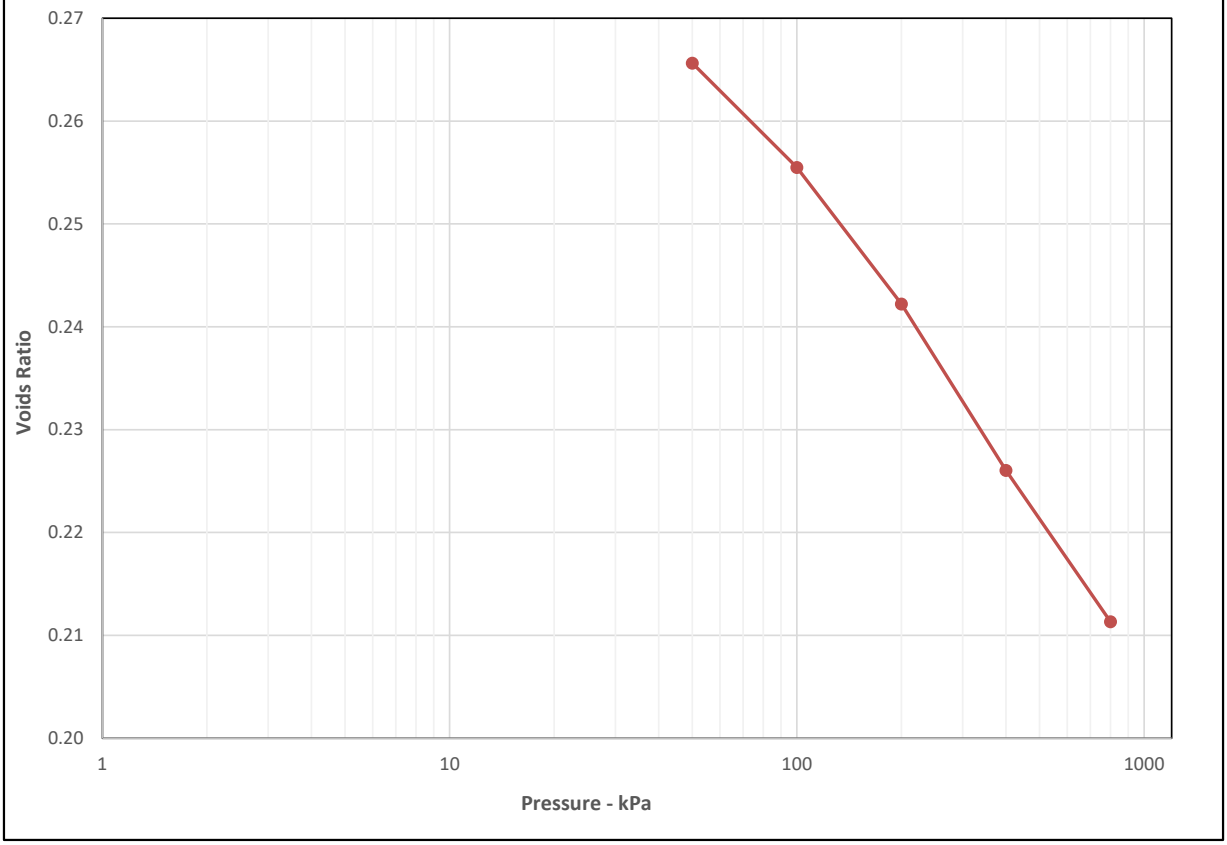


Initial Sample Conditions		Pressure Range			Mv m2/MN	Cv m2/yr	Pressure Range			Mv m2/MN	Cv m2/yr
Moisture Content (%)	16	0	-	50	0.60	8.3		-			
Bulk Density (Mg/m3)	2.16	50	-	100	0.21	1.3		-			
Dry Density (Mg/m3)	1.86	100	-	200	0.14	1.3		-			
Voids Ratio	0.4254	200	-	400	0.082	1.8		-			
Degree of saturation	99.9	400	-	800	0.044	2.3		-			
Height (mm)	19.67		-					-			
Diameter (mm)	74.93		-					-			
Particle Density (Mg/m3)	2.65		-					-			

Operator
Wayne W

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**ONE DIMENSIONAL CONSOLIDATION TEST BS1377:Part 5:1990, clause 3**	Contract Number	71227
		Borehole/Trialpit No.	BH003
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	
Soil Description	Brown silty CLAY.	Depth Top (m)	4.00
		Depth Base (m)	
Lab Temperature	20°c	Sample Location	Top
Remarks	Cv Calculated Using T90 Particle Density Assumed Unless Stated Otherwise	Sample Type	UT
Date Tested	01/03/2024		

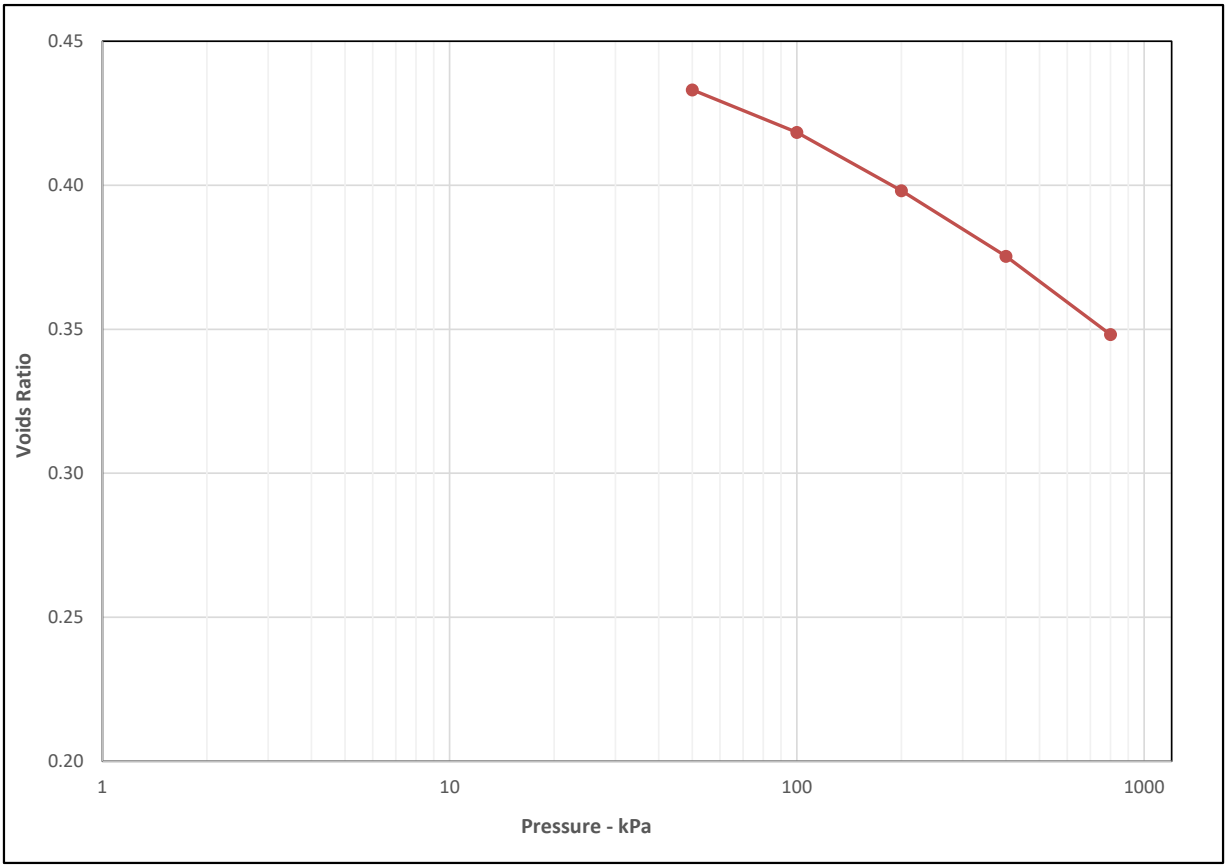


Initial Sample Conditions		Pressure Range			Mv m2/MN	Cv m2/yr	Pressure Range			Mv m2/MN	Cv m2/yr
Moisture Content (%)	14	0	-	50	0.43	4.7		-			
Bulk Density (Mg/m3)	2.34	50	-	100	0.16	5.8		-			
Dry Density (Mg/m3)	2.05	100	-	200	0.11	2.3		-			
Voids Ratio	0.2931	200	-	400	0.065	3.4		-			
Degree of saturation	129.9	400	-	800	0.030	6.6		-			
Height (mm)	19.67		-					-			
Diameter (mm)	74.94		-					-			
Particle Density (Mg/m3)	2.65		-					-			

Operator
Wayne W

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**ONE DIMENSIONAL CONSOLIDATION TEST BS1377:Part 5:1990, clause 3**	Contract Number	71227
		Borehole/Trialpit No.	BH004
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	
Soil Description	Brown silty CLAY.	Depth Top (m)	2.70
		Depth Base (m)	
Lab Temperature	20°c	Sample Location	Top
Remarks	Cv Calculated Using T90 Particle Density Assumed Unless Stated Otherwise	Sample Type	UT
Date Tested	01/03/2024		

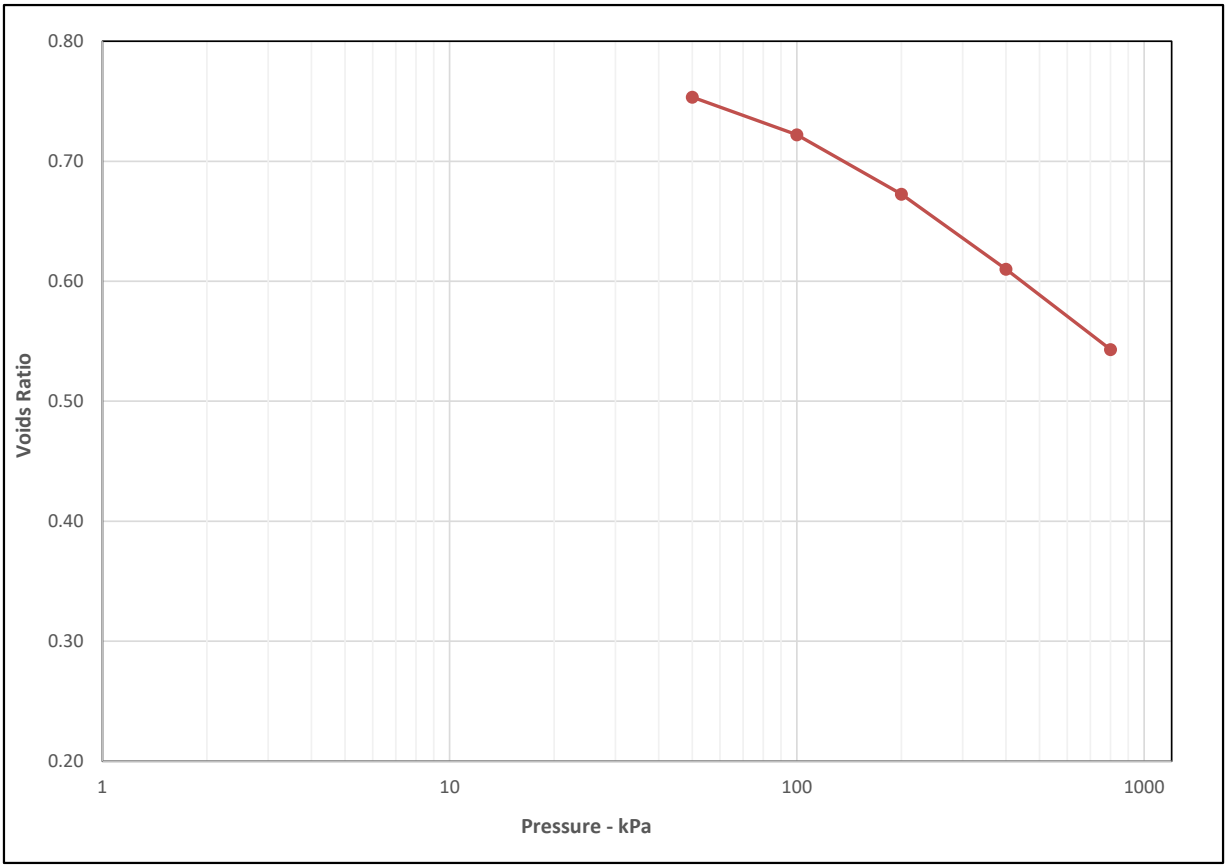


Initial Sample Conditions		Pressure Range			Mv m2/MN	Cv m2/yr	Pressure Range			Mv m2/MN	Cv m2/yr
Moisture Content (%)	21	0	-	50	0.43	23		-			
Bulk Density (Mg/m3)	2.18	50	-	100	0.21	2.2		-			
Dry Density (Mg/m3)	1.81	100	-	200	0.14	1.7		-			
Voids Ratio	0.4647	200	-	400	0.081	1.6		-			
Degree of saturation	117.6	400	-	800	0.049	1.7		-			
Height (mm)	19.65		-					-			
Diameter (mm)	74.84		-					-			
Particle Density (Mg/m3)	2.65		-					-			

Operator
Wayne W

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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**ONE DIMENSIONAL CONSOLIDATION TEST BS1377:Part 5:1990, clause 3**	Contract Number	71227
		Borehole/Trialpit No.	BH005
Project Name	90 Carmoor Road, Manchester, M13 0FB	Sample No.	
Soil Description	Brown silty CLAY.	Depth Top (m)	4.00
		Depth Base (m)	
Lab Temperature	20°c	Sample Location	Top
Remarks	Cv Calculated Using T90 Particle Density Assumed Unless Stated Otherwise	Sample Type	UT
Date Tested	01/03/2024		

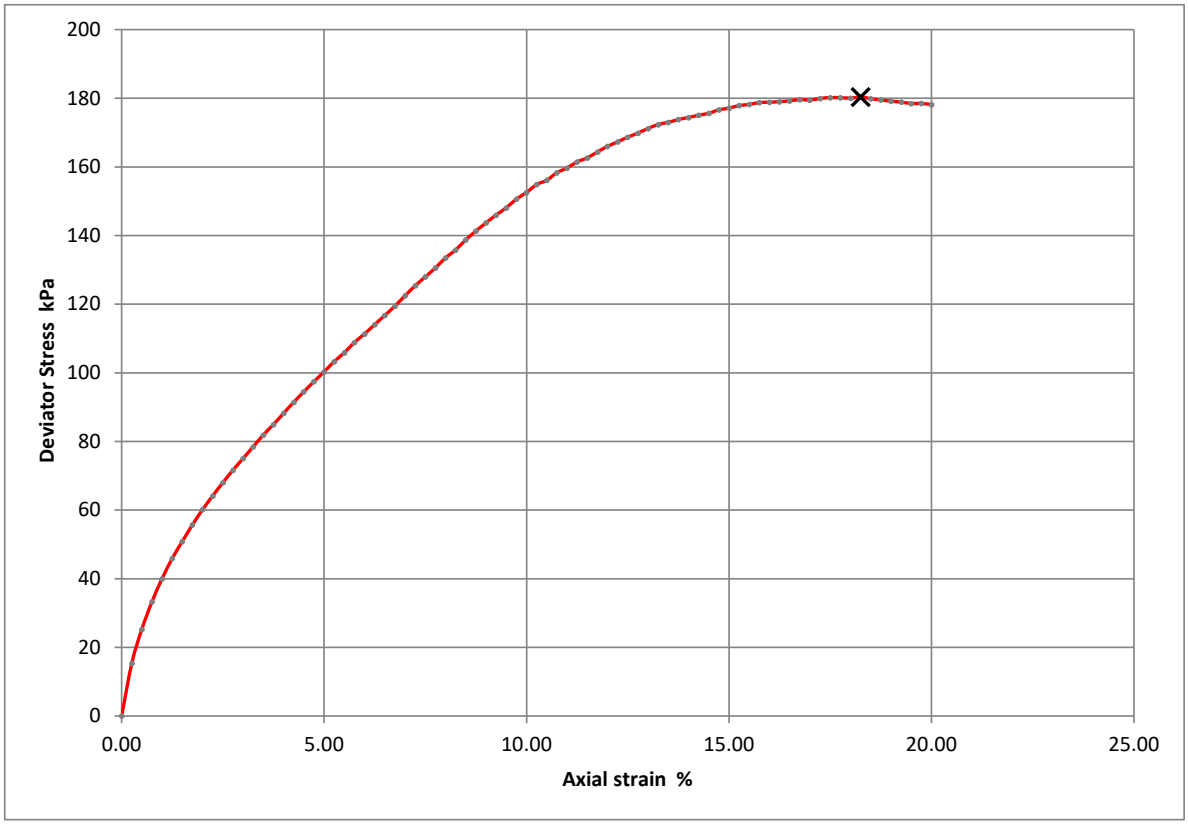


Initial Sample Conditions		Pressure Range			Mv m2/MN	Cv m2/yr	Pressure Range			Mv m2/MN	Cv m2/yr
Moisture Content (%)	30	0	-	50	0.96	1.7		-			
Bulk Density (Mg/m3)	1.87	50	-	100	0.36	1.5		-			
Dry Density (Mg/m3)	1.44	100	-	200	0.29	0.71		-			
Voids Ratio	0.8419	200	-	400	0.19	1.5		-			
Degree of saturation	95.0	400	-	800	0.10	2.8		-			
Height (mm)	19.52		-					-			
Diameter (mm)	74.8		-					-			
Particle Density (Mg/m3)	2.65		-					-			

Operator
Wayne W

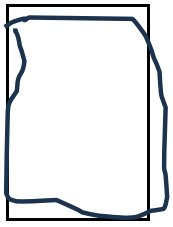
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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH001
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Sandy CLAY	Depth Top (m)	2.00
		Depth Base (m)	2.45
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	21
Bulk Density (Mg/m^3)	2.15
Dry Density (Mg/m^3)	1.78
Specimen Length (mm)	190.9
Specimen Diameter (mm)	97.2
Cell Pressure (kPa)	40
Deviator Stress (kPa)	180
Undrained Shear Strength (kPa)	90
Failure Strain (%)	18
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.57

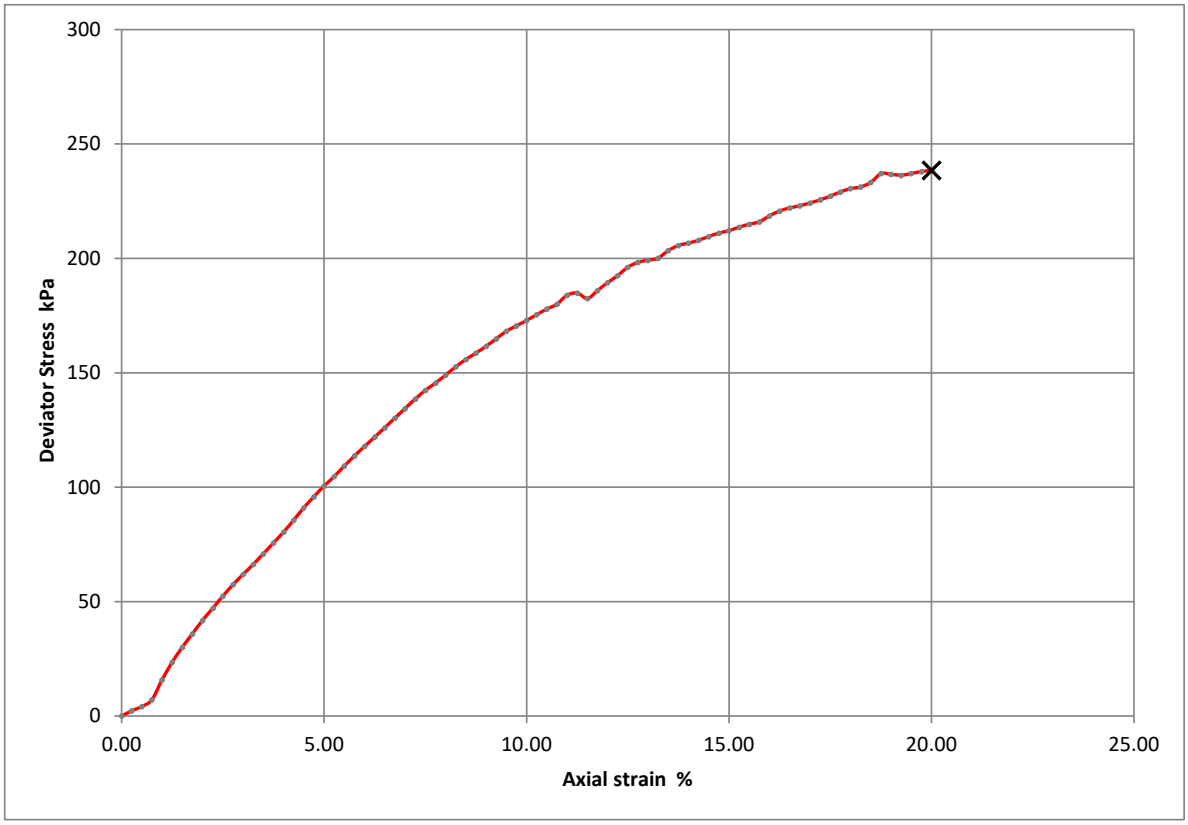
Notes.



Failure Sketch.

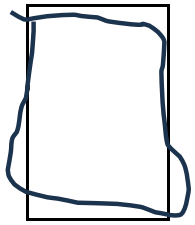
UKAS TESTING
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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH001
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Gravelly Silty Sandy CLAY	Depth Top (m)	8.50
		Depth Base (m)	9.00
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	11
Bulk Density (Mg/m^3)	2.48
Dry Density (Mg/m^3)	2.22
Specimen Length (mm)	193.3
Specimen Diameter (mm)	78.8
Cell Pressure (kPa)	170
Deviator Stress (kPa)	238
Undrained Shear Strength (kPa)	119
Failure Strain (%)	20
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.55

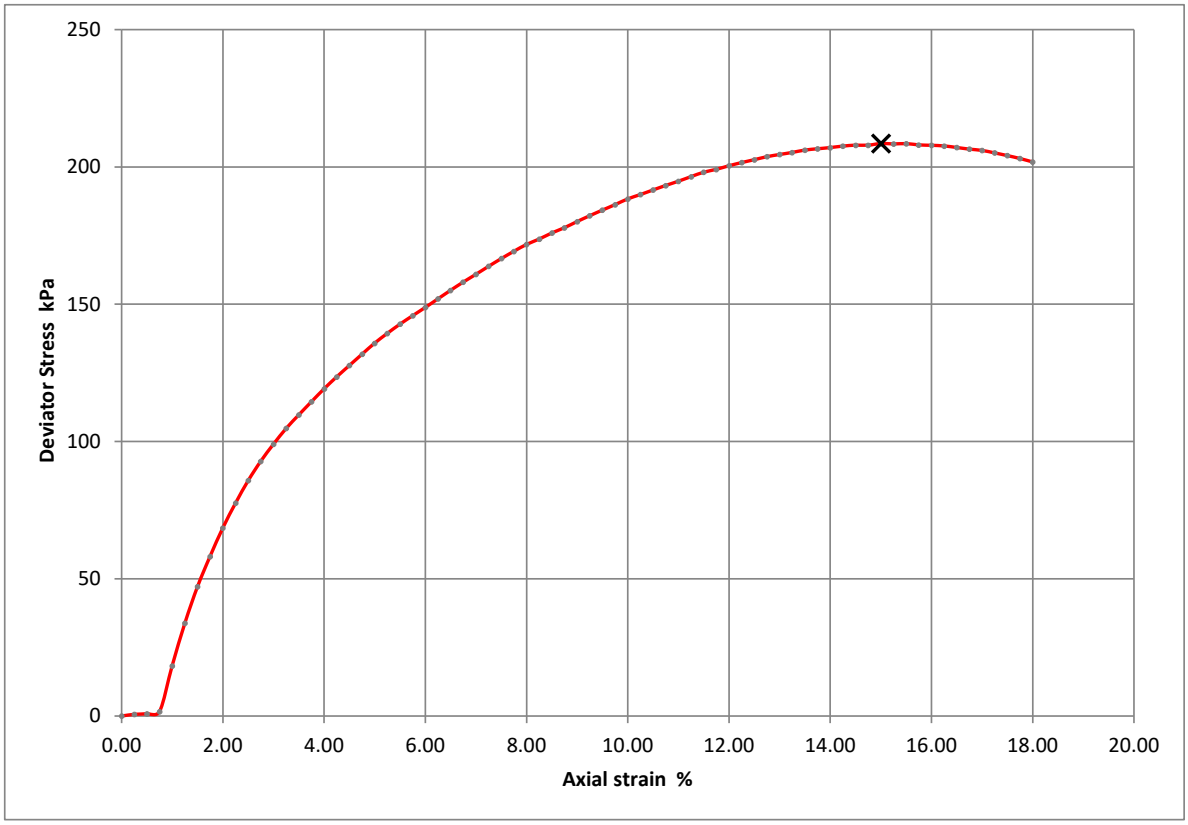
Notes.



Failure Sketch.

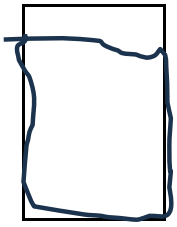
UKAS TESTING
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GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH002
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Gravelly Silty CLAY	Depth Top (m)	4.70
		Depth Base (m)	5.20
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	14
Bulk Density (Mg/m^3)	2.19
Dry Density (Mg/m^3)	1.92
Specimen Length (mm)	202.1
Specimen Diameter (mm)	83.8
Cell Pressure (kPa)	94
Deviator Stress (kPa)	209
Undrained Shear Strength (kPa)	104
Failure Strain (%)	15
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.48

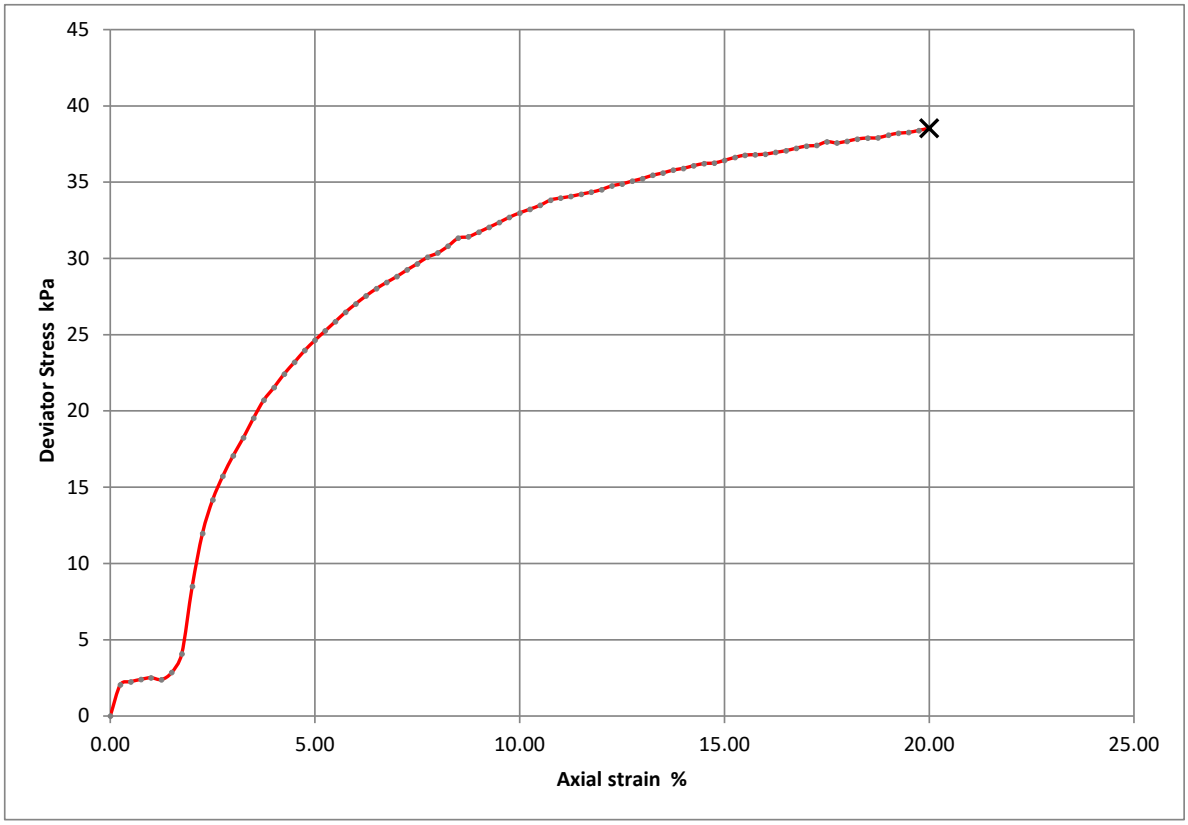
Notes.



Failure Sketch.

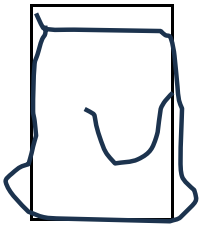
UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH003
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Sandy Gravelly CLAY	Depth Top (m)	2.70
		Depth Base (m)	3.00
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	28
Bulk Density (Mg/m^3)	1.94
Dry Density (Mg/m^3)	1.52
Specimen Length (mm)	204.5
Specimen Diameter (mm)	95.7
Cell Pressure (kPa)	54
Deviator Stress (kPa)	39
Undrained Shear Strength (kPa)	19
Failure Strain (%)	20
Mode Of Failure	Compound
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.47

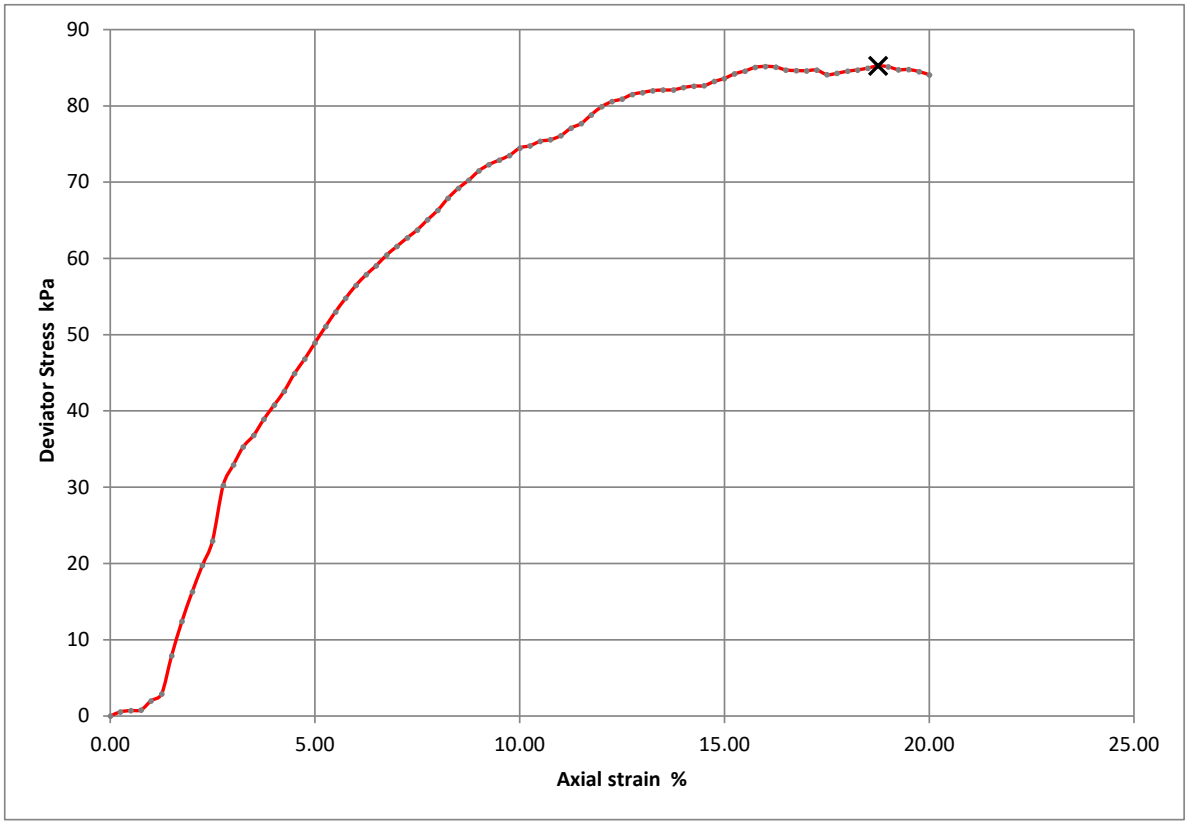
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Failure Sketch.

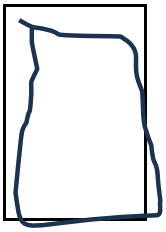
UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH003
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Silty Gravelly Sandy CLAY	Depth Top (m)	8.60
		Depth Base (m)	9.00
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	16
Bulk Density (Mg/m^3)	2.07
Dry Density (Mg/m^3)	1.79
Specimen Length (mm)	153.4
Specimen Diameter (mm)	77.9
Cell Pressure (kPa)	172
Deviator Stress (kPa)	85
Undrained Shear Strength (kPa)	43
Failure Strain (%)	19
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.79

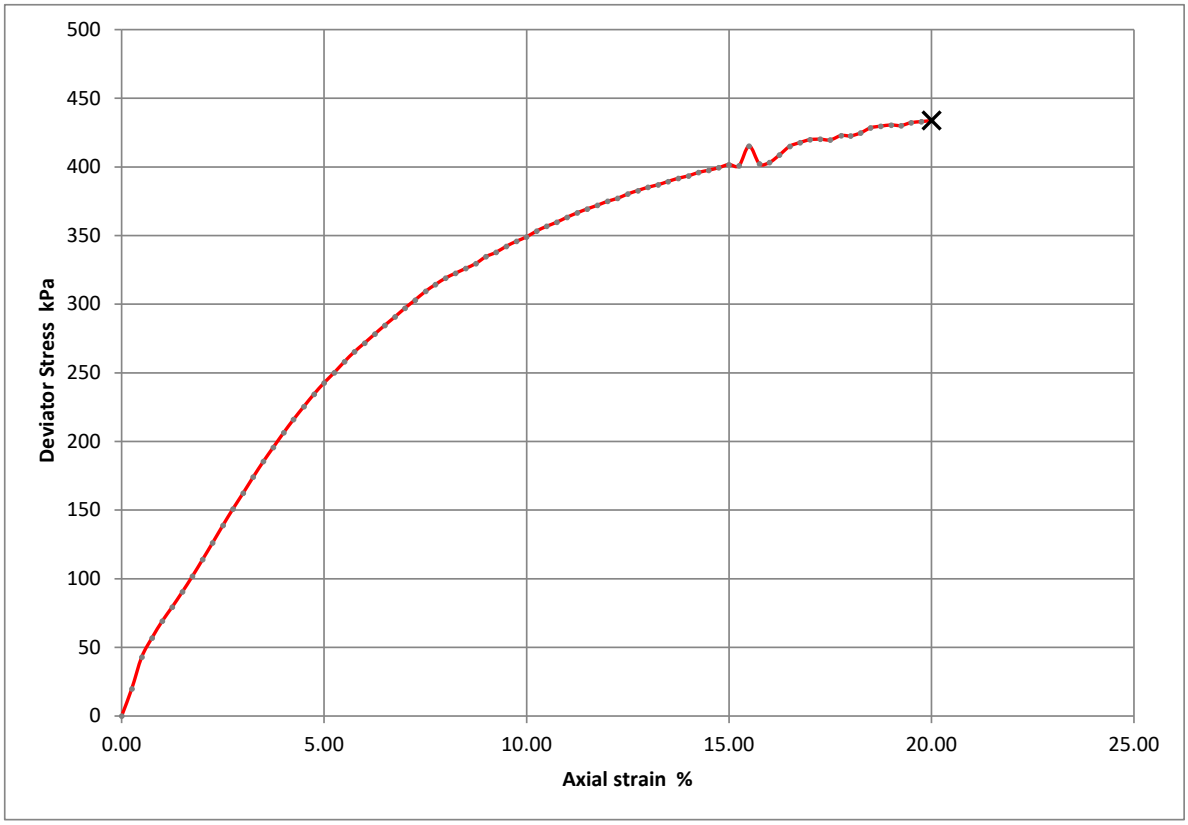
Notes.



Failure Sketch.

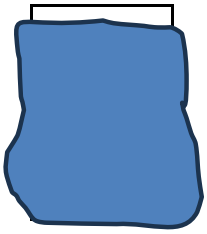
UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH004
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Gravelly Sandy Silty CLAY	Depth Top (m)	4.70
		Depth Base (m)	5.20
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	14
Bulk Density (Mg/m^3)	2.19
Dry Density (Mg/m^3)	1.93
Specimen Length (mm)	208.3
Specimen Diameter (mm)	101.5
Cell Pressure (kPa)	94
Deviator Stress (kPa)	434
Undrained Shear Strength (kPa)	217
Failure Strain (%)	20
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.44

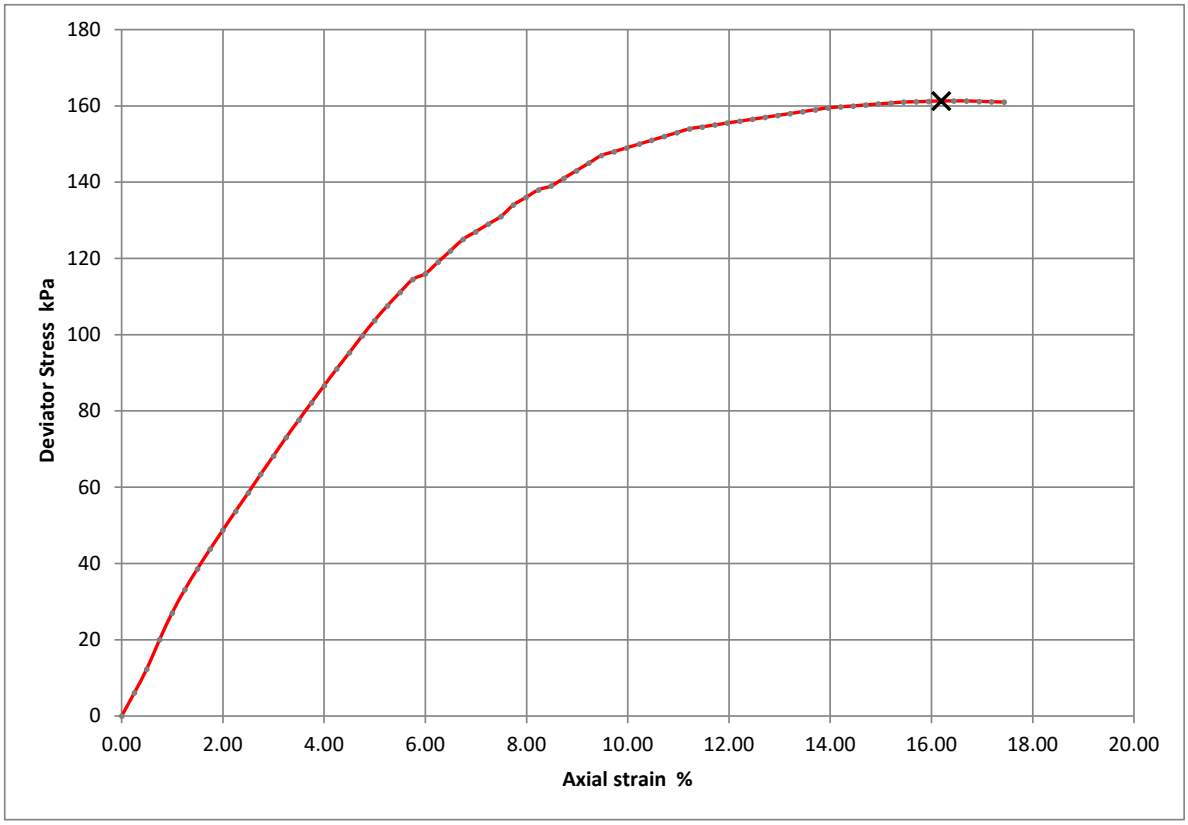
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Failure Sketch.

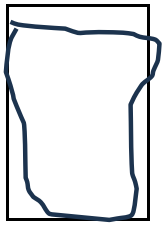
UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH005
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Gravelly Sandy CLAY	Depth Top (m)	2.00
		Depth Base (m)	2.50
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	26
Bulk Density (Mg/m^3)	2.17
Dry Density (Mg/m^3)	1.73
Specimen Length (mm)	202.9
Specimen Diameter (mm)	103.6
Cell Pressure (kPa)	40
Deviator Stress (kPa)	161
Undrained Shear Strength (kPa)	81
Failure Strain (%)	16
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.48

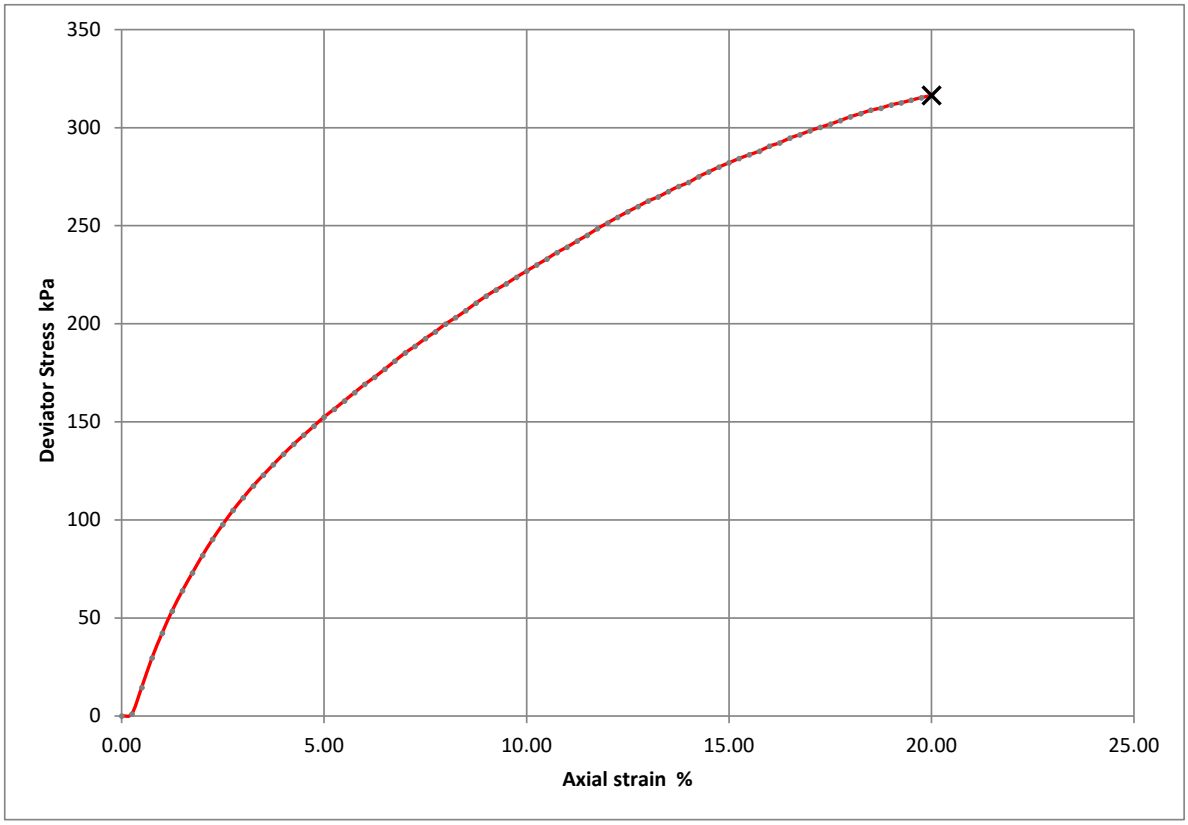
Notes.



Failure Sketch.

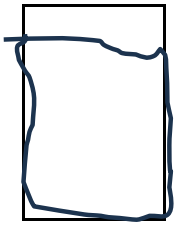
UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Single Stage Unconsolidated-Undrained Triaxial Test BS 1377 : 1990 Part 7 : 8**	Contract Number	71227
		Borehole/Pit No.	BH005
Project Name	90 Carmoor Road, Manchester	Sample No.	
Soil Description	Brown Gravelly Silty CLAY	Depth Top (m)	7.50
		Depth Base (m)	
Date Tested	08/03/2024	Sample Type	UT
		Operator	David



Moisture Content (%)	13
Bulk Density (Mg/m^3)	2.21
Dry Density (Mg/m^3)	1.95
Specimen Length (mm)	197.5
Specimen Diameter (mm)	84.3
Cell Pressure (kPa)	150
Deviator Stress (kPa)	316
Undrained Shear Strength (kPa)	158
Failure Strain (%)	20
Mode Of Failure	Plastic
Membrane Used/Thickness	Rubber/0.4mm
Rate of Strain (%/min)	1.52

Notes.



Failure Sketch.

UKAS TESTING
2788

Test Report: MS DIRECT SHEARBOX TEST.BS1377:Part 7:4.5 :1990.

Borehole Number:	BH002	Depth from (m):	13.50
Sample Number :		Depth to (m):	

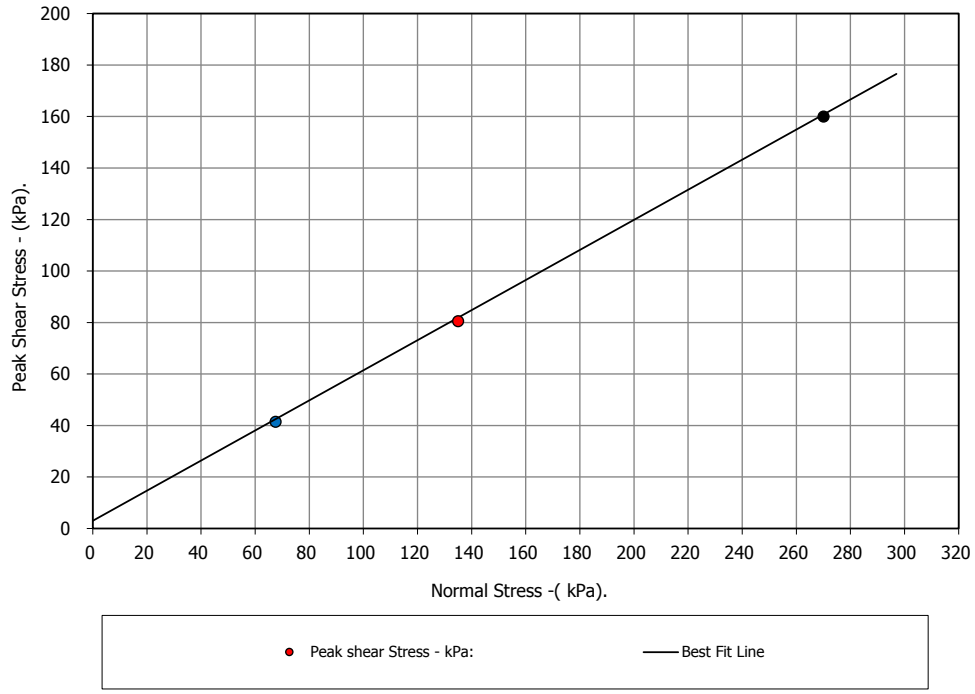
Sample Type:	B
Particle Density - Mg/m3:	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded (Light Tamping) Material above 2mm removed.

Sample Description:
Brown silty CLAY

STAGE	**1**	**2**	**3**
Initial Conditions			
Height - mm:	24.80	24.80	24.80
Length - mm:	60.00	60.00	60.00
Moisture Content - %:	18	18	18
Bulk Density - Mg/m3:	2.12	2.12	2.11
Dry Density - Mg/m3:	1.79	1.79	1.78
Voids Ratio:	0.4812	0.4824	0.4879
Degree of Saturation - %:	101.62	101.37	100.24
Normal Pressure- kPa	68	135	270
Consolidation			
Consolidated Height - mm:	20.46	20.84	19.52
Shear			
Rate of Horizontal Displacement (mm/min)	0.200	0.200	0.200
Horizontal Displacement at Peak Shear Stress (mm)	13.60	14.04	11.52
Peak shear Stress - kPa:	41	80	160

PEAK	
Angle of Shearing Resistance:(~~θ~~)	**30.5**
Effective Cohesion - kPa:	**3.0**

FAILURE CONDITIONS



UKAS TESTING 2788

Contract No.:

71227

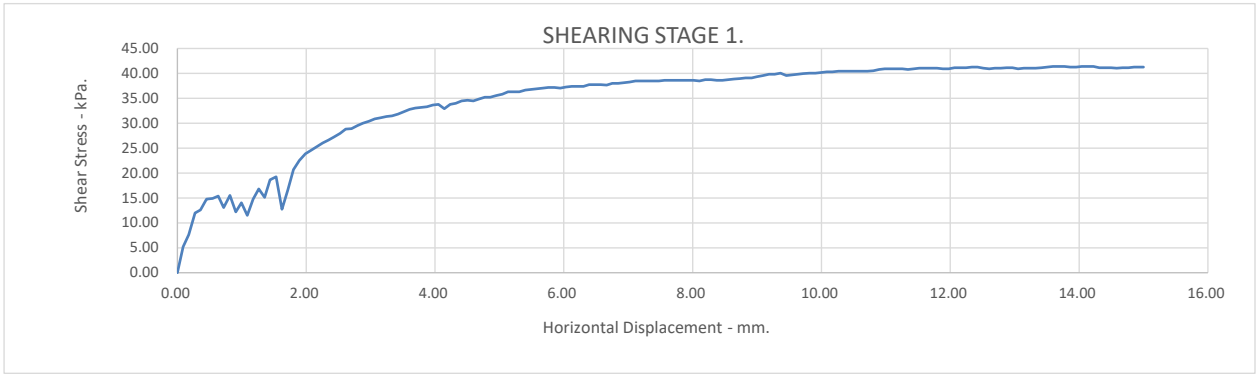
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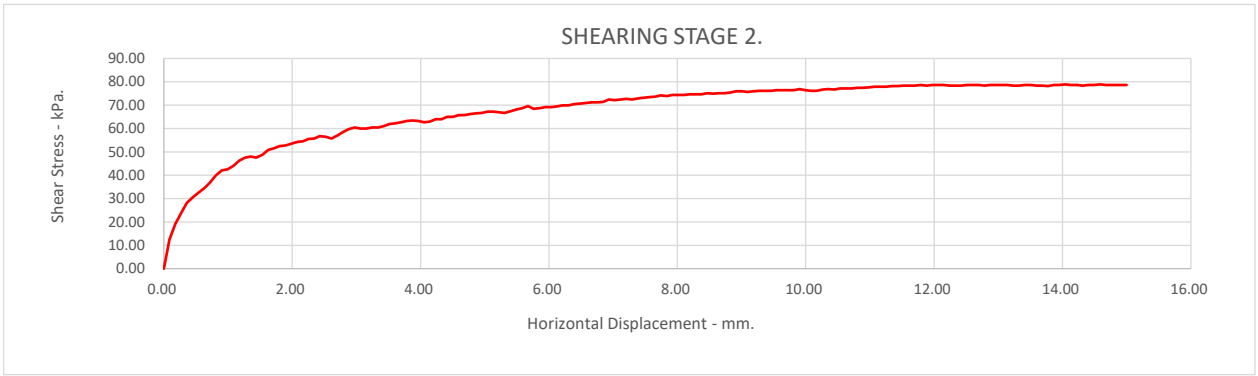
LS7347

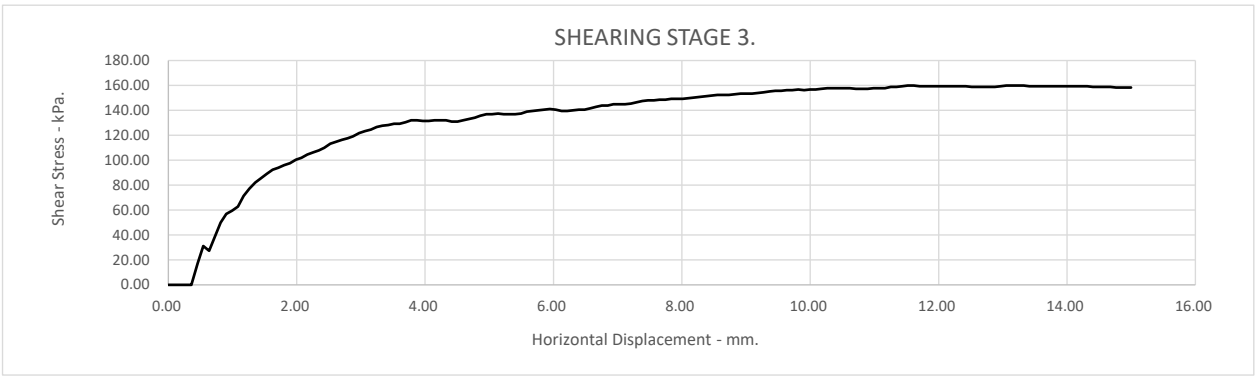
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES

90 Carmoor Road, Manchester, M13 0FB

Borehole Number:	BH002	Depth from (m):	13.50
Sample Number :		Depth to (m):	

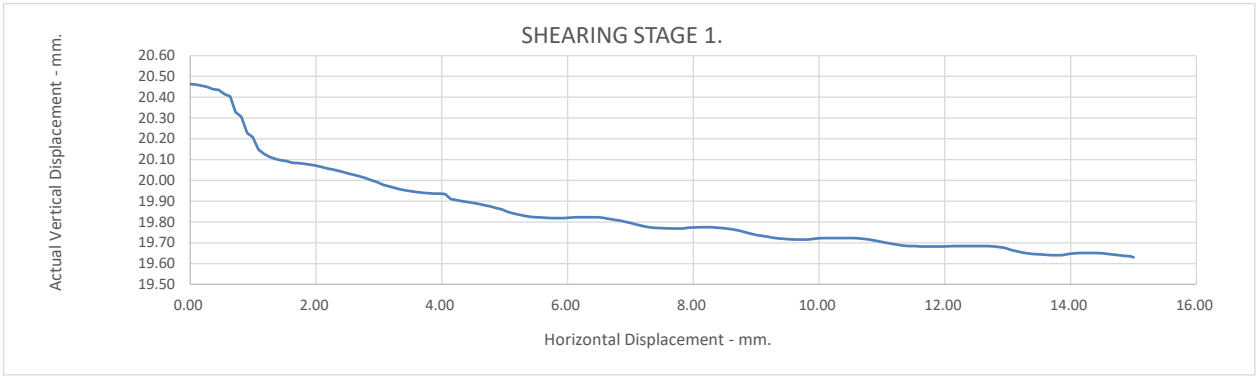


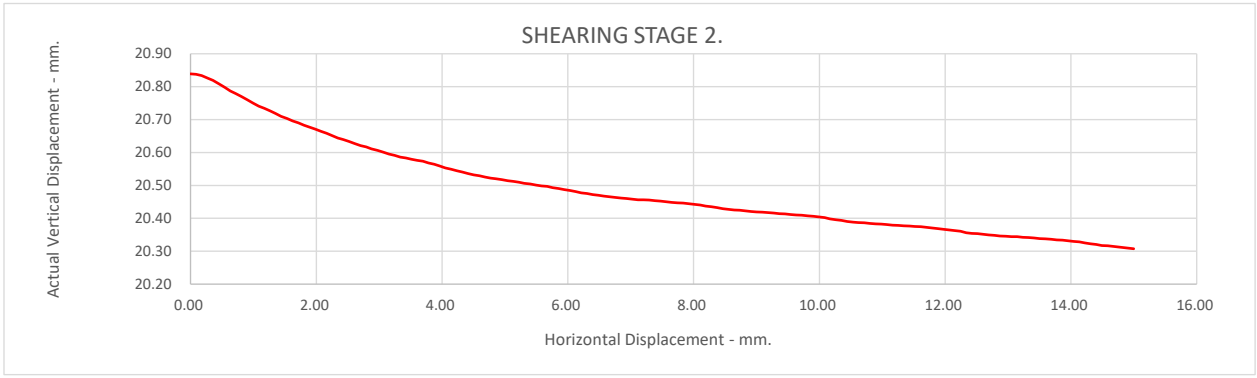


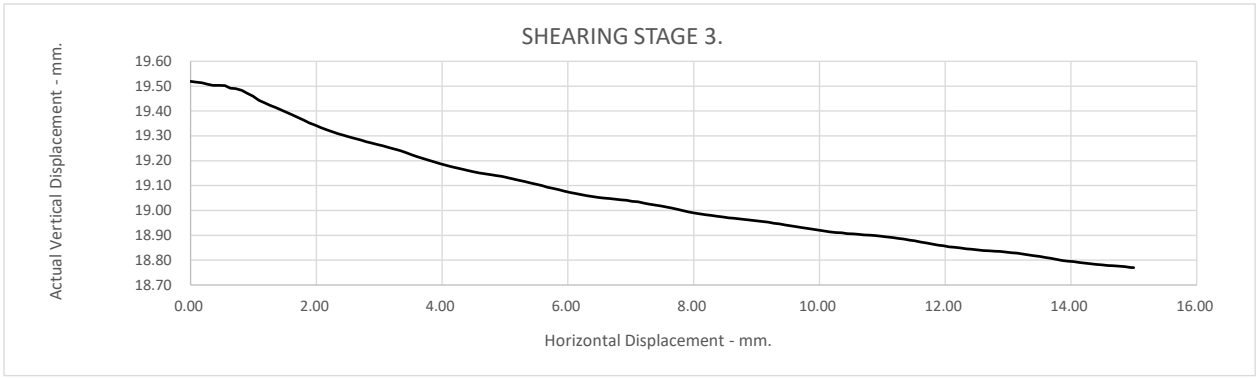


Borehole Number: BH002
Sample Number :

Depth from (m): 13.50
Depth to (m):





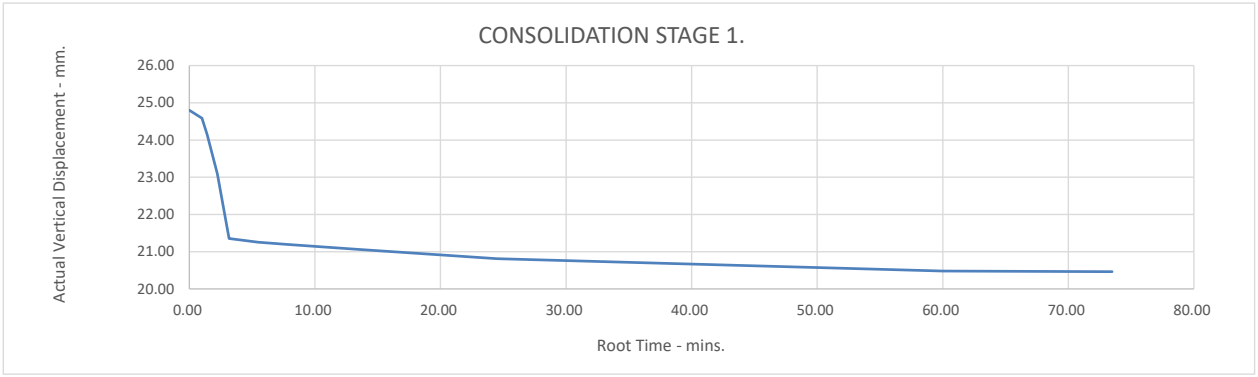


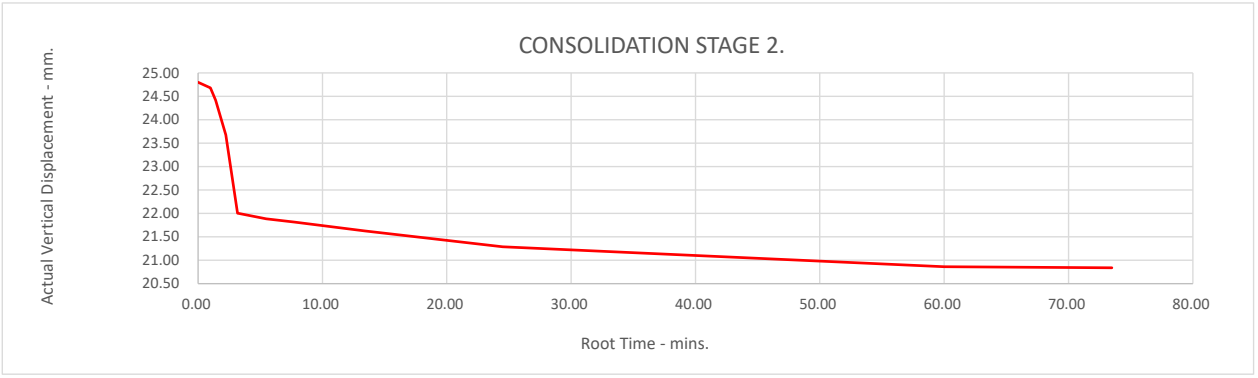
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

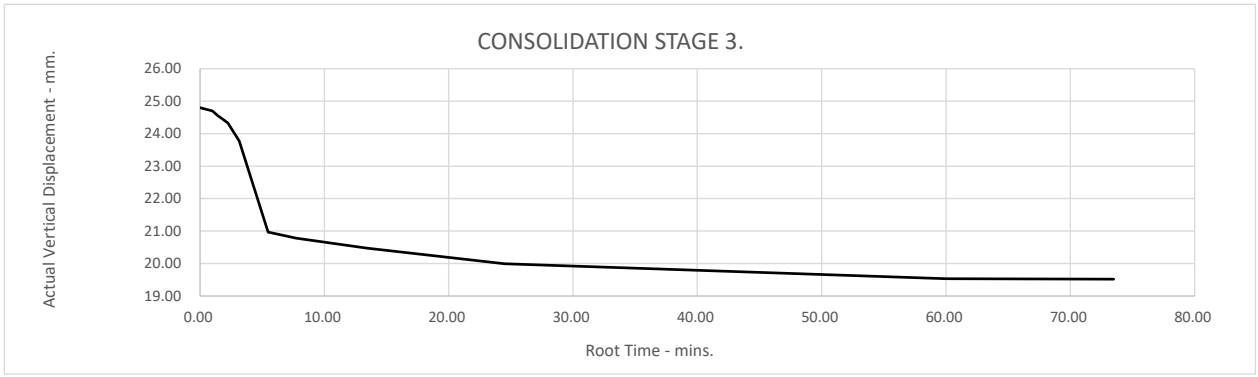
90 Carmoor Road, Manchester, M13 0FB

Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number:	BH002	Depth from (m):	13.50
Sample Number :		Depth to (m):	







Test Report: MS DIRECT SHEARBOX TEST.BS1377:Part 7:4.5 :1990.

Borehole Number:	BH03	Depth from (m):	11.00
Sample Number :		Depth to (m):	

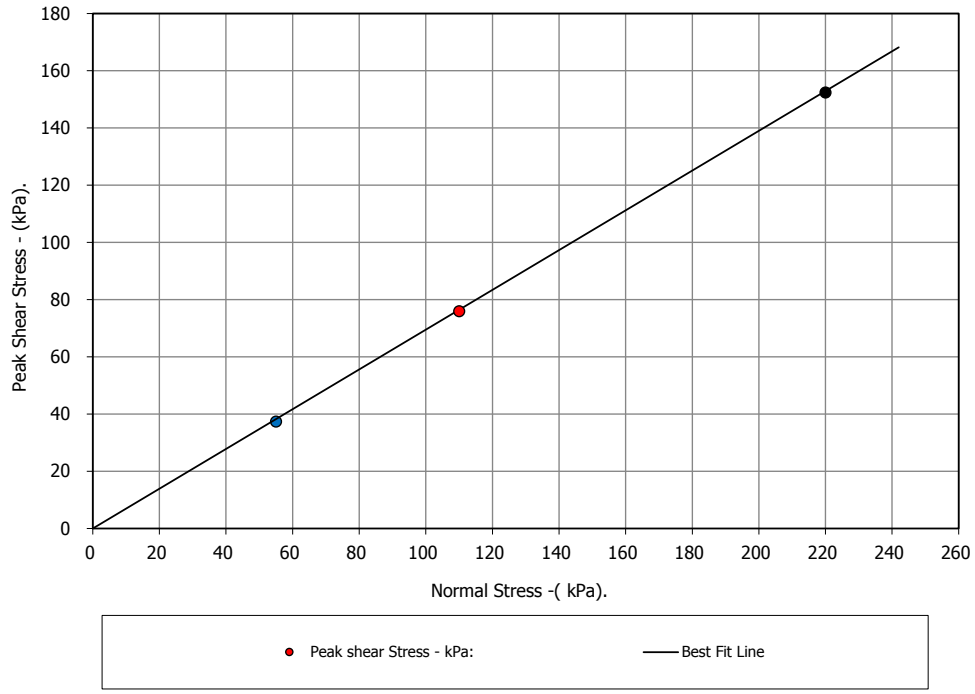
Sample Type:	B
Particle Density - Mg/m3:	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded (Light Tamping) Material above 2mm removed.

Sample Description:
Brown fine to medium gravel CLAY

STAGE	**1**	**2**	**3**
Initial Conditions			
Height - mm:	24.80	24.80	24.80
Length - mm:	60.00	60.00	60.00
Moisture Content - %:	18	18	18
Bulk Density - Mg/m3:	2.13	2.13	2.13
Dry Density - Mg/m3:	1.81	1.81	1.81
Voids Ratio:	0.4668	0.4673	0.4664
Degree of Saturation - %:	102.81	102.71	102.90
Normal Pressure- kPa	55	110	220
Consolidation			
Consolidated Height - mm:	21.67	18.86	19.88
Shear			
Rate of Horizontal Displacement (mm/min)	0.200	0.200	0.200
Horizontal Displacement at Peak Shear Stress (mm)	12.43	13.06	10.90
Peak shear Stress - kPa:	37	76	152

PEAK	
Angle of Shearing Resistance:(~~θ~~)	**35.0**
Effective Cohesion - kPa:	**0.0**

FAILURE CONDITIONS



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2788

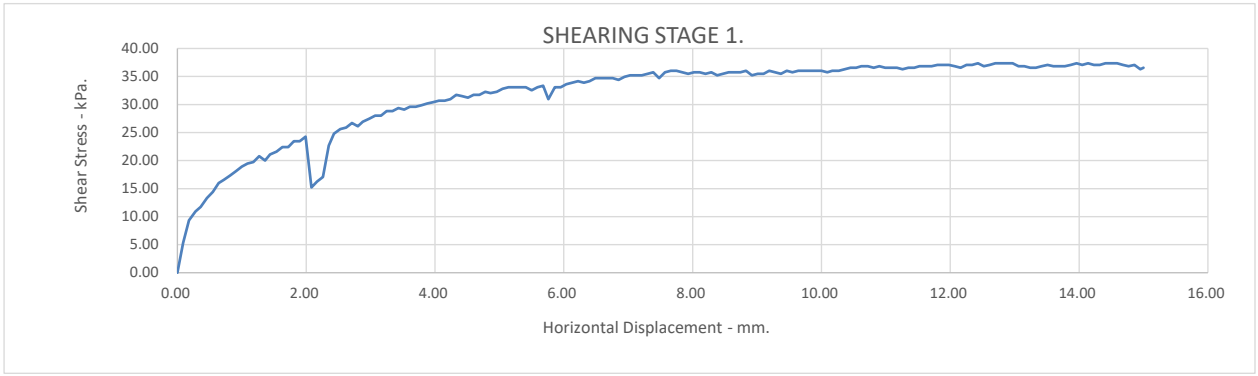
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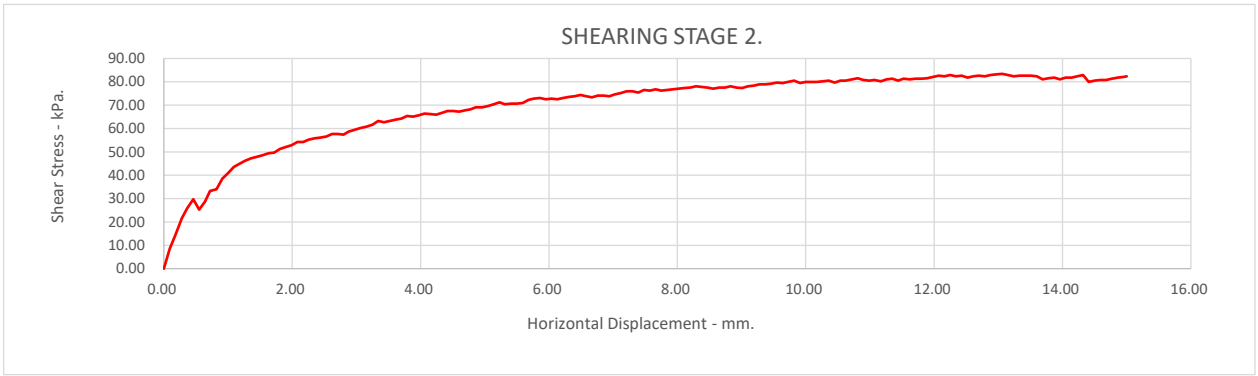
90 Carmoor Road, Manchester, M13 0FB

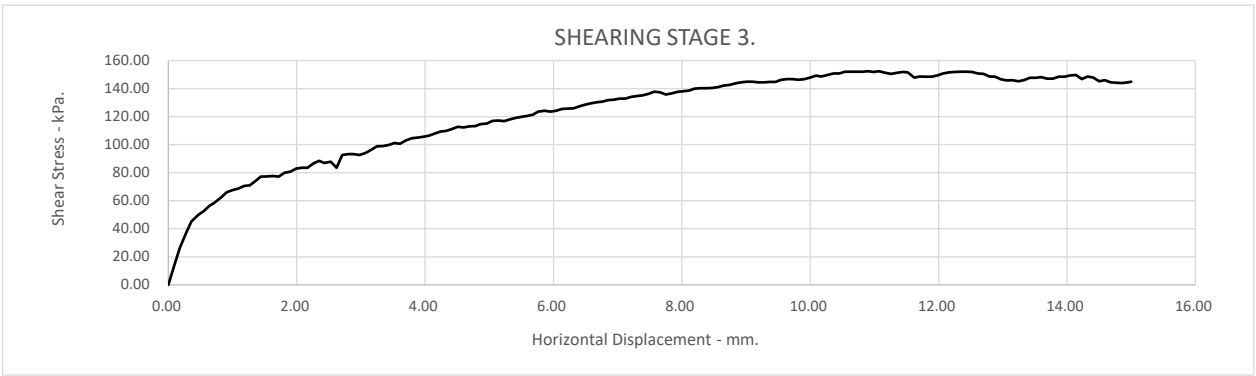
Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number: BH03
Sample Number :

Depth from (m): 11.00
Depth to (m):







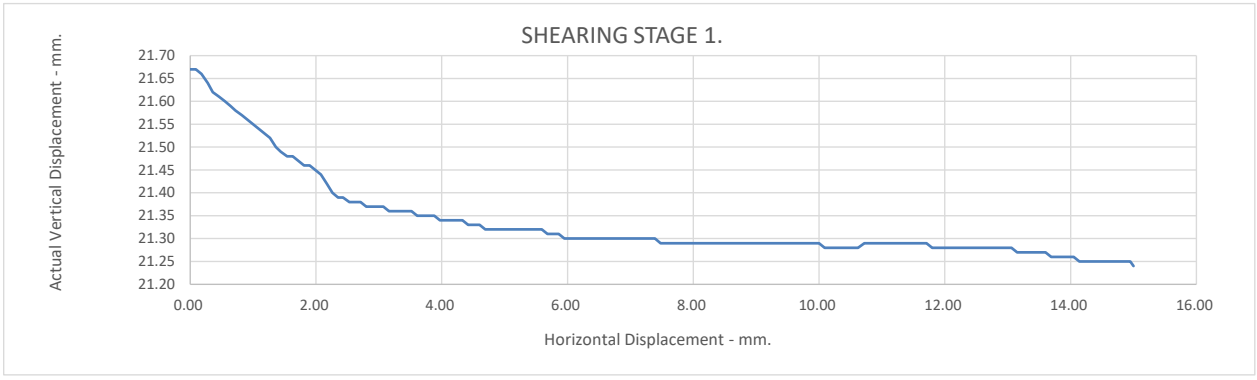
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

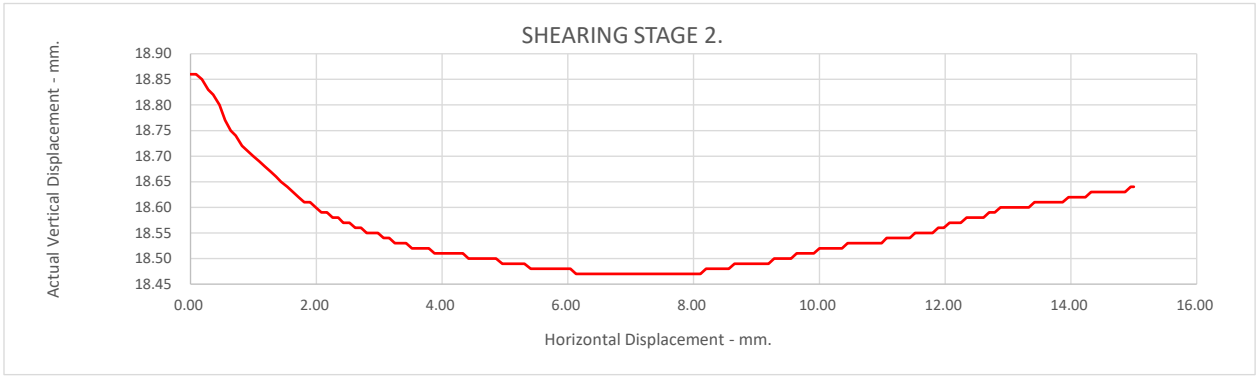
90 Carmoor Road, Manchester, M13 0FB

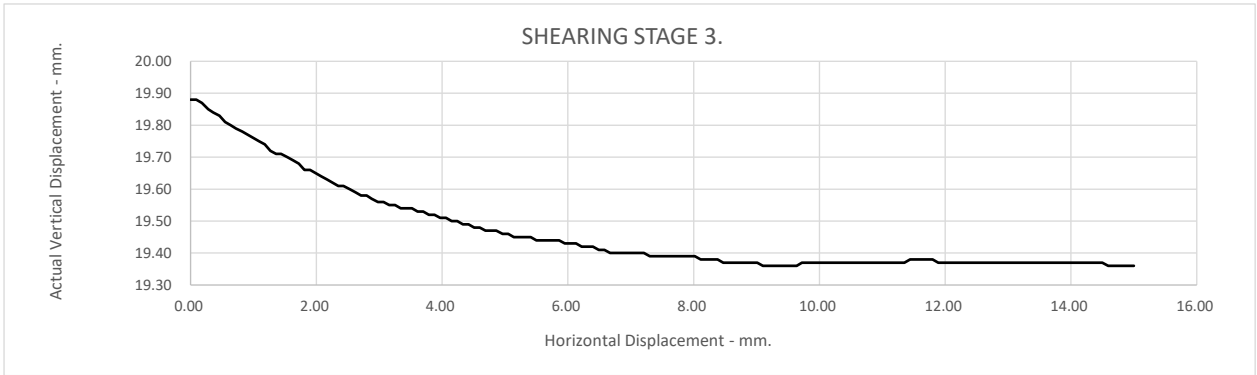
Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number: BH03
Sample Number :

Depth from (m): 11.00
Depth to (m):





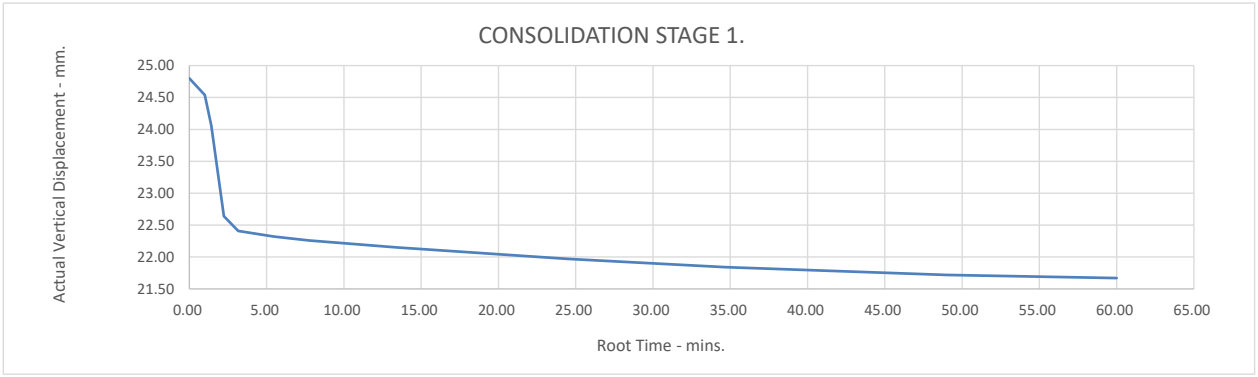


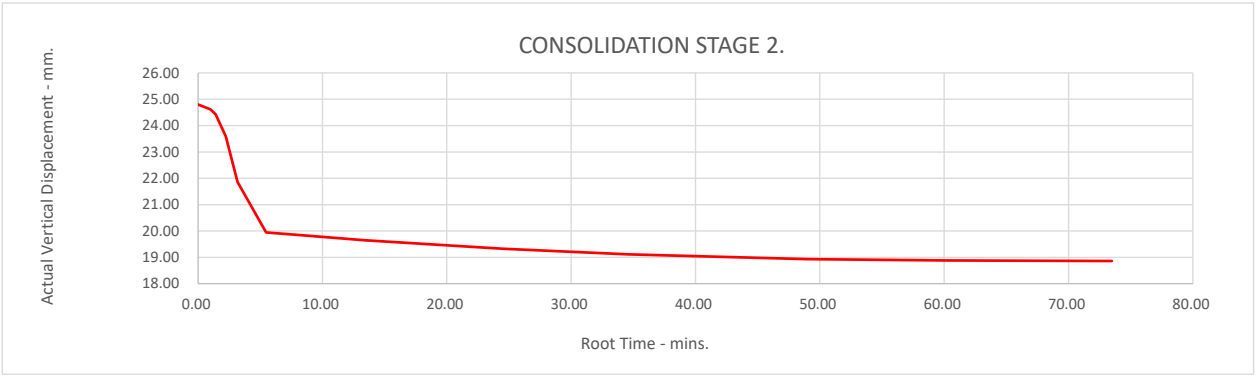
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

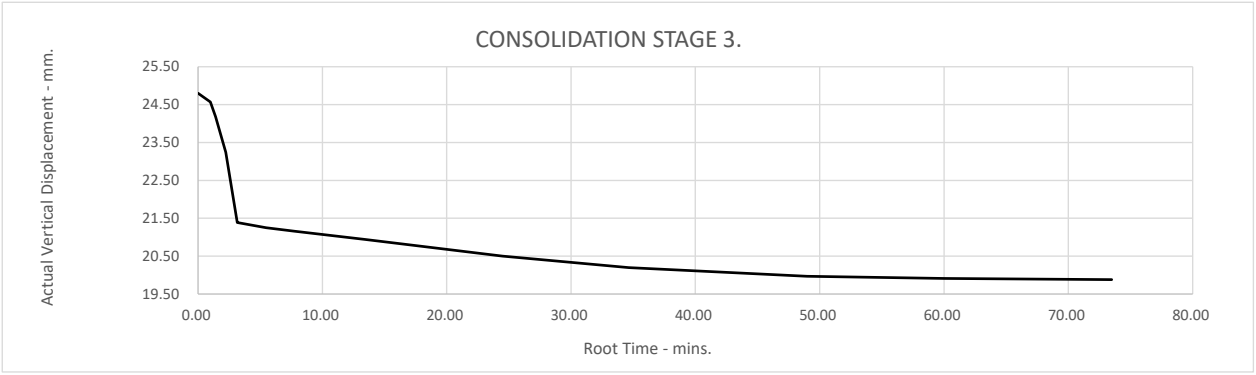
90 Carmoor Road, Manchester, M13 0FB

Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number:	BH03	Depth from (m):	11.00
Sample Number :		Depth to (m):	







Test Report: MS DIRECT SHEARBOX TEST.BS1377:Part 7:4.5 :1990.

Borehole Number:	BH003	Depth from (m):	13.50
Sample Number :		Depth to (m):	

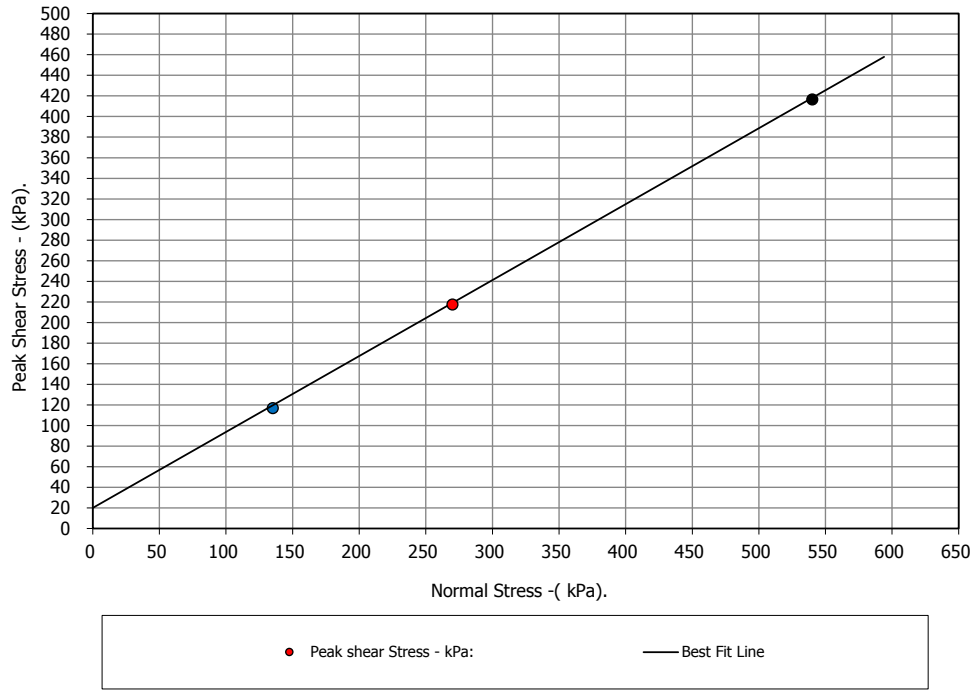
Sample Type:	B
Particle Density - Mg/m3:	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded (Light Tamping) Material above 2mm removed.

Sample Description:
Brown fine to medium gravel SAND

STAGE	**1**	**2**	**3**
Initial Conditions			
Height - mm:	24.80	24.80	24.80
Length - mm:	60.00	60.00	60.00
Moisture Content - %:	11	11	11
Bulk Density - Mg/m3:	2.12	2.12	2.11
Dry Density - Mg/m3:	1.91	1.91	1.91
Voids Ratio:	0.3878	0.3859	0.3892
Degree of Saturation - %:	74.27	74.62	74.00
Normal Pressure- kPa	135	270	540
Consolidation			
Consolidated Height - mm:	21.71	21.37	21.38
Shear			
Rate of Horizontal Displacement (mm/min)	0.500	0.500	0.500
Horizontal Displacement at Peak Shear Stress (mm)	5.41	4.33	4.78
Peak shear Stress - kPa:	117	217	416

PEAK	
Angle of Shearing Resistance:(~~θ~~)	**36.5**
Effective Cohesion - kPa:	**20**

FAILURE CONDITIONS



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Contract No.:

71227

Client Ref Number:

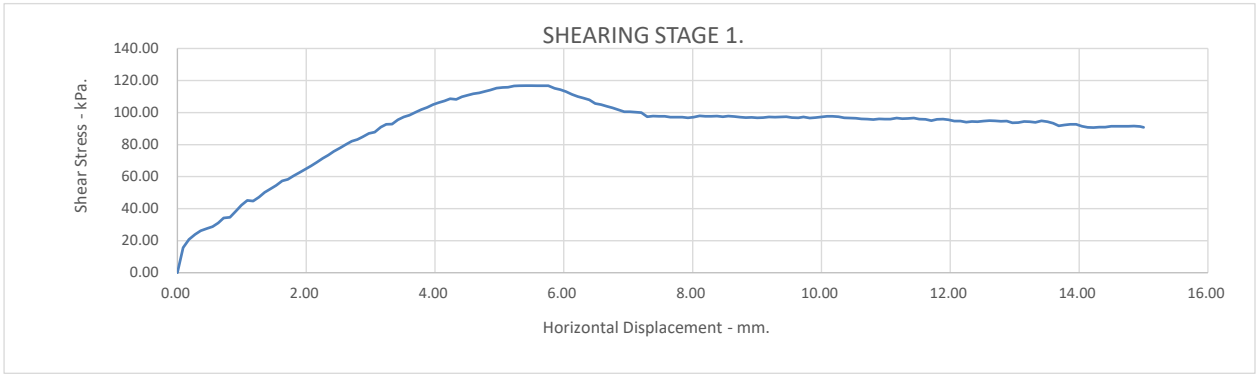
LS7347

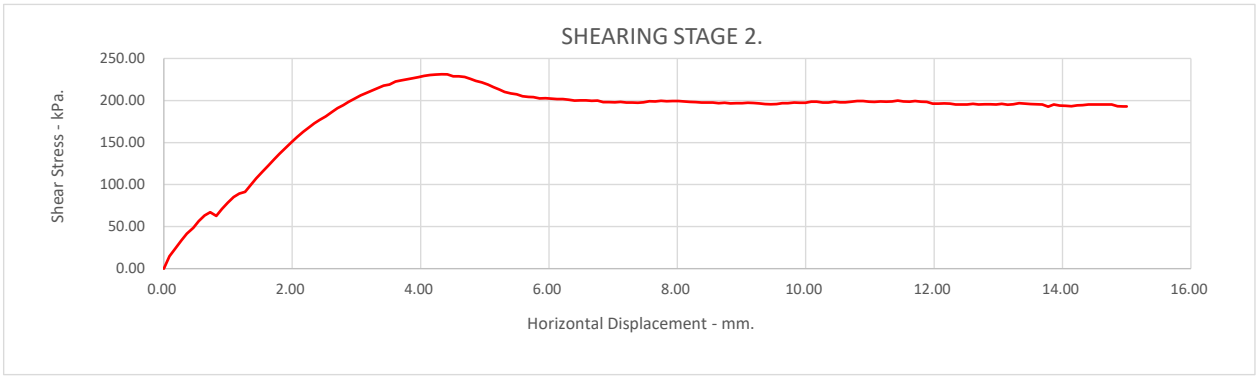
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES

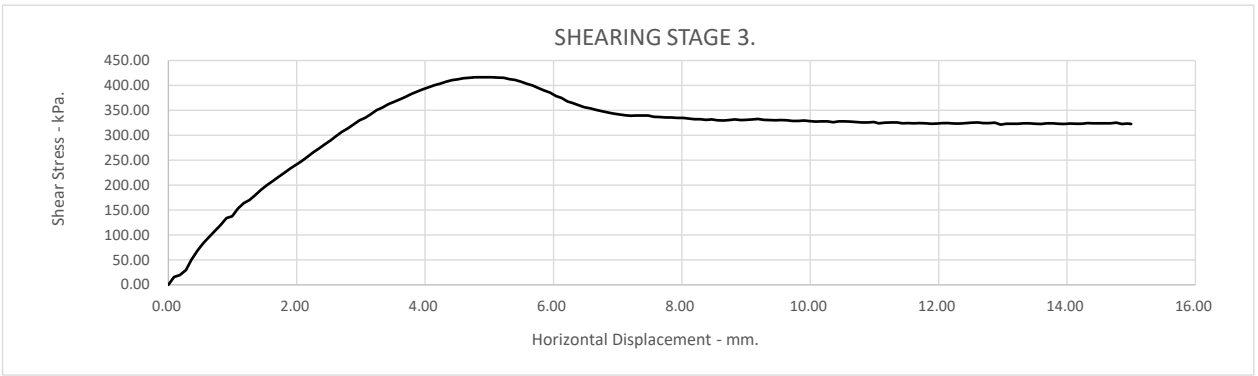
90 Carmoor Road, Manchester, M13 0FB

Borehole Number: BH003
Sample Number :

Depth from (m): 13.50
Depth to (m):

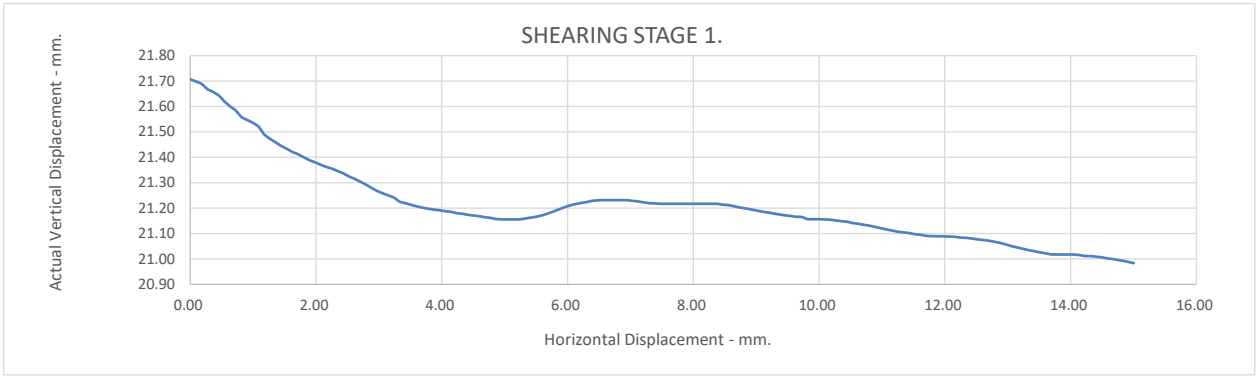


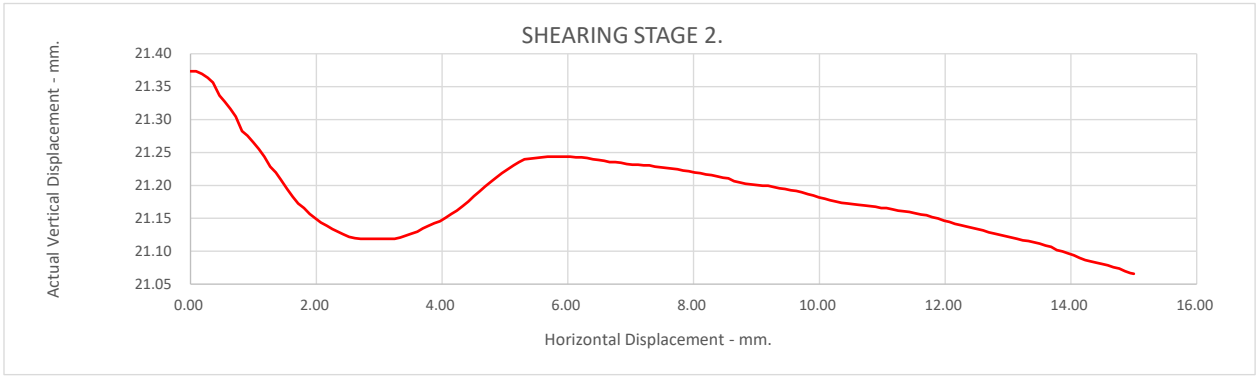


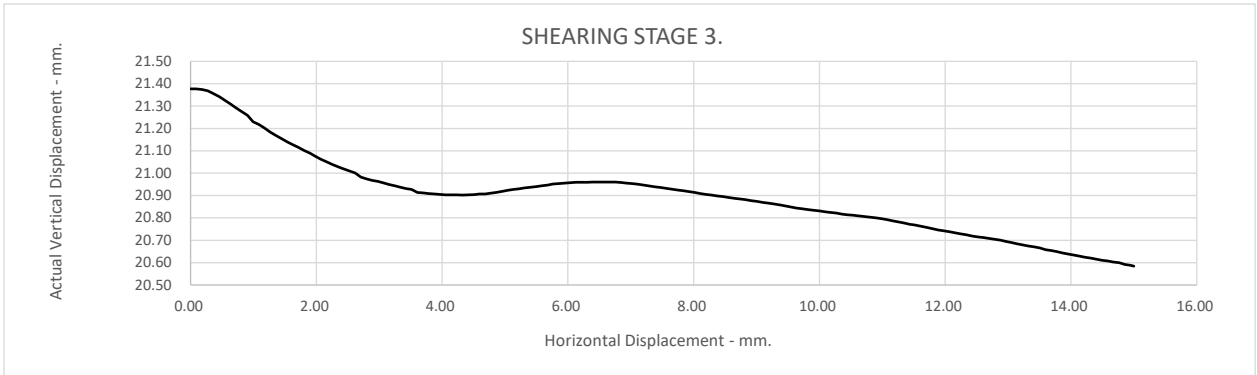


Borehole Number: BH003
Sample Number :

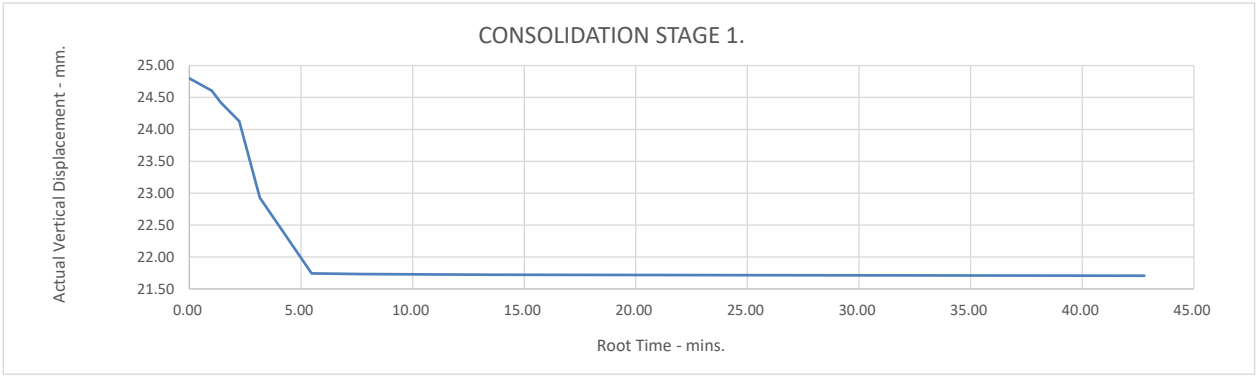
Depth from (m): 13.50
Depth to (m):

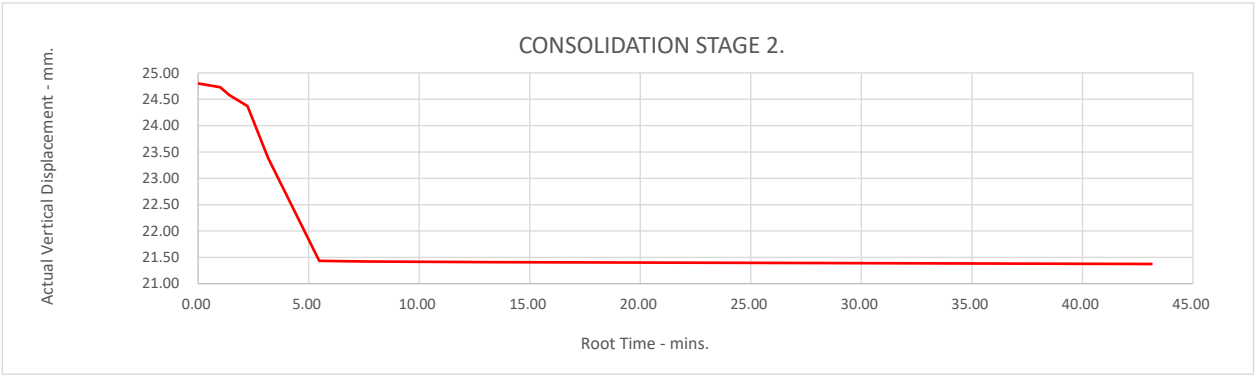


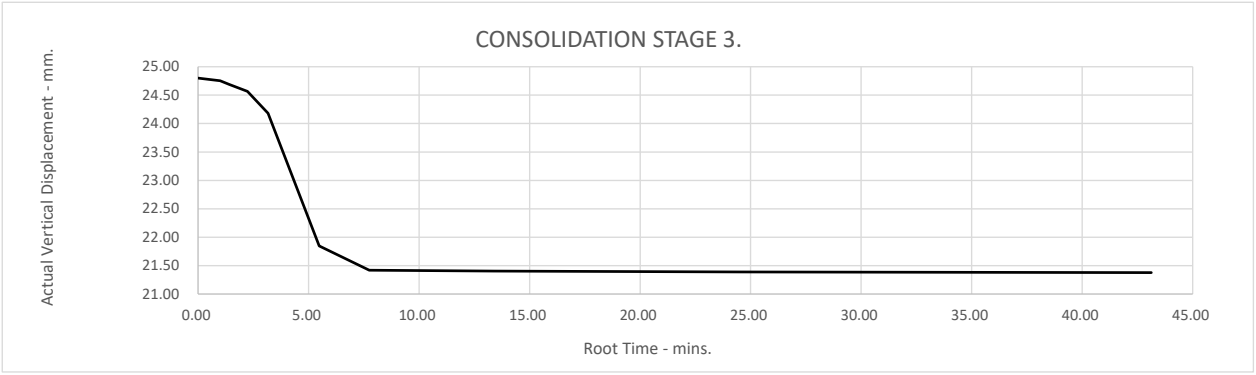




Borehole Number:	BH003	Depth from (m):	13.50
Sample Number :		Depth to (m):	







Test Report: MS DIRECT SHEARBOX TEST.BS1377:Part 7:4.5 :1990.

Borehole Number:	BH003	Depth from (m):	18.00
Sample Number :		Depth to (m):	

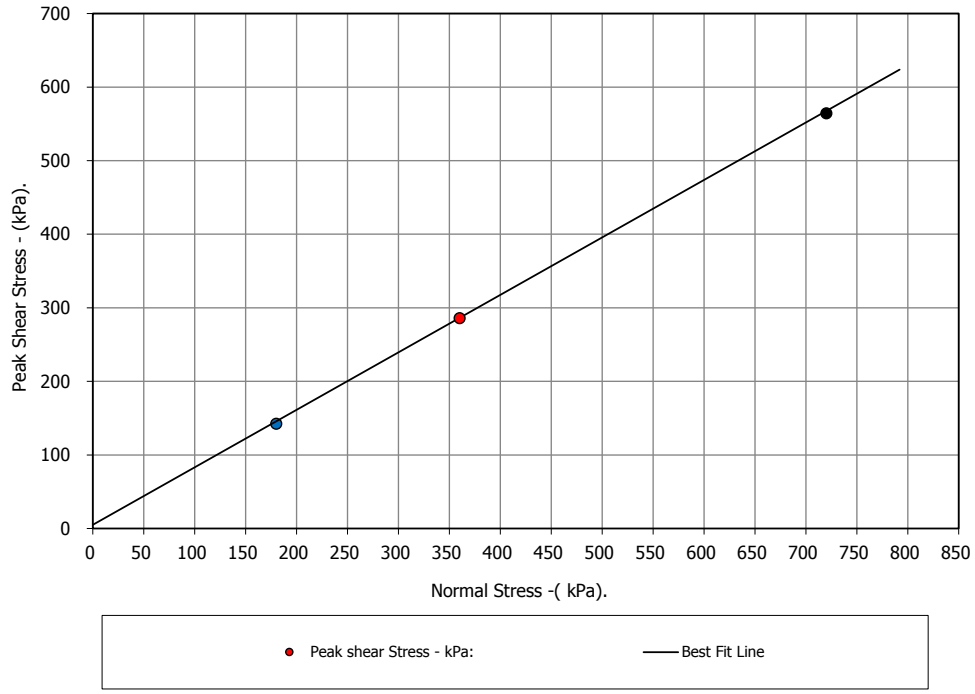
Sample Type:	B
Particle Density - Mg/m3:	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded (Light Tamping) Material above 2mm removed.

Sample Description:
Brown/Red fine to medium gravel silty SAND

STAGE	**1**	**2**	**3**
Initial Conditions			
Height - mm:	24.80	24.80	24.80
Length - mm:	60.00	60.00	60.00
Moisture Content - %:	14	14	14
Bulk Density - Mg/m3:	1.99	1.99	1.99
Dry Density - Mg/m3:	1.74	1.74	1.74
Voids Ratio:	0.5229	0.5223	0.5246
Degree of Saturation - %:	72.34	72.43	72.12
Normal Pressure- kPa	180	360	720
Consolidation			
Consolidated Height - mm:	21.26	21.55	21.31
Shear			
Rate of Horizontal Displacement (mm/min)	0.500	0.500	0.500
Horizontal Displacement at Peak Shear Stress (mm)	3.61	4.69	4.96
Peak shear Stress - kPa:	142	286	564

PEAK	
Angle of Shearing Resistance:(~~θ~~)	**38.0**
Effective Cohesion - kPa:	**5.0**

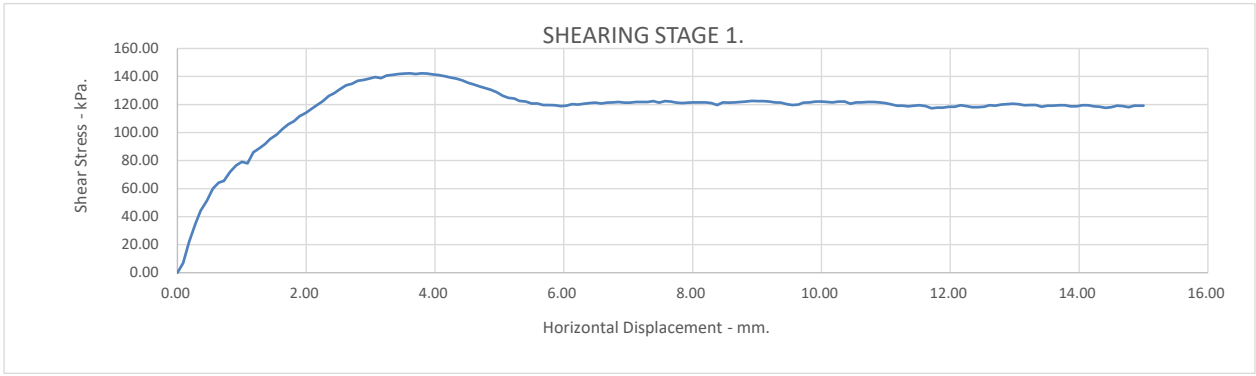
FAILURE CONDITIONS

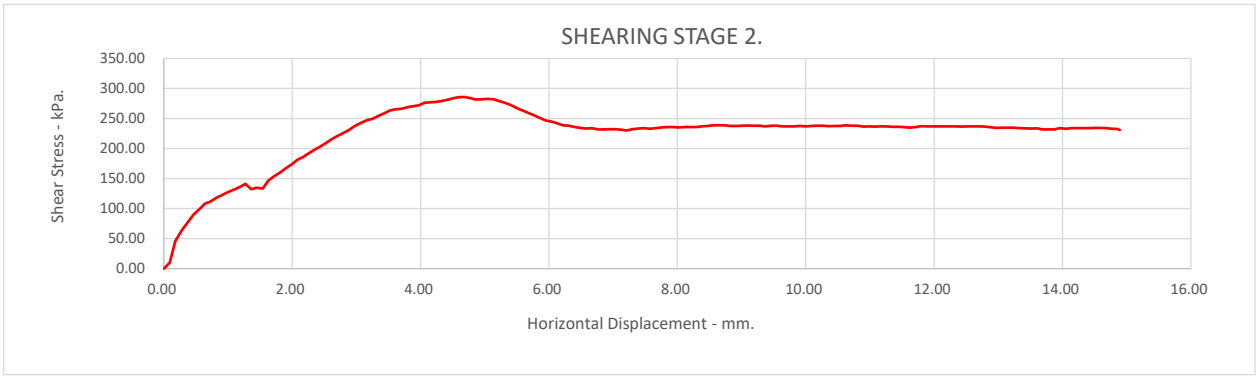


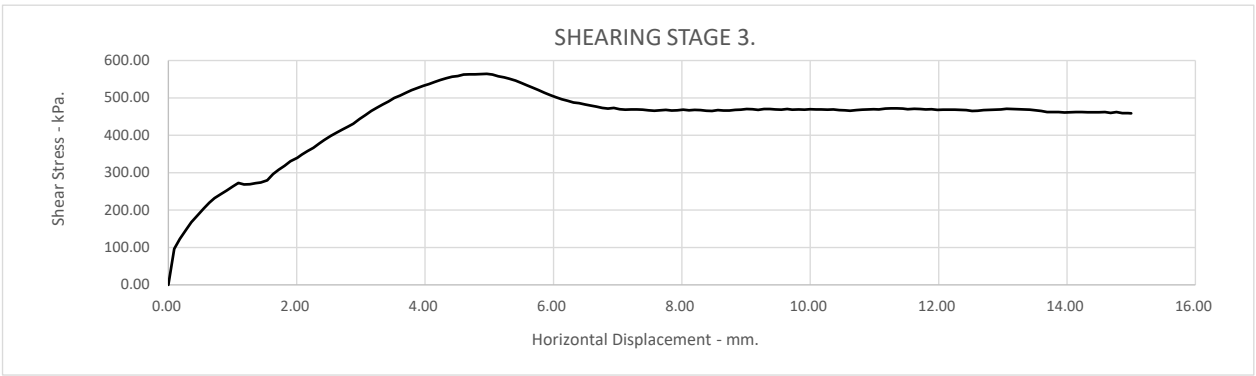
UKAS TESTING 2788

Borehole Number: BH003
Sample Number :

Depth from (m): 18.00
Depth to (m):







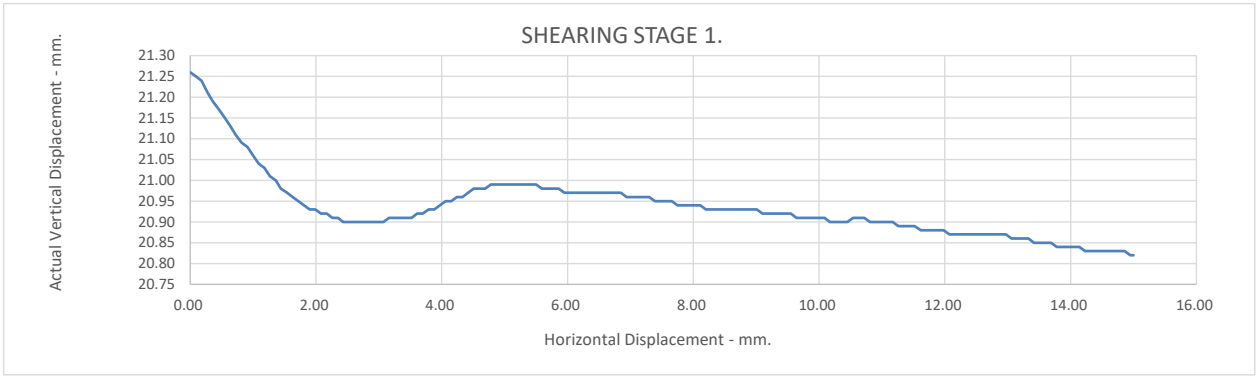
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

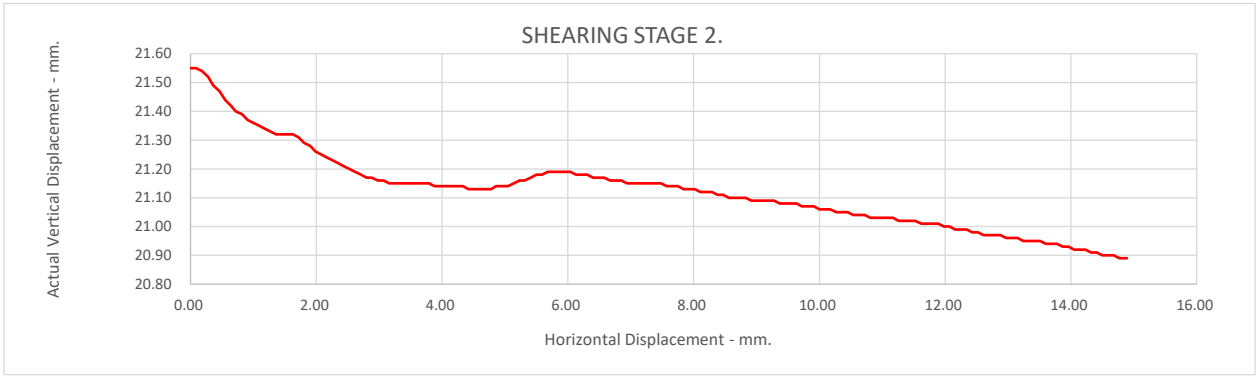
90 Carmoor Road, Manchester, M13 0FB

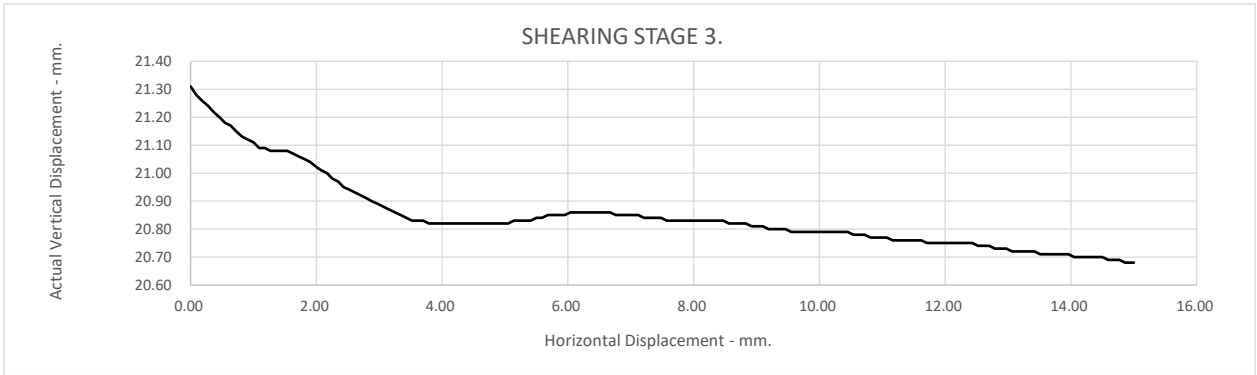
Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number: BH003
Sample Number :

Depth from (m): 18.00
Depth to (m):







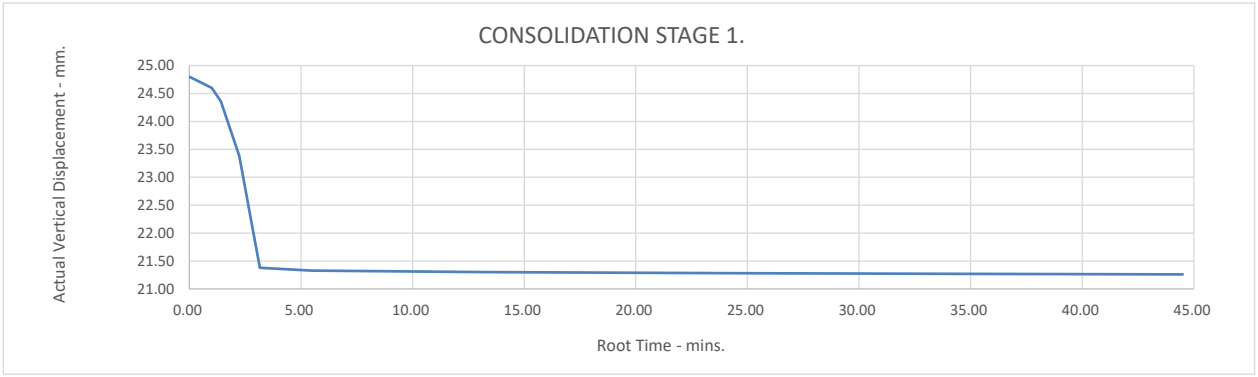
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

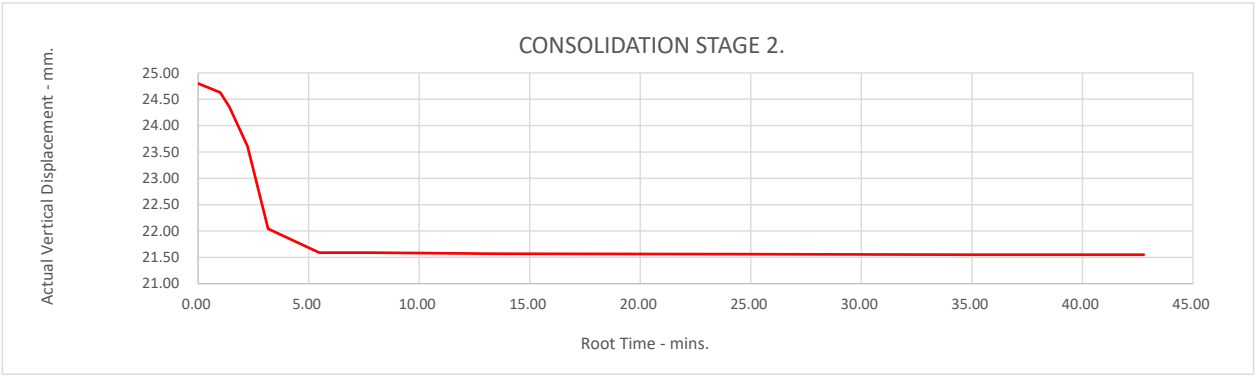
90 Carmoor Road, Manchester, M13 0FB

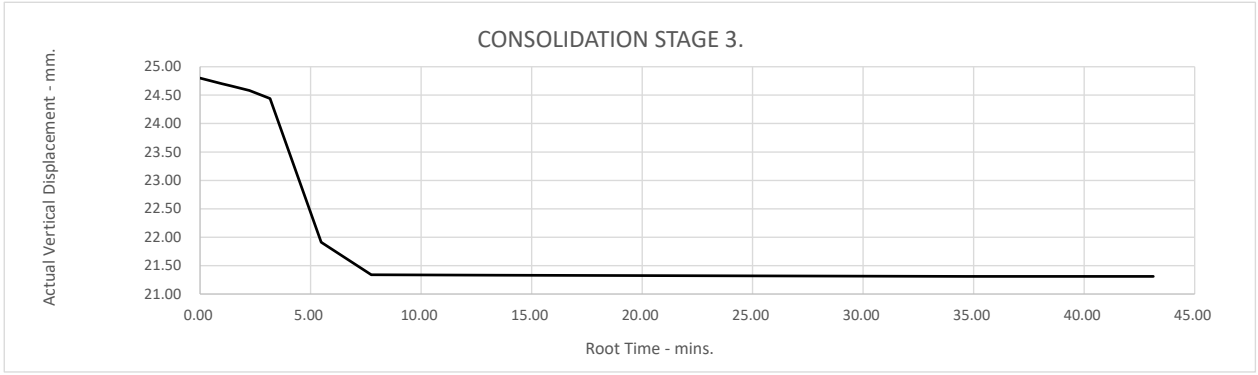
Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number: BH003
Sample Number :

Depth from (m): 18.00
Depth to (m):







Test Report: MS DIRECT SHEARBOX TEST.BS1377:Part 7:4.5 :1990.

Borehole Number:	BH004	Depth from (m):	14.00
Sample Number :		Depth to (m):	

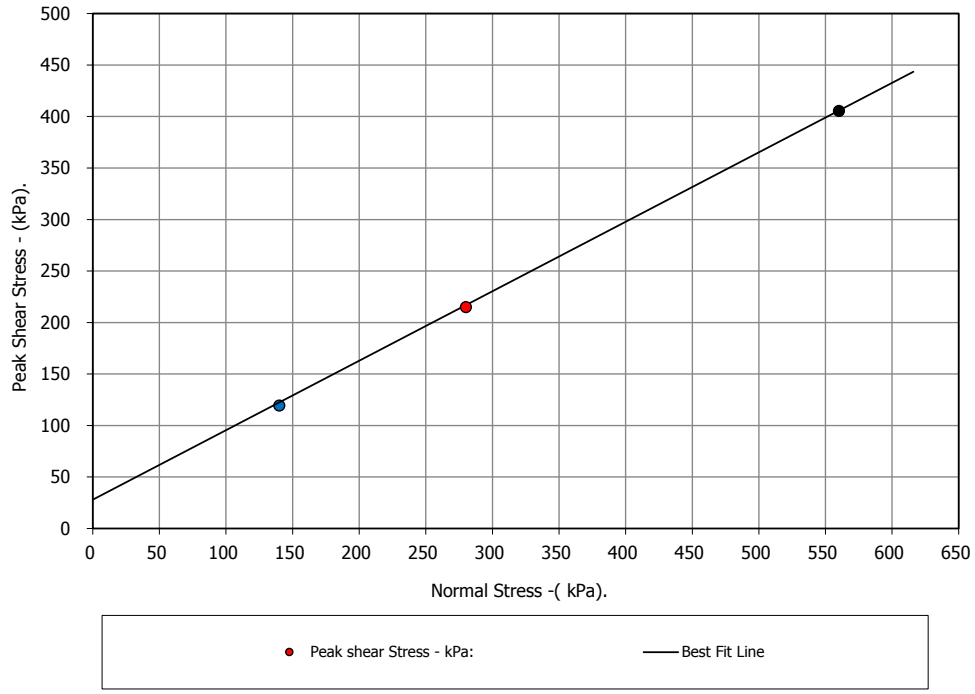
Sample Type:	B
Particle Density - Mg/m3:	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded (Light Tamping) Material above 2mm removed.

Sample Description:
Brown silty SAND

STAGE	**1**	**2**	**3**
Initial Conditions			
Height - mm:	24.80	24.80	24.80
Length - mm:	60.00	60.00	60.00
Moisture Content - %:	15	15	15
Bulk Density - Mg/m3:	1.94	1.95	1.95
Dry Density - Mg/m3:	1.69	1.70	1.70
Voids Ratio:	0.5655	0.5621	0.5615
Degree of Saturation - %:	69.06	69.48	69.56
Normal Pressure- kPa	140	280	560
Consolidation			
Consolidated Height - mm:	21.69	22.37	20.58
Shear			
Rate of Horizontal Displacement (mm/min)	0.500	0.500	0.500
Horizontal Displacement at Peak Shear Stress (mm)	3.61	4.42	4.78
Peak shear Stress - kPa:	119	215	405

PEAK	
Angle of Shearing Resistance:(~~θ~~)	**34.0**
Effective Cohesion - kPa:	**28**

FAILURE CONDITIONS



UKAS TESTING 2788

Contract No.:

71227

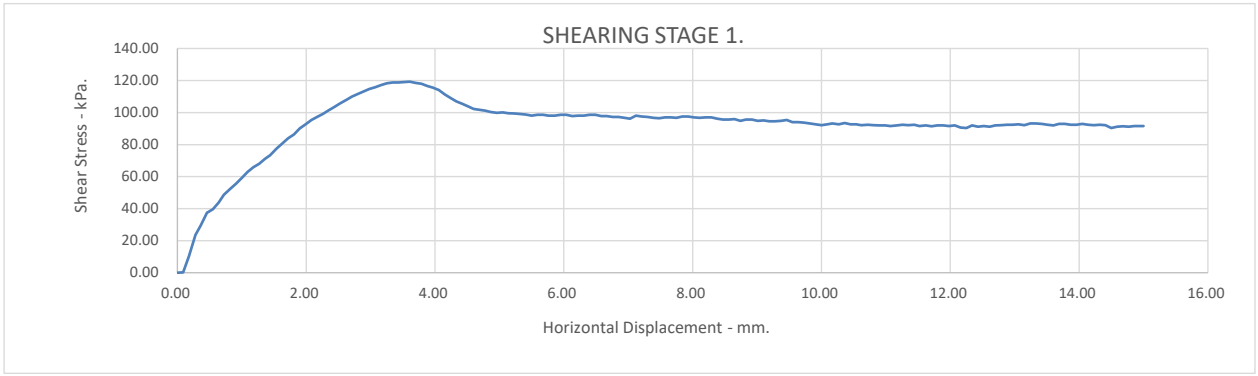
Client Ref Number:

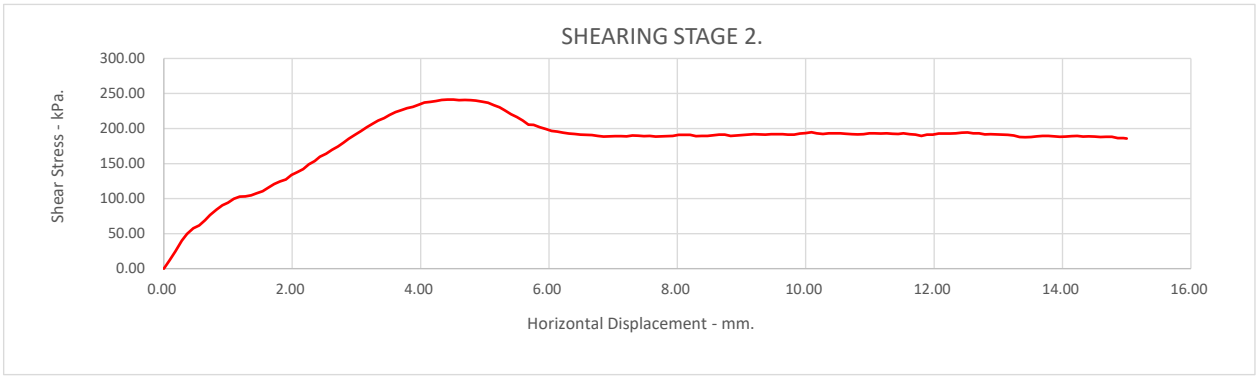
LS7347

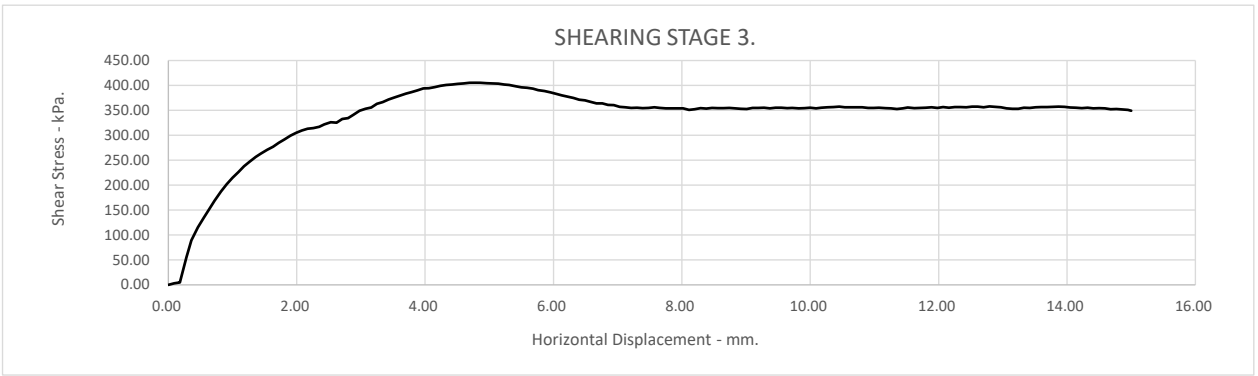
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES

90 Carmoor Road, Manchester, M13 0FB

Borehole Number:	BH004	Depth from (m):	14.00
Sample Number :		Depth to (m):	

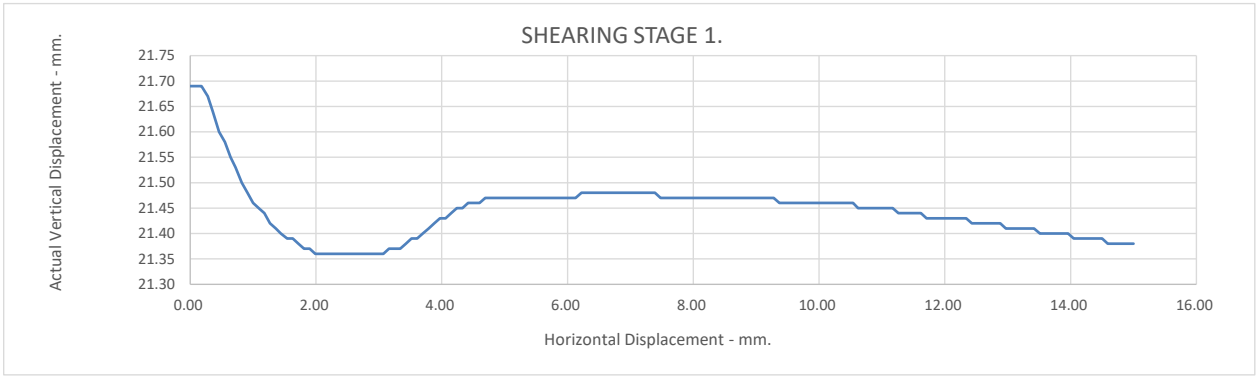


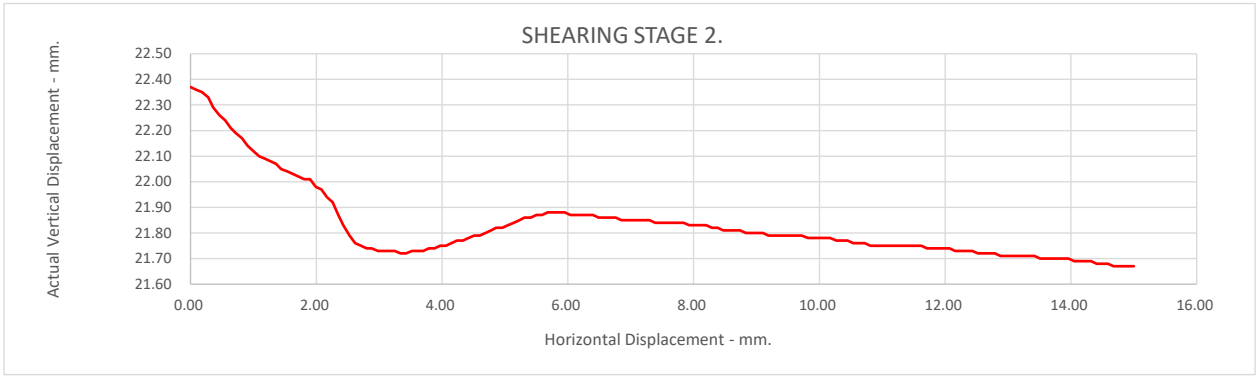


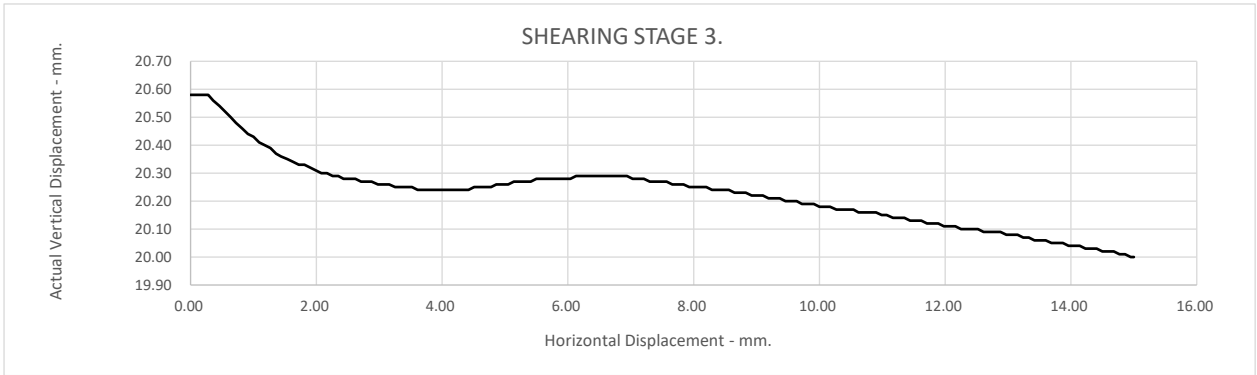


Borehole Number: BH004
Sample Number :

Depth from (m): 14.00
Depth to (m):

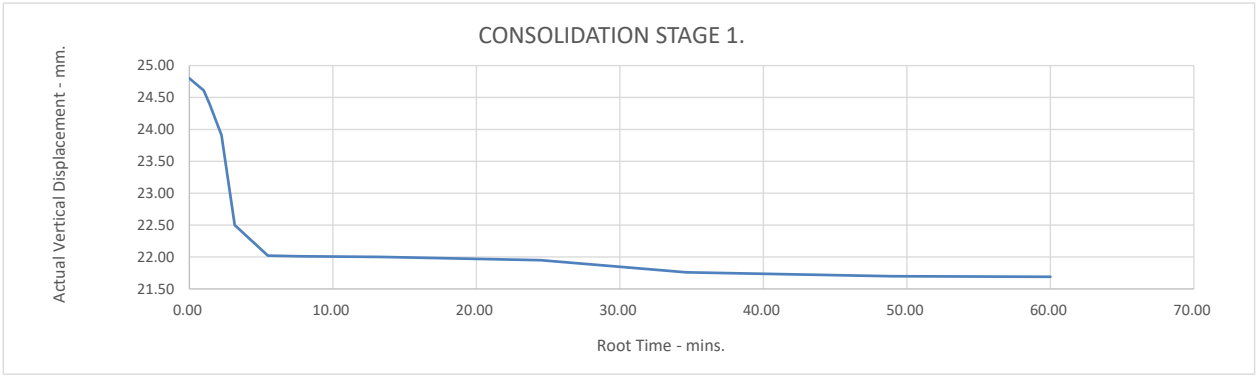


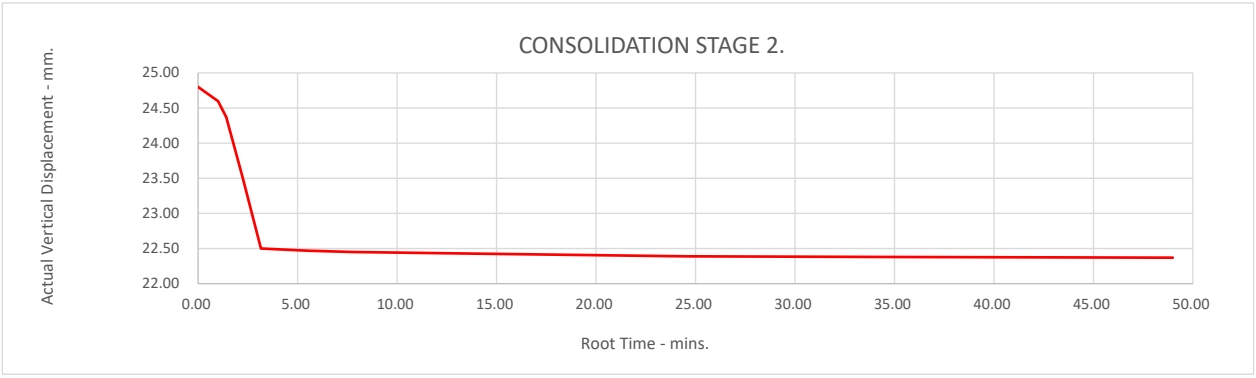


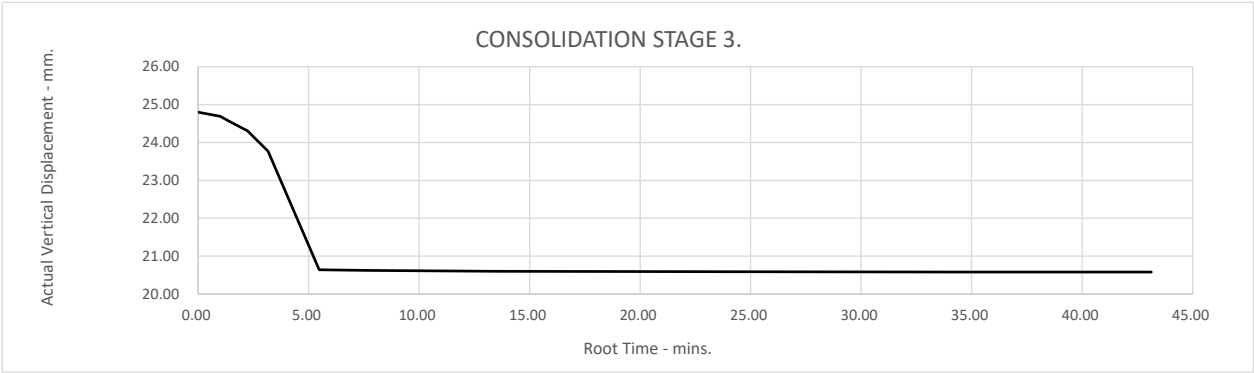


Borehole Number: BH004
Sample Number :

Depth from (m): 14.00
Depth to (m):







Test Report: MS DIRECT SHEARBOX TEST.BS1377:Part 7:4.5 :1990.

Borehole Number:	BH005	Depth from (m):	11.00
Sample Number :		Depth to (m):	

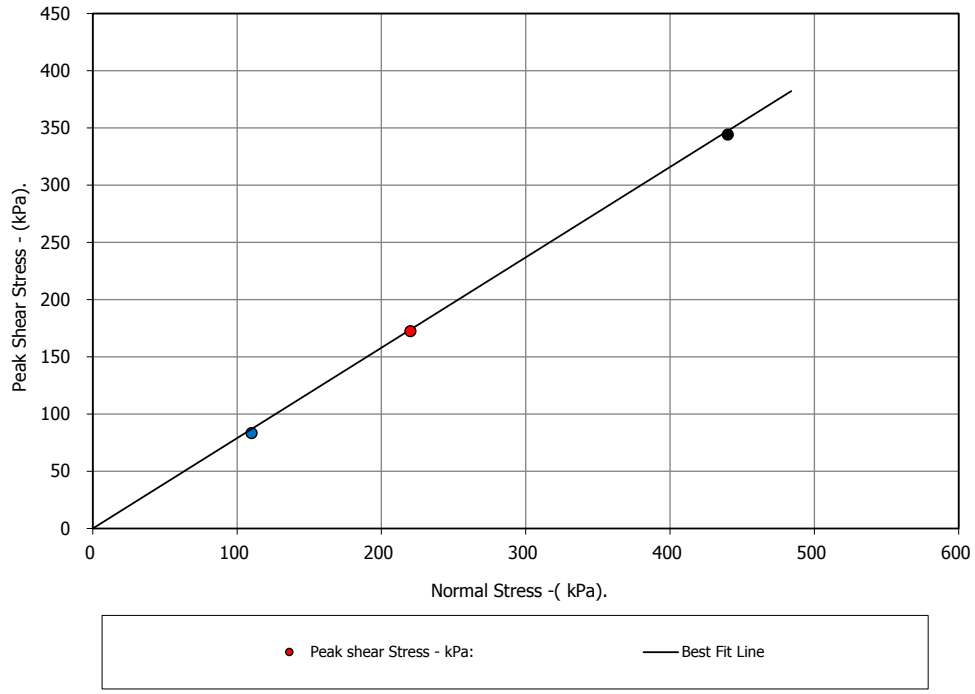
Sample Type:	B
Particle Density - Mg/m3:	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded (Light Tamping) Material above 2mm removed.

Sample Description:
Brown SAND

STAGE	**1**	**2**	**3**
Initial Conditions			
Height - mm:	24.80	24.80	24.80
Length - mm:	60.00	60.00	60.00
Moisture Content - %:	23	23	23
Bulk Density - Mg/m3:	1.97	1.97	1.97
Dry Density - Mg/m3:	1.61	1.61	1.61
Voids Ratio:	0.6459	0.6477	0.6446
Degree of Saturation - %:	92.55	92.30	92.74
Normal Pressure- kPa	110	220	440
Consolidation			
Consolidated Height - mm:	22.38	22.26	21.31
Shear			
Rate of Horizontal Displacement (mm/min)	0.500	0.500	0.500
Horizontal Displacement at Peak Shear Stress (mm)	5.05	4.69	5.59
Peak shear Stress - kPa:	83	172	344

PEAK	
Angle of Shearing Resistance:(~~θ~~)	**38.5**
Effective Cohesion - kPa:	**0.0**

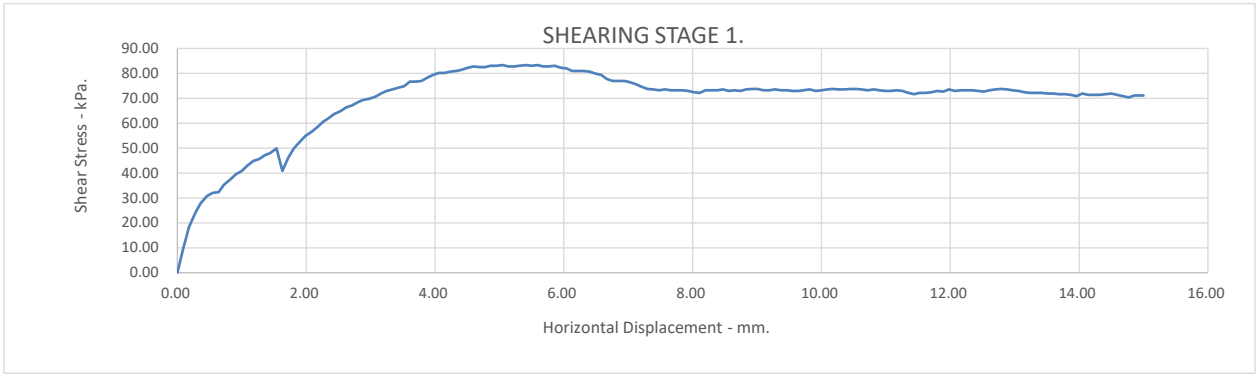
FAILURE CONDITIONS

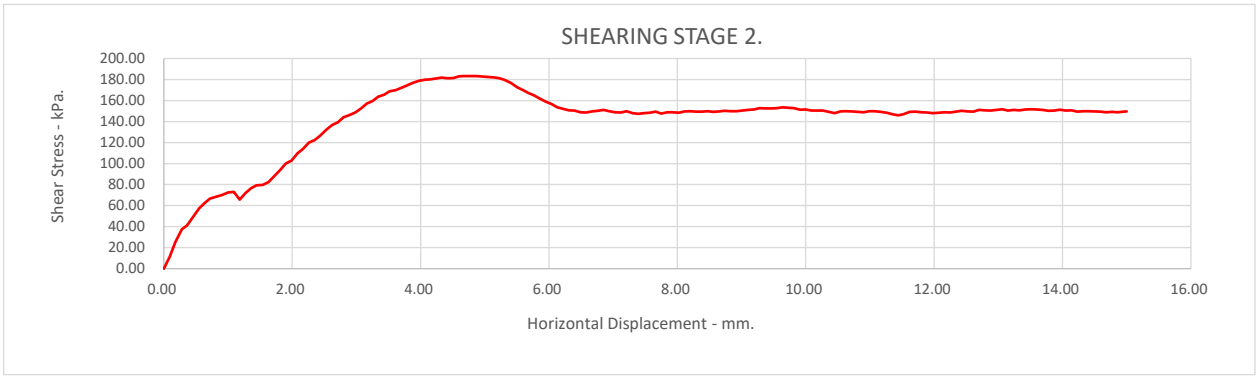


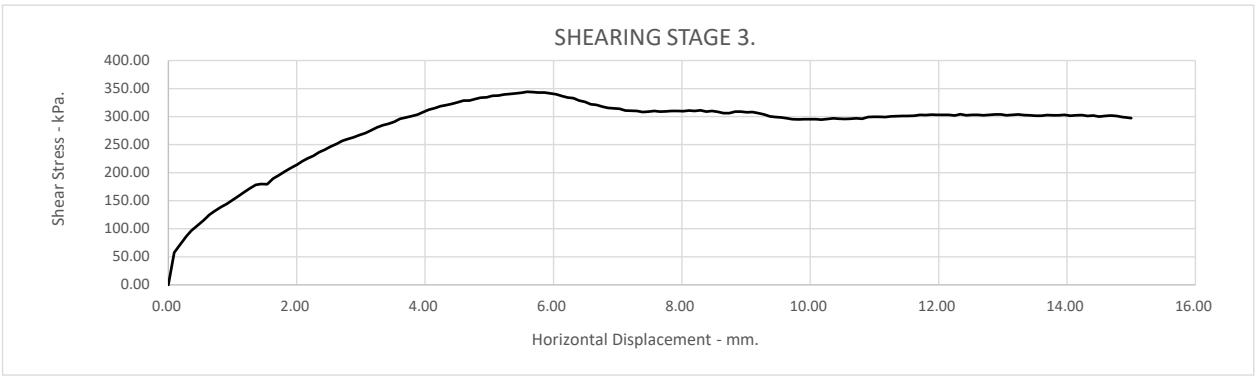
UKAS TESTING
2788

Borehole Number: BH005
Sample Number :

Depth from (m): 11.00
Depth to (m):







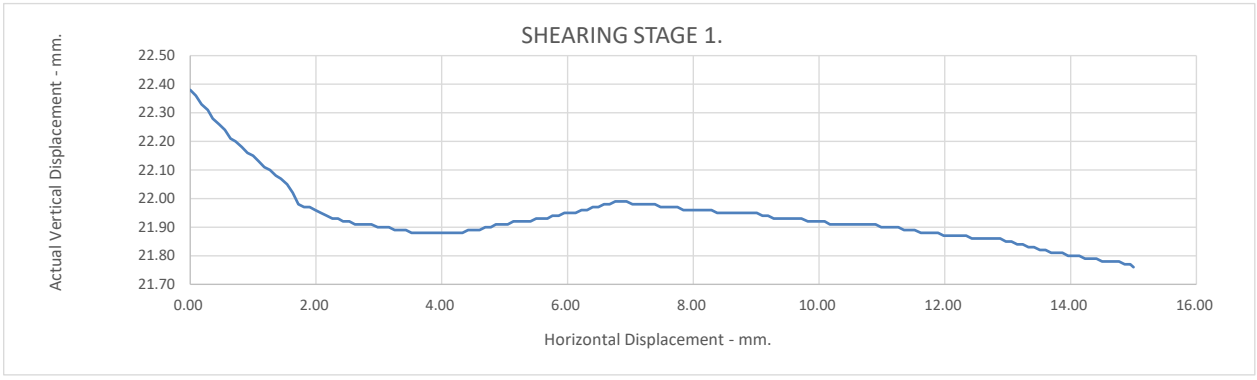
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

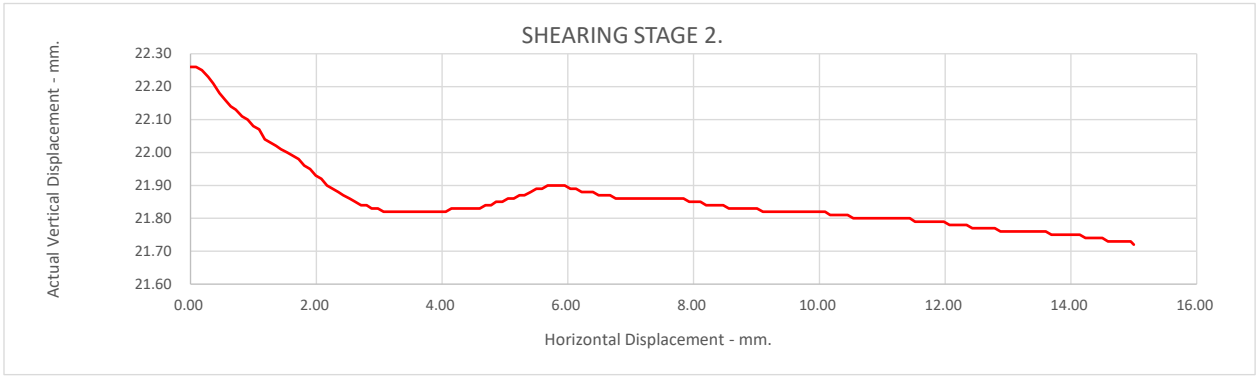
90 Carmoor Road, Manchester, M13 0FB

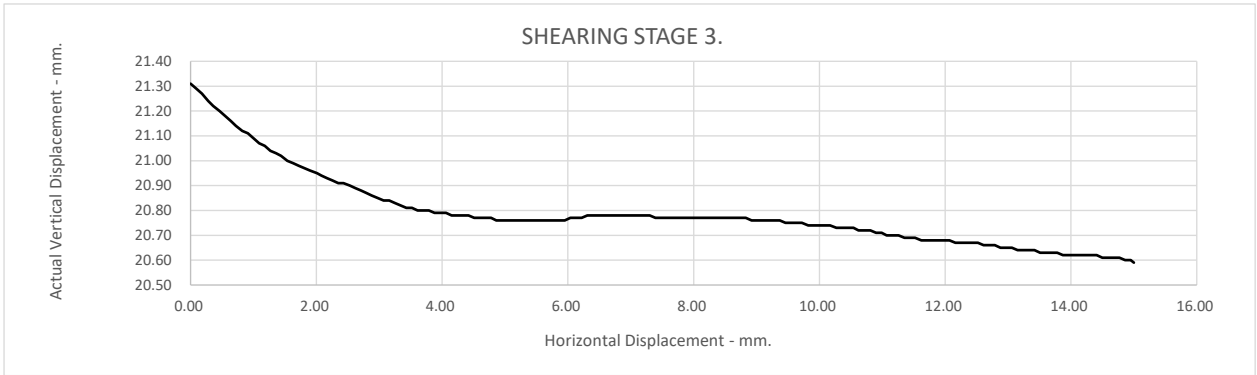
Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number: BH005
Sample Number :

Depth from (m): 11.00
Depth to (m):







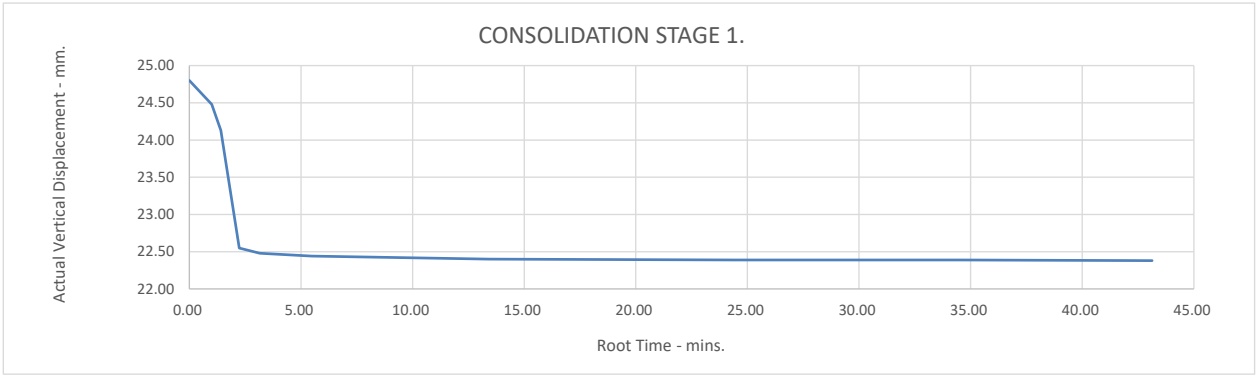
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

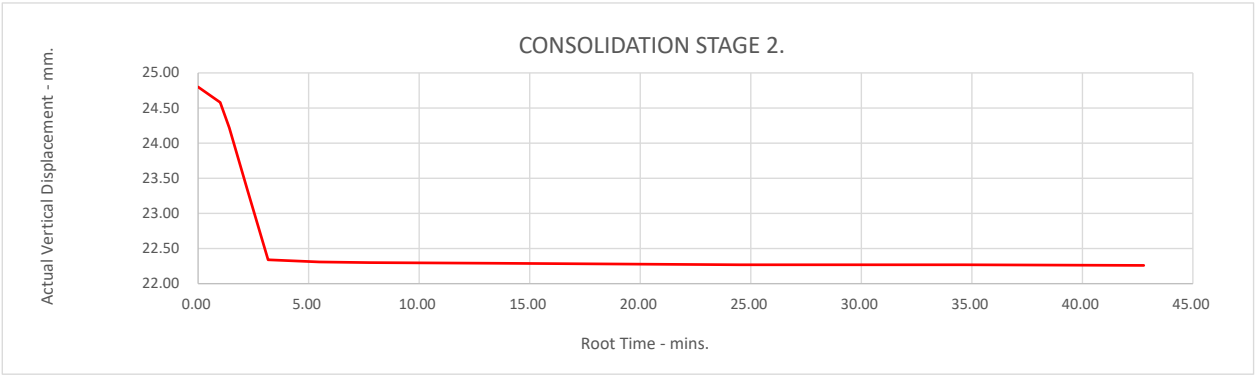
90 Carmoor Road, Manchester, M13 0FB

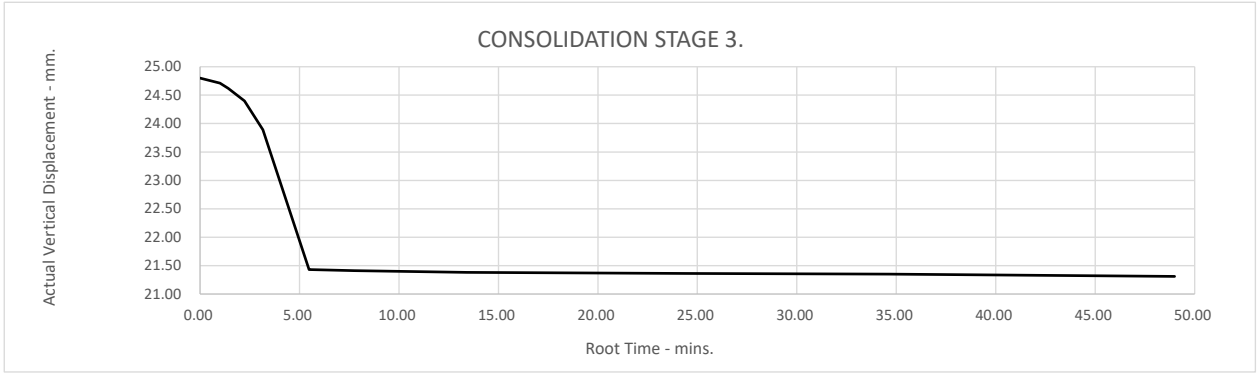
Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number: BH005
Sample Number :

Depth from (m): 11.00
Depth to (m):







GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

90 Carmoor Road, Manchester, M13 0FB

Contract No.:
71227
Client Ref Number:
LS7347

Test Report: MS DIRECT SHEARBOX TEST.BS1377:Part 7:4.5 :1990.

Borehole Number:	BH005	Depth from (m):	18.00
Sample Number :		Depth to (m):	

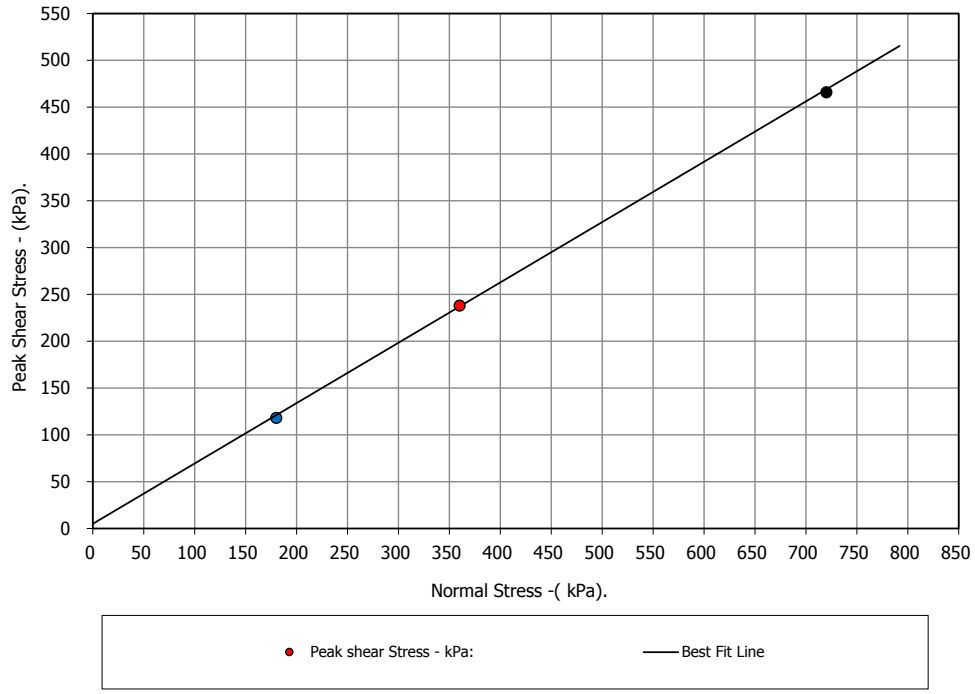
Sample Type:	B
Particle Density - Mg/m3:	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded (Light Tamping) Material above 2mm removed.

Sample Description:
Brown SAND

STAGE	**1**	**2**	**3**
Initial Conditions			
Height - mm:	24.80	24.80	24.80
Length - mm:	60.00	60.00	60.00
Moisture Content - %:	16	16	16
Bulk Density - Mg/m3:	1.83	1.83	1.83
Dry Density - Mg/m3:	1.58	1.58	1.58
Voids Ratio:	0.6791	0.6756	0.6802
Degree of Saturation - %:	62.12	62.45	62.02
Normal Pressure- kPa	180	360	720
Consolidation			
Consolidated Height - mm:	22.29	21.06	21.15
Shear			
Rate of Horizontal Displacement (mm/min)	0.500	0.500	0.500
Horizontal Displacement at Peak Shear Stress (mm)	7.20	5.86	7.56
Peak shear Stress - kPa:	118	238	466

PEAK	
Angle of Shearing Resistance:(~~θ~~)	**33.0**
Effective Cohesion - kPa:	**5.0**

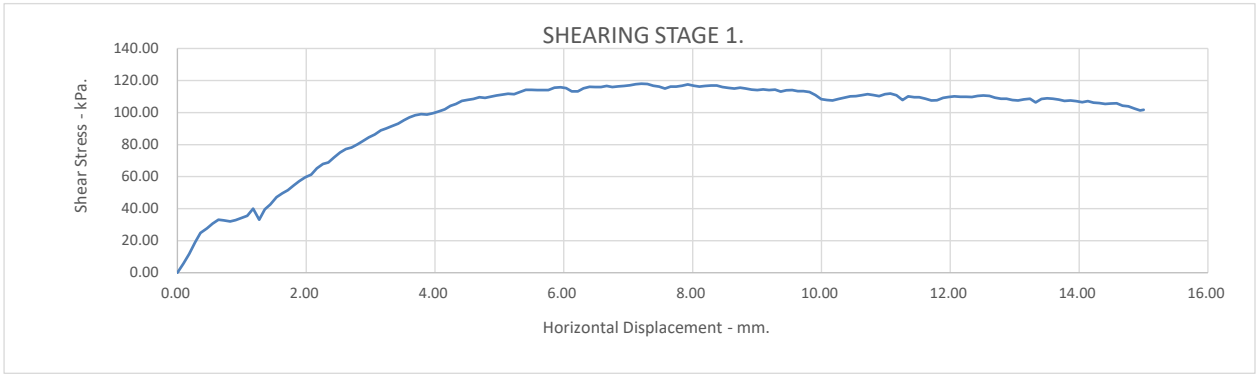
FAILURE CONDITIONS

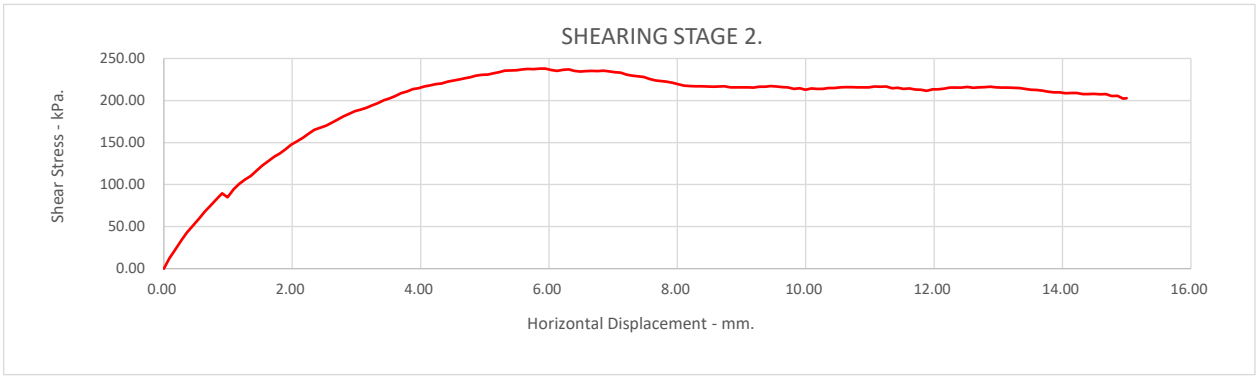


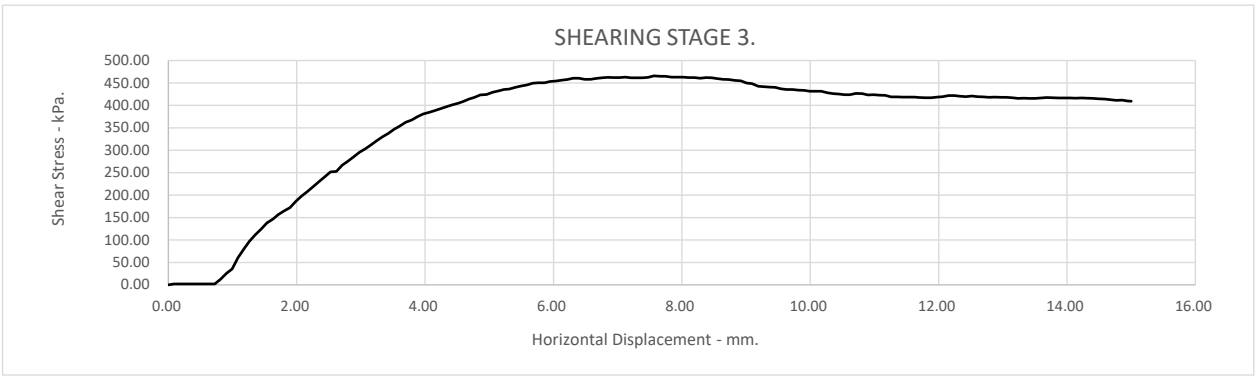
UKAS TESTING
2788

Borehole Number: BH005
Sample Number :

Depth from (m): 18.00
Depth to (m):







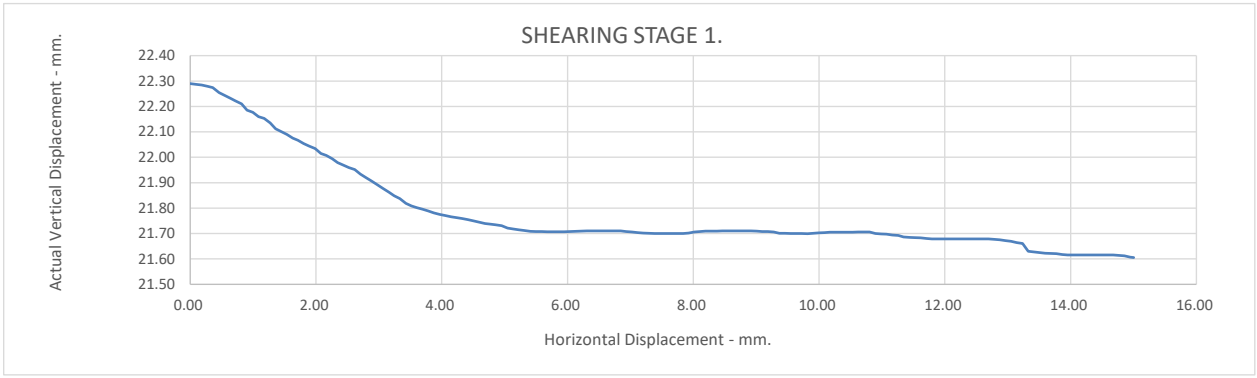
GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

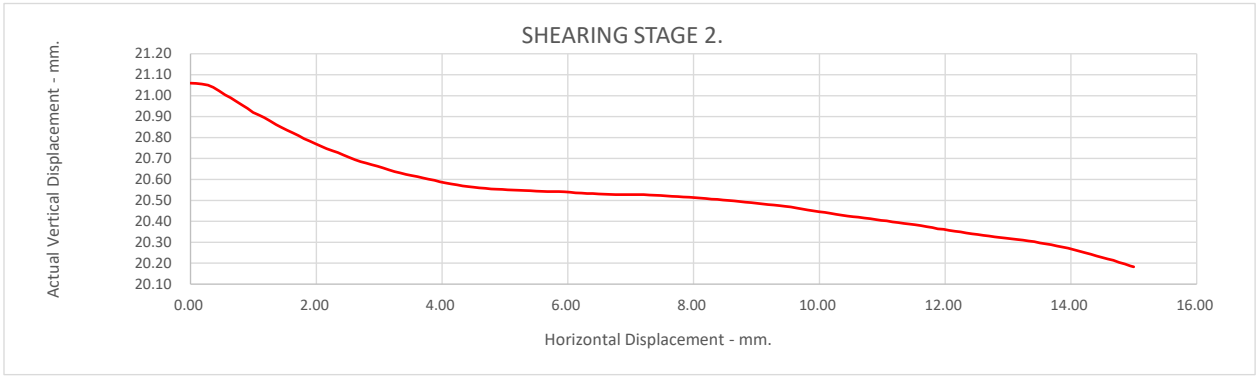
90 Carmoor Road, Manchester, M13 0FB

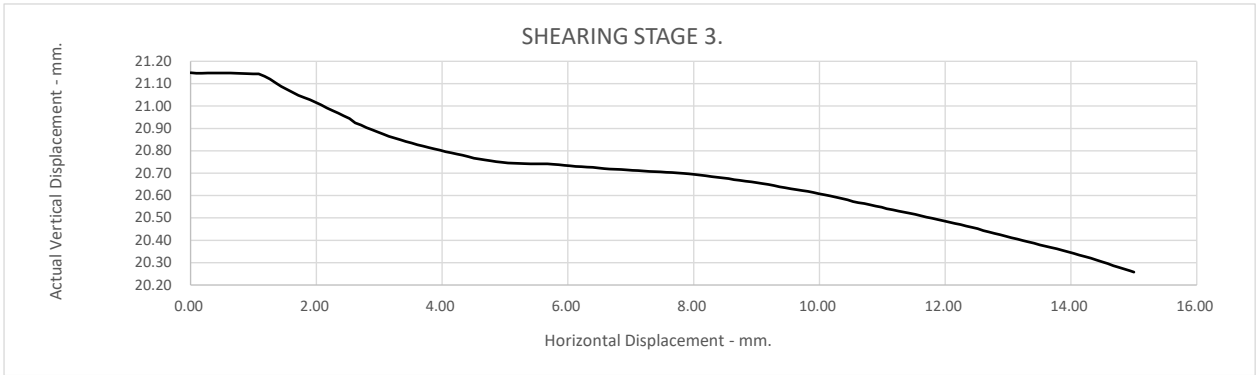
Contract No.:
71227
Client Ref Number:
LS7347

Borehole Number: BH005
Sample Number :

Depth from (m): 18.00
Depth to (m):

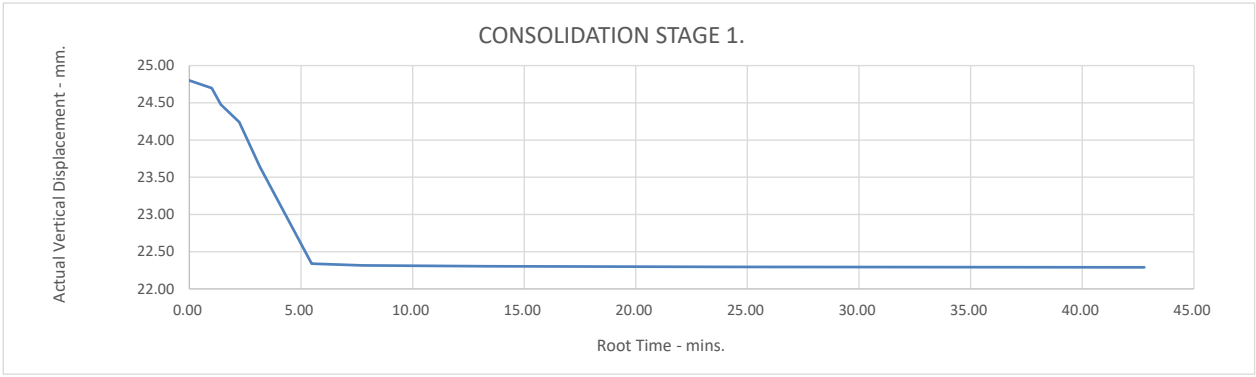


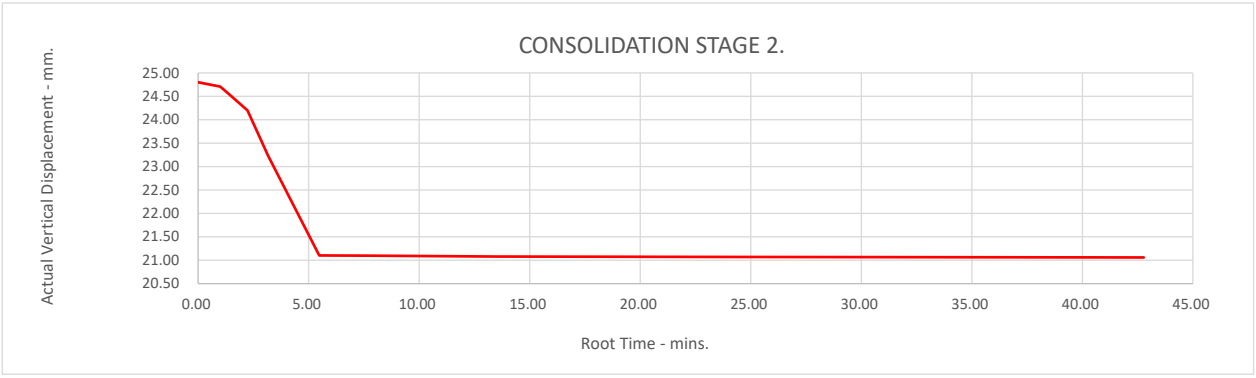


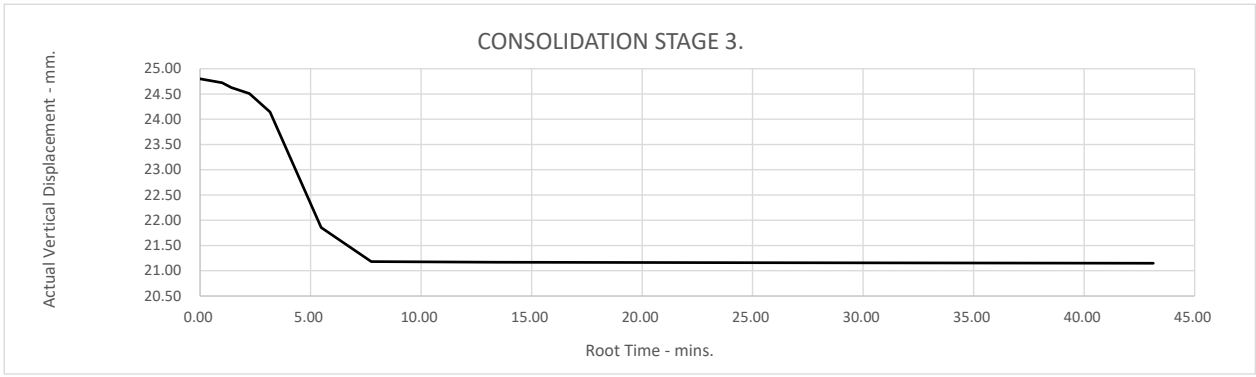


Borehole Number: BH005
Sample Number :

Depth from (m): 18.00
Depth to (m):







GSTL	Point Load Test The complete ISRM suggested methods for rock characterization, testing and monitoring 1974-2006 Determining Point Load Strength
Contract Number	71227
Project Name	90 Carmoor Road, Manchester, M13 0FB
Sample Type	Core
Date Tested	28/02/2024
	*Please note that GSTL is not accredited for the water content of rock

Hole Reference	Depth (m)			Sample No	Test Type		Width	Platen Seperation	Failure Load	Equivalent Diameter	Point Load	Size Factor	Point Load Index	Moisture Content	Description	Angle Between Plane of Anisotropy & Core Axis	Type of Anisotropy (Bedding or Cleavage)
					d / a / b / i	I //											
BH004	19.50	-			I		78	28	0.09	52.73	0.03	1.02	0.03	12.1	MUDSTONE		
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Key	Reported As
Width	(W) mm
Platen Separation	(D) mm
Failure Load	(P) kN
Equivalent Diameter	(De) mm
Point Load	(Is) MPa
Size Factor	(F)
Point Load Index	(Is(50)) MPa
Moisture Content	%
Description	SC

Operator
Julian Jones

UKAS TESTING 2788

APPENDIX F

4041

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WD18 8YS

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Analytical Report Number : 24-005638

Project / Site name:	90 Carmoor Road Manchester	**Samples received on:**	27/02/2024
Your job number:	LS7347	**Samples instructed on/ Analysis started on:**	27/02/2024
Your order number:		**Analysis completed by:**	04/03/2024
Report Issue Number:	1	**Report issued on:**	07/03/2024
Samples Analysed:	1 water sample		

Signed [redacted]

Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

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Analytical Report Number: 24-005638
Project / Site name: 90 Carmoor Road Manchester

Lab Sample Number				129040
Sample Reference				BH003
Sample Number				22/02/24
Depth (m)				4.40
Date Sampled				22/02/2024
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	7.4
Total Cyanide	µg/l	10	ISO 17025	< 10
Sulphate as SO4	µg/l	45	ISO 17025	32300
Sulphide	µg/l	5	NONE	6.1
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	3.52
Total Phenols				
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01
Coronene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16
Total WAC-17 PAHs	µg/l	0.17	NONE	< 0.17

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UKAS TESTING
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Analytical i2 Environmental Science

Analytical Report Number: 24-005638
Project / Site name: 90 Carmoor Road Manchester

Lab Sample Number				129040
Sample Reference				BH003
Sample Number				22/02/24
Depth (m)				4.40
Date Sampled				22/02/2024
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.51
Barium (dissolved)	µg/l	0.06	ISO 17025	51
Beryllium (dissolved)	µg/l	0.1	ISO 17025	< 0.1
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	3.2
Lead (dissolved)	µg/l	0.2	ISO 17025	0.6
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.4
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6
Vanadium (dissolved)	µg/l	0.2	ISO 17025	1.4
Zinc (dissolved)	µg/l	0.5	ISO 17025	3
Boron (dissolved)	µg/l	10	ISO 17025	56
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Petroleum Hydrocarbons				
TPH - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	9.2#
TPH - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH - Aliphatic >C10 - C12 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aliphatic >C12 - C16 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aliphatic >C16 - C21 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aliphatic >C21 - C35 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aliphatic >C5 - C35 HS+EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aromatic >EC5 - EC7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH - Aromatic >EC7 - EC8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH - Aromatic >EC8 - EC10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH - Aromatic >EC10 - EC12 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aromatic >EC12 - EC16 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aromatic >EC16 - EC21 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aromatic >EC21 - EC35 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
TPH - Aromatic >EC5 - EC35 HS+EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10
VOCs				
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 24-005638
Project / Site name: 90 Carmoor Road Manchester

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029	W	NONE
Total organic carbon in water	Determination of total organic carbon in water by TOC/DOC NDIR analyser.Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices: SW, GW, PW, PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total petroleum hydrocarbons with carbon banding by GC-MS in water	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L070B	W	NONE
BTEX and/or Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW	L080	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	ISO 17025
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	ISO 17025
Total petroleum hydrocarbons by GC-MS HS in water	Determination of total petroleum hydrocarbons in water by GC-MS HS	In-house method	L088	W	ISO 17025
pH at 20°C in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method	L099	W	ISO 17025
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAH) in leachate by extraction in dichloromethane followed by GC-MS	In-house method based on USEPA 8270	L102B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised

Sample Deviation Report

Analytical Report Number : 24-005638
Project / Site name: 90 Carmoor Road Manchester

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH003	22/02/24	W	129040	c	pH at 20°C in water (automated)	L099	c

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Analytical Report Number : 24-005779

Project / Site name:	90 Carmoor Road, Manchester, M13 0FB	**Samples received on:**	27/02/2024
Your job number:	LS7347	**Samples instructed on/ Analysis started on:**	27/02/2024
Your order number:		**Analysis completed by:**	05/03/2024
Report Issue Number:	1	**Report issued on:**	07/03/2024
Samples Analysed:	28 soil samples - 15 leachate samples		

[redacted]

Signed:

Joanna Szwagrzak
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129594	129595	129596	129597	129598
Sample Reference				BH001	BH001	BH002	BH002	BH003
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	3.00	1.20	5.20	1.20
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	17	15	10	21
Total mass of sample received	kg	0.1	NONE	1	1.2	0.8	1.3	0.9
General Inorganics								
pH (L005B)	pH Units	N/A	MCERTS	8.1	-	8.2	-	8.1
pH (L099)	pH Units	N/A	MCERTS	-	8.6	-	8.6	-
Total Sulphate as SO4	%	0.005	MCERTS	-	0.03	-	0.031	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	100	-	100	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.0503	-	0.0515	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	50.3	-	51.5	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	4.5	-	3.3	-
Total Sulphur	mg/kg	50	MCERTS	-	160	-	520	-
Total Sulphur	%	0.005	MCERTS	-	0.016	-	0.052	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	< 0.5	-	< 0.5	-
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.6	-	0.6	-	1.1
Loss on Ignition @ 450oC	%	0.2	MCERTS	2.9	-	3.7	-	5.5
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	< 2.0	-	< 2.0	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-	< 2.0	-
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	4.6	-	3.3	-	22
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.07	-	< 0.05	-	0.5
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	0.88
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	0.73
Phenanthrene	mg/kg	0.05	MCERTS	0.16	-	< 0.05	-	6.7
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	1.8
Fluoranthene	mg/kg	0.05	MCERTS	0.2	-	< 0.05	-	11
Pyrene	mg/kg	0.05	MCERTS	0.2	-	< 0.05	-	10
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.1	-	< 0.05	-	5.4
Chrysene	mg/kg	0.05	MCERTS	0.13	-	< 0.05	-	5.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.12	-	< 0.05	-	5.8
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	-	< 0.05	-	2.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.1	-	< 0.05	-	5.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.05	-	< 0.05	-	2.5
Dibenzo(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	0.67
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.08	-	< 0.05	-	2.9
Coronene	mg/kg	0.05	NONE	< 0.05	-	< 0.05	-	< 0.05
Total PAH								
Total WAC-17 PAHs	mg/kg	0.85	NONE	1.21	-	< 0.85	-	61.2
Heavy Metals / Metalloids								
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	16	-	13	-
Magnesium (water soluble)	mg/kg	5	NONE	-	31	-	25	-

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129594	129595	129596	129597	129598
Sample Reference				BH001	BH001	BH002	BH002	BH003
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	3.00	1.20	5.20	1.20
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	-	-	-	-	-
Mineral Oil (C10 - C40) EH_CU_1D_AL_#1_#2	mg/kg	10	NONE	15	-	< 10	-	180
VOCs								
Benzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	-	6.8	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	12	-	< 5.0	-	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Total BTEX	µg/kg	5	MCERTS	12	-	6.8	-	< 5.0
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
Total PCBs	mg/kg	0.007	MCERTS	< 0.007	-	< 0.007	-	< 0.007

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129599	129600	129601	129602	129603
Sample Reference				BH003	BH004	BH004	BH005	BH005
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				6.00	1.20	7.00	1.20	4.50
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.6	15	11	28	17
Total mass of sample received	kg	0.1	NONE	1.2	0.8	0.5	0.9	1.8
General Inorganics								
pH (L005B)	pH Units	N/A	MCERTS	-	8.2	-	7.8	-
pH (L099)	pH Units	N/A	MCERTS	8.5	-	8.6	-	8.4
Total Sulphate as SO4	%	0.005	MCERTS	0.026	-	0.028	-	0.037
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	130	-	94	-	140
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0669	-	0.0471	-	0.0713
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	66.9	-	47.1	-	71.3
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	3.3	-	3	-	8.9
Total Sulphur	mg/kg	50	MCERTS	550	-	210	-	230
Total Sulphur	%	0.005	MCERTS	0.055	-	0.021	-	0.023
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	< 0.5	-	< 0.5	-	0.5
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	0.5	-	1.9	-
Loss on Ignition @ 450oC	%	0.2	MCERTS	-	3.6	-	7.1	-
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	< 2.0	-	< 2.0	-	< 2.0
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	-	< 2.0	-	< 2.0
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	-	7	-	7.4	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.11	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.19	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.11	-
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.96	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.2	-
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	1.1	-
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.99	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.49	-
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.53	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	< 0.05	-	0.57	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	< 0.05	-	0.2	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.47	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.23	-
Dibenzo(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.08	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.28	-
Coronene	mg/kg	0.05	NONE	-	< 0.05	-	< 0.05	-
Total PAH								
Total WAC-17 PAHs	mg/kg	0.85	NONE	-	< 0.85	-	6.55	-
Heavy Metals / Metalloids								
Magnesium (leachate equivalent)	mg/l	2.5	NONE	14	-	16	-	18
Magnesium (water soluble)	mg/kg	5	NONE	28	-	32	-	36

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129599	129600	129601	129602	129603
Sample Reference				BH003	BH004	BH004	BH005	BH005
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				6.00	1.20	7.00	1.20	4.50
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	-	-	-	-	-
Mineral Oil (C10 - C40) EH_CU_1D_AL_#1_#2	mg/kg	10	NONE	-	< 10	-	< 10	-
VOCs								
Benzene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Toluene	µg/kg	5	MCERTS	-	6.9	-	< 5.0	-
Ethylbenzene	µg/kg	5	MCERTS	-	12	-	< 5.0	-
p & m-Xylene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
o-Xylene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Total BTEX	µg/kg	5	MCERTS	-	19	-	< 5.0	-
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
PCB Congener 52	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
PCB Congener 101	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
PCB Congener 118	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
PCB Congener 138	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
PCB Congener 153	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
PCB Congener 180	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
Total PCBs	mg/kg	0.007	MCERTS	-	< 0.007	-	< 0.007	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129604	129605	129606	129607	129608
Sample Reference				TP001	TP001	TP001	TP002	TP002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.60	1.00	0.50	0.60
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	48.3	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	19	19	20	20
Total mass of sample received	kg	0.1	NONE	0.6	0.9	0.8	0.7	0.9
General Inorganics								
pH (L005B)	pH Units	N/A	MCERTS	7.6	-	7.9	8.1	-
pH (L099)	pH Units	N/A	MCERTS	-	-	-	-	-
Total Sulphate as SO4	%	0.005	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Sulphur	%	0.005	MCERTS	-	-	-	-	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	-	-	-	-
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	-	0.4	1.5	-
Loss on Ignition @ 450oC	%	0.2	MCERTS	5.7	-	3.9	5.6	-
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	-
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	2.1	-	5.1	3.3	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.07	-	< 0.05	0.22	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	0.11	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	0.71	-
Fluorene	mg/kg	0.05	MCERTS	0.18	-	< 0.05	0.64	-
Phenanthrene	mg/kg	0.05	MCERTS	0.52	-	< 0.05	6.1	-
Anthracene	mg/kg	0.05	MCERTS	0.06	-	< 0.05	1.2	-
Fluoranthene	mg/kg	0.05	MCERTS	0.5	-	< 0.05	8.9	-
Pyrene	mg/kg	0.05	MCERTS	0.52	-	< 0.05	9	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.23	-	< 0.05	4.2	-
Chrysene	mg/kg	0.05	MCERTS	0.26	-	< 0.05	4.3	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.28	-	< 0.05	4.7	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.09	-	< 0.05	1.6	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.2	-	< 0.05	4.2	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.11	-	< 0.05	1.9	-
Dibenzo(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	0.5	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.15	-	< 0.05	2.4	-
Coronene	mg/kg	0.05	NONE	< 0.05	-	< 0.05	< 0.05	-
Total PAH								
Total WAC-17 PAHs	mg/kg	0.85	NONE	3.17	-	< 0.85	50.6	-
Heavy Metals / Metalloids								
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	-

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129604	129605	129606	129607	129608
Sample Reference				TP001	TP001	TP001	TP002	TP002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.60	1.00	0.50	0.60
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	-	180	< 10	-	17
Mineral Oil (C10 - C40) EH_CU_1D_AL_#1_#2	mg/kg	10	NONE	600	-	< 10	43	-
VOCs								
Benzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	< 5.0	-
Toluene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	< 5.0	-
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	12	< 5.0	-
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	< 5.0	-
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	< 5.0	-
Total BTEX	µg/kg	5	MCERTS	< 5.0	-	12	< 5.0	-
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
Total PCBs	mg/kg	0.007	MCERTS	< 0.007	-	< 0.007	< 0.007	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129609	129610	129611	129612	129613
Sample Reference				TP002	WS001	WS001	WS002	WS002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	0.60	1.20	0.50	0.60
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	20	20	20	21	20
Total mass of sample received	kg	0.1	NONE	1	1.1	0.9	0.5	0.9
General Inorganics								
pH (L005B)	pH Units	N/A	MCERTS	7.7	7.8	8.3	6.6	-
pH (L099)	pH Units	N/A	MCERTS	-	-	-	-	-
Total Sulphate as SO4	%	0.005	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Sulphur	%	0.005	MCERTS	-	-	-	-	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	-	-	-	-
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.4	1.8	0.7	1.7	-
Loss on Ignition @ 450oC	%	0.2	MCERTS	3	5.2	2.6	6.1	-
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	-
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	2.9	5	12	-3.6	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.47	0.06	0.15	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.44	< 0.05	0.1	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	1.1	< 0.05	0.2	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	1.1	< 0.05	0.28	-
Phenanthrene	mg/kg	0.05	MCERTS	0.08	11	0.22	1.8	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	2.3	< 0.05	0.35	-
Fluoranthene	mg/kg	0.05	MCERTS	0.09	18	0.25	2.2	-
Pyrene	mg/kg	0.05	MCERTS	0.08	18	0.28	2.4	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	8.2	0.14	1.2	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	8.2	0.2	1.2	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	9.5	0.19	1.3	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	3	0.09	0.42	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	7.8	0.19	1.2	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	3.7	0.1	0.53	-
Dibenzo(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.99	< 0.05	0.15	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	4.6	0.15	0.65	-
Coronene	mg/kg	0.05	NONE	< 0.05	1.6	< 0.05	< 0.05	-
Total PAH								
Total WAC-17 PAHs	mg/kg	0.85	NONE	< 0.85	99.4	1.87	14	-
Heavy Metals / Metalloids								
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	-

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129609	129610	129611	129612	129613
Sample Reference				TP002	WS001	WS001	WS002	WS002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	0.60	1.20	0.50	0.60
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	< 10	110	-	-	960
Mineral Oil (C10 - C40) EH_CU_1D_AL_#1_#2	mg/kg	10	NONE	< 10	12	< 10	71	-
VOCs								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	5.3	-
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	7.2	-
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	12	< 5.0	< 5.0	-
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	-
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	23	-
Total BTEX	µg/kg	5	MCERTS	< 5.0	12	< 5.0	35	-
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	-
Total PCBs	mg/kg	0.007	MCERTS	< 0.007	< 0.007	< 0.007	< 0.007	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129614	129615	129616	129617	129618
Sample Reference				WS002	WS002	WS002	WS002	WS003
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	1.70	2.20	2.70	0.30
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	16	17	11	24
Total mass of sample received	kg	0.1	NONE	1.1	1	1.1	0.9	1.2
General Inorganics								
pH (L005B)	pH Units	N/A	MCERTS	8.1	-	-	-	-
pH (L099)	pH Units	N/A	MCERTS	-	-	-	-	-
Total Sulphate as SO4	%	0.005	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-	-
Total Sulphur	%	0.005	MCERTS	-	-	-	-	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	-	-	-	-
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.8	-	-	-	-
Loss on Ignition @ 450oC	%	0.2	MCERTS	2.5	-	-	-	-
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	-
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	5.9	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Dibenzo(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Coronene	mg/kg	0.05	NONE	< 0.05	-	-	-	-
Total PAH								
Total WAC-17 PAHs	mg/kg	0.85	NONE	< 0.85	-	-	-	-
Heavy Metals / Metalloids								
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	-

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129614	129615	129616	129617	129618
Sample Reference				WS002	WS002	WS002	WS002	WS003
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	1.70	2.20	2.70	0.30
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	-	< 10	410	< 10	670
Mineral Oil (C10 - C40) EH_CU_1D_AL_#1_#2	mg/kg	10	NONE	25	-	-	-	-
VOCs								
Benzene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
Toluene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
Total BTEX	µg/kg	5	MCERTS	< 5.0	-	-	-	-
PCBs by GC-MS								
PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	-	-	-	-
Total PCBs	mg/kg	0.007	MCERTS	< 0.007	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129619	129620	129621
Sample Reference				WS003	WS004	WS004
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.40
Date Sampled				02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	25	18	20
Total mass of sample received	kg	0.1	NONE	0.6	0.9	0.9
General Inorganics						
pH (L005B)	pH Units	N/A	MCERTS	6.7	-	7.8
pH (L099)	pH Units	N/A	MCERTS	-	-	-
Total Sulphate as SO4	%	0.005	MCERTS	-	-	-
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-
Total Sulphur	%	0.005	MCERTS	-	-	-
Ammoniacal Nitrogen as NH4	mg/kg	0.5	MCERTS	-	-	-
Ammonium as NH4 (10:1 leachate equivalent)	mg/l	0.05	MCERTS	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.8	-	2.8
Loss on Ignition @ 450oC	%	0.2	MCERTS	8.7	-	7.6
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-
Acid Neutralisation Capacity	+/- mmol/kg	-9999	NONE	-1.7	-	8.3
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	3.7	-	4.6
Acenaphthylene	mg/kg	0.05	MCERTS	11	-	3.5
Acenaphthene	mg/kg	0.05	MCERTS	8.1	-	6.4
Fluorene	mg/kg	0.05	MCERTS	22	-	9.2
Phenanthrene	mg/kg	0.05	MCERTS	180	-	66
Anthracene	mg/kg	0.05	MCERTS	43	-	16
Fluoranthene	mg/kg	0.05	MCERTS	240	-	82
Pyrene	mg/kg	0.05	MCERTS	220	-	78
Benzo(a)anthracene	mg/kg	0.05	MCERTS	88	-	37
Chrysene	mg/kg	0.05	MCERTS	85	-	33
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	92	-	37
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	30	-	14
Benzo(a)pyrene	mg/kg	0.05	MCERTS	85	-	35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	41	-	17
Dibenzo(a,h)anthracene	mg/kg	0.05	MCERTS	11	-	4.7
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	49	-	20
Coronene	mg/kg	0.05	NONE	14	-	5.5
Total PAH						
Total WAC-17 PAHs	mg/kg	0.85	NONE	1230	-	467
Heavy Metals / Metalloids						
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129619	129620	129621
Sample Reference				WS003	WS004	WS004
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.30	0.40
Date Sampled				02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Petroleum Hydrocarbons						
TPH (C10 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	-	52	-
Mineral Oil (C10 - C40) EH_CU_1D_AL_#1_#2	mg/kg	10	NONE	12	-	19
VOCs						
Benzene	µg/kg	5	MCERTS	5.5	-	< 5.0
Toluene	µg/kg	5	MCERTS	7.5	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	13	-	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0
Total BTEX	µg/kg	5	MCERTS	26	-	< 5.0
PCBs by GC-MS						
PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001
Total PCBs	mg/kg	0.007	MCERTS	< 0.007	-	< 0.007

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129594	129596	129598	129600	129602
Sample Reference				BH001	BH002	BH003	BH004	BH005
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	1.20	1.20	1.20	1.20
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
10:1 WAC Leachate								
Arsenic	mg/l	0.001	ISO 17025	< 0.00100	< 0.00100	< 0.00100	< 0.00100	0.00114
Barium	mg/l	0.00005	ISO 17025	0.0182	0.00814	0.0253	0.0232	0.0167
Cadmium	mg/l	0.0001	ISO 17025	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100
Chromium	mg/l	0.0004	ISO 17025	< 0.00040	< 0.00040	0.00047	0.0032	0.00049
Copper	mg/l	0.0007	ISO 17025	0.0032	0.0025	0.0099	0.0051	0.0094
Mercury	mg/l	0.0005	ISO 17025	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Molybdenum	mg/l	0.0004	ISO 17025	0.00581	0.00127	0.0164	0.00169	0.019
Nickel	mg/l	0.0003	ISO 17025	0.00048	0.00056	0.0006	0.0024	0.00063
Lead	mg/l	0.001	ISO 17025	0.0015	< 0.0010	< 0.0010	0.0014	< 0.0010
Antimony	mg/l	0.0017	ISO 17025	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017
Selenium	mg/l	0.004	ISO 17025	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Zinc	mg/l	0.0004	ISO 17025	0.0037	0.0023	0.0045	0.0061	0.0029
Chloride	mg/l	0.15	ISO 17025	1.3	0.56	0.75	0.98	1.1
Fluoride	mg/l	0.05	ISO 17025	0.65	0.85	0.57	0.65	0.72
Sulphate	mg/l	0.045	ISO 17025	5.9	1.9	12	1.3	16
Total dissolved solids	mg/l	6	ISO 17025	58	50	66	50	76
Total monohydric phenols	mg/l	0.01	ISO 17025	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dissolved organic carbon	mg/l	0.1	NONE	5.18	5.88	8.32	5.46	11.8

10:1 WAC Leachate

Arsenic	mg/kg	0.01	NONE	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.0114
Barium	mg/kg	0.0005	NONE	0.182	0.0814	0.253	0.232	0.167
Cadmium	mg/kg	0.001	NONE	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Chromium	mg/kg	0.004	NONE	< 0.0040	< 0.0040	0.0047	0.032	0.0049
Copper	mg/kg	0.007	NONE	0.032	0.025	0.099	0.051	0.094
Mercury	mg/kg	0.005	NONE	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Molybdenum	mg/kg	0.004	NONE	0.0581	0.0127	0.164	0.0169	0.19
Nickel	mg/kg	0.003	NONE	0.0048	0.0056	0.006	0.024	0.0063
Lead	mg/kg	0.01	NONE	0.015	< 0.010	< 0.010	0.014	< 0.010
Antimony	mg/kg	0.017	NONE	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
Selenium	mg/kg	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Zinc	mg/kg	0.004	NONE	0.037	0.023	0.045	0.061	0.029
Chloride	mg/kg	1.5	NONE	13	5.6	7.5	9.8	11
Fluoride	mg/kg	0.5	NONE	6.5	8.5	5.7	6.5	7.2
Sulphate	mg/kg	0.45	NONE	59	19	120	13	160
Total dissolved solids	mg/kg	60	ISO 17025	580	500	660	500	760
Total monohydric phenols	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dissolved organic carbon	mg/kg	1	NONE	51.8	58.8	83.2	54.6	118

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129604	129606	129607	129609	129610
Sample Reference				TP001	TP001	TP002	TP002	WS001
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.00	0.50	0.90	0.60
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
10:1 WAC Leachate								
Arsenic	mg/l	0.001	ISO 17025	0.00133	< 0.00100	< 0.00100	< 0.00100	0.0021
Barium	mg/l	0.00005	ISO 17025	0.0267	0.0144	0.0368	0.00485	0.0246
Cadmium	mg/l	0.0001	ISO 17025	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100
Chromium	mg/l	0.0004	ISO 17025	0.0013	0.00047	< 0.00040	< 0.00040	0.00052
Copper	mg/l	0.0007	ISO 17025	0.015	0.0025	0.011	0.0023	0.0055
Mercury	mg/l	0.0005	ISO 17025	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Molybdenum	mg/l	0.0004	ISO 17025	0.0167	0.000491	0.00892	< 0.000400	0.00554
Nickel	mg/l	0.0003	ISO 17025	0.0023	< 0.00030	0.00065	< 0.00030	0.00041
Lead	mg/l	0.001	ISO 17025	0.0019	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Antimony	mg/l	0.0017	ISO 17025	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017
Selenium	mg/l	0.004	ISO 17025	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Zinc	mg/l	0.0004	ISO 17025	0.013	0.0017	0.0026	0.0014	0.0046
Chloride	mg/l	0.15	ISO 17025	1.4	1.1	2	1.8	1.3
Fluoride	mg/l	0.05	ISO 17025	0.34	0.66	0.81	0.8	0.89
Sulphate	mg/l	0.045	ISO 17025	42	1.7	14	1.7	6.3
Total dissolved solids	mg/l	6	ISO 17025	99	39	69	38	30
Total monohydric phenols	mg/l	0.01	ISO 17025	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dissolved organic carbon	mg/l	0.1	NONE	10.5	7.98	9.92	6.75	15.7

10:1 WAC Leachate

Arsenic	mg/kg	0.01	NONE	0.0133	< 0.0100	< 0.0100	< 0.0100	0.021
Barium	mg/kg	0.0005	NONE	0.267	0.144	0.368	0.0485	0.246
Cadmium	mg/kg	0.001	NONE	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Chromium	mg/kg	0.004	NONE	0.013	0.0047	< 0.0040	< 0.0040	0.0052
Copper	mg/kg	0.007	NONE	0.15	0.025	0.11	0.023	0.055
Mercury	mg/kg	0.005	NONE	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Molybdenum	mg/kg	0.004	NONE	0.167	0.00491	0.0892	< 0.00400	0.0554
Nickel	mg/kg	0.003	NONE	0.023	< 0.0030	0.0065	< 0.0030	0.0041
Lead	mg/kg	0.01	NONE	0.019	< 0.010	< 0.010	< 0.010	< 0.010
Antimony	mg/kg	0.017	NONE	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
Selenium	mg/kg	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Zinc	mg/kg	0.004	NONE	0.13	0.017	0.026	0.014	0.046
Chloride	mg/kg	1.5	NONE	14	11	20	18	13
Fluoride	mg/kg	0.5	NONE	3.4	6.6	8.1	8	8.9
Sulphate	mg/kg	0.45	NONE	420	17	140	17	63
Total dissolved solids	mg/kg	60	ISO 17025	990	390	690	380	300
Total monohydric phenols	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dissolved organic carbon	mg/kg	1	NONE	105	79.8	99.2	67.5	157

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Analytical Report Number: 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Lab Sample Number				129611	129612	129614	129619	129621
Sample Reference				WS001	WS002	WS002	WS003	WS004
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.50	1.20	0.50	0.40
Date Sampled				02/02/2024	02/02/2024	02/02/2024	02/02/2024	02/02/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
10:1 WAC Leachate								
Arsenic	mg/l	0.001	ISO 17025	0.00146	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Barium	mg/l	0.00005	ISO 17025	0.0211	0.0661	0.0148	0.0509	0.0296
Cadmium	mg/l	0.0001	ISO 17025	< 0.000100	< 0.000100	< 0.000100	< 0.000100	< 0.000100
Chromium	mg/l	0.0004	ISO 17025	< 0.00040	0.0029	< 0.00040	0.00095	0.0077
Copper	mg/l	0.0007	ISO 17025	0.0026	0.013	0.0026	0.018	0.026
Mercury	mg/l	0.0005	ISO 17025	< 0.000500	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Molybdenum	mg/l	0.0004	ISO 17025	0.00855	0.0105	0.00236	0.00224	0.00463
Nickel	mg/l	0.0003	ISO 17025	0.003	0.0032	0.0011	0.0026	0.0027
Lead	mg/l	0.001	ISO 17025	< 0.0010	0.0081	< 0.0010	0.0057	0.018
Antimony	mg/l	0.0017	ISO 17025	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017
Selenium	mg/l	0.004	ISO 17025	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Zinc	mg/l	0.0004	ISO 17025	0.002	0.02	0.0027	0.026	0.022
Chloride	mg/l	0.15	ISO 17025	0.79	1.4	0.73	0.62	1.4
Fluoride	mg/l	0.05	ISO 17025	0.81	0.3	0.45	0.28	0.64
Sulphate	mg/l	0.045	ISO 17025	2.9	38	1.5	92	36
Total dissolved solids	mg/l	6	ISO 17025	52	93	37	120	100
Total monohydric phenols	mg/l	0.01	ISO 17025	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dissolved organic carbon	mg/l	0.1	NONE	7.42	8.31	7.07	8.09	9.88
10:1 WAC Leachate								
Arsenic	mg/kg	0.01	NONE	0.0146	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Barium	mg/kg	0.0005	NONE	0.211	0.661	0.148	0.509	0.296
Cadmium	mg/kg	0.001	NONE	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Chromium	mg/kg	0.004	NONE	< 0.0040	0.029	< 0.0040	0.0095	0.077
Copper	mg/kg	0.007	NONE	0.026	0.13	0.026	0.18	0.26
Mercury	mg/kg	0.005	NONE	< 0.00500	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Molybdenum	mg/kg	0.004	NONE	0.0855	0.105	0.0236	0.0224	0.0463
Nickel	mg/kg	0.003	NONE	0.03	0.032	0.011	0.026	0.027
Lead	mg/kg	0.01	NONE	< 0.010	0.081	< 0.010	0.057	0.18
Antimony	mg/kg	0.017	NONE	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
Selenium	mg/kg	0.04	NONE	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Zinc	mg/kg	0.004	NONE	0.02	0.2	0.027	0.26	0.22
Chloride	mg/kg	1.5	NONE	7.9	14	7.3	6.2	14
Fluoride	mg/kg	0.5	NONE	8.1	3	4.5	2.8	6.4
Sulphate	mg/kg	0.45	NONE	29	380	15	920	360
Total dissolved solids	mg/kg	60	ISO 17025	520	930	370	1200	1000
Total monohydric phenols	mg/kg	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dissolved organic carbon	mg/kg	1	NONE	74.2	83.1	70.7	80.9	98.7

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
129594	BH001	None Supplied	1.2	Brown clay and loam
129595	BH001	None Supplied	3	Brown clay and loam
129596	BH002	None Supplied	1.2	Brown clay and loam
129597	BH002	None Supplied	5.2	Brown clay and loam with gravel
129598	BH003	None Supplied	1.2	Brown loam and clay with gravel and brick
129599	BH003	None Supplied	6	Brown clay and sand with gravel
129600	BH004	None Supplied	1.2	Brown clay
129601	BH004	None Supplied	7	Brown clay
129602	BH005	None Supplied	1.2	Brown clay and sand with gravel
129603	BH005	None Supplied	4.5	Brown clay and sand with gravel and vegetation
129604	TP001	None Supplied	0.5	Brown clay and sand with gravel
129605	TP001	None Supplied	0.6	Brown clay and sand with gravel and stones
129606	TP001	None Supplied	1	Brown clay and loam
129607	TP002	None Supplied	0.5	Brown clay and sand with gravel
129608	TP002	None Supplied	0.6	Brown clay and loam with vegetation
129609	TP002	None Supplied	0.9	Brown clay and loam
129610	WS001	None Supplied	0.6	Brown loam and clay with brick
129611	WS001	None Supplied	1.2	Brown clay and loam
129612	WS002	None Supplied	0.5	Brown clay and sand with gravel
129613	WS002	None Supplied	0.6	Brown loam and clay with brick
129614	WS002	None Supplied	1.2	Brown clay and sand with gravel
129615	WS002	None Supplied	1.7	Brown clay and sand with gravel
129616	WS002	None Supplied	2.2	Brown clay and sand with gravel
129617	WS002	None Supplied	2.7	Brown clay and sand with gravel
129618	WS003	None Supplied	0.3	Brown loam and clay with gravel
129619	WS003	None Supplied	0.5	Brown clay and sand with gravel
129620	WS004	None Supplied	0.3	Brown loam and sand with gravel
129621	WS004	None Supplied	0.4	Brown loam and clay with brick

Analytical Report Number : 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031B	W	ISO 17025
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination	L033B	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES	In-house method based on TRL 447	L038B	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Sample Preparation		In-house method	L043B	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047	D	MCERTS

Analytical Report Number : 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08, 2:1 extraction	L078B	D	NONE
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	ISO 17025
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser	In-house method	L082B	D	MCERTS
Ammonium as NH4 in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS
WAC Leachate 10:1		In-house method	L043B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 24-005779
Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BH001	N/A	S	129594	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
BH001	N/A	S	129594	bc	PCB's By GC-MS in soil	L027B	c
BH001	N/A	S	129594	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH001	N/A	S	129594	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
BH002	N/A	S	129596	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
BH002	N/A	S	129596	bc	PCB's By GC-MS in soil	L027B	c
BH002	N/A	S	129596	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH002	N/A	S	129596	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
BH003	N/A	S	129598	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
BH003	N/A	S	129598	bc	PCB's By GC-MS in soil	L027B	c
BH003	N/A	S	129598	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH003	N/A	S	129598	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
BH004	N/A	S	129600	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
BH004	N/A	S	129600	bc	PCB's By GC-MS in soil	L027B	c
BH004	N/A	S	129600	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH004	N/A	S	129600	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
BH005	N/A	S	129602	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
BH005	N/A	S	129602	bc	PCB's By GC-MS in soil	L027B	c
BH005	N/A	S	129602	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH005	N/A	S	129602	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
TP001	N/A	S	129604	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
TP001	N/A	S	129604	bc	PCB's By GC-MS in soil	L027B	c
TP001	N/A	S	129604	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
TP001	N/A	S	129604	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
TP001	N/A	S	129605	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc
TP001	N/A	S	129606	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
TP001	N/A	S	129606	bc	PCB's By GC-MS in soil	L027B	c
TP001	N/A	S	129606	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
TP001	N/A	S	129606	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
TP002	N/A	S	129607	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
TP002	N/A	S	129607	bc	PCB's By GC-MS in soil	L027B	c
TP002	N/A	S	129607	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
TP002	N/A	S	129607	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
TP002	N/A	S	129608	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc
TP002	N/A	S	129609	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
TP002	N/A	S	129609	bc	PCB's By GC-MS in soil	L027B	c
TP002	N/A	S	129609	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
TP002	N/A	S	129609	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
WS001	N/A	S	129610	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
WS001	N/A	S	129610	bc	PCB's By GC-MS in soil	L027B	c
WS001	N/A	S	129610	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS001	N/A	S	129610	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
WS001	N/A	S	129611	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
WS001	N/A	S	129611	bc	PCB's By GC-MS in soil	L027B	c
WS001	N/A	S	129611	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS001	N/A	S	129611	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
WS002	N/A	S	129612	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
WS002	N/A	S	129612	bc	PCB's By GC-MS in soil	L027B	c
WS002	N/A	S	129612	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS002	N/A	S	129612	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
WS002	N/A	S	129613	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc
WS002	N/A	S	129614	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
WS002	N/A	S	129614	bc	PCB's By GC-MS in soil	L027B	c
WS002	N/A	S	129614	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS002	N/A	S	129614	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
WS002	N/A	S	129615	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc
WS002	N/A	S	129616	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc
WS002	N/A	S	129617	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc

Sample Deviation Report

Analytical Report Number : 24-005779

Project / Site name: 90 Carmoor Road, Manchester, M13 0FB

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS003	N/A	S	129618	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc
WS003	N/A	S	129619	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
WS003	N/A	S	129619	bc	PCB's By GC-MS in soil	L027B	c
WS003	N/A	S	129619	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS003	N/A	S	129619	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c
WS004	N/A	S	129620	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	bc
WS004	N/A	S	129621	bc	BTEX and/or Volatile organic compounds in soil	L073B	bc
WS004	N/A	S	129621	bc	PCB's By GC-MS in soil	L027B	c
WS004	N/A	S	129621	bc	Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS004	N/A	S	129621	bc	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088	c

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Analytical Report Number : 24-80355

Project / Site name:	Carmoor Road Manchester	**Samples received on:**	29/01/2024
Your job number:	LS7347	**Samples instructed on/ Analysis started on:**	29/01/2024
Your order number:		**Analysis completed by:**	08/02/2024
Report Issue Number:	1	**Report issued on:**	08/02/2024
Samples Analysed:	9 soil samples		

Sign [redacted]

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-80355
Project / Site name: Carmoor Road Manchester

Lab Sample Number				2939998	2939999	2940000	2940001	2940002
Sample Reference				TP001	TP001	TP002	WS001	WS001
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.50	0.50	0.40	0.60
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	35	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	24	20	19	18
Total mass of sample received	kg	0.001	NONE	1.3	1	1.3	1.3	1.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI	MWI	MWI	MWI
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.1	7	8	8.8	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0762	0.176	0.174	0.2	0.0557
Sulphide	mg/kg	1	MCERTS	14	110	16	12	6.2
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.015	0.024	0.025	0.028	0.023
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	1.8	2.1	3	3.7	2.9
Acenaphthylene	mg/kg	0.05	MCERTS	0.37	< 0.05	0.26	0.69	0.24
Acenaphthene	mg/kg	0.05	MCERTS	0.42	< 0.05	1.1	1.6	0.71
Fluorene	mg/kg	0.05	MCERTS	0.66	< 0.05	1.1	1.9	0.75
Phenanthrene	mg/kg	0.05	MCERTS	5.5	0.71	14	16	5.4
Anthracene	mg/kg	0.05	MCERTS	0.99	0.15	2.8	3.3	1.2
Fluoranthene	mg/kg	0.05	MCERTS	7.6	0.92	21	21	6.7
Pyrene	mg/kg	0.05	MCERTS	7.9	0.96	21	21	6.8
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.5	0.51	9.4	9.5	3
Chrysene	mg/kg	0.05	MCERTS	3.7	0.56	10	8.7	3.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.7	0.49	11	11	3.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.8	0.24	4	4.2	1.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.4	0.41	8.7	9.2	3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.5	0.15	3.9	4.2	1.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.4	< 0.05	1.2	1.2	0.39
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	0.19	4	4.8	1.8
Coronene	mg/kg	0.05	NONE	< 0.05	< 0.05	2.4	2.8	< 0.05
Total PAH								
Total WAC-17 PAHs	mg/kg	0.85	NONE	44.9	7.42	119	125	42.6
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	17	17	24	21
Barium (aqua regia extractable)	mg/kg	1	MCERTS	120	110	220	250	310
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.98	1.9	1.5	1.8	2.2
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	4.1	4.5	7.8	2.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.5	< 0.2	0.7
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	28	28	30	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	44	66	86	92	91
Lead (aqua regia extractable)	mg/kg	1	MCERTS	89	77	200	380	320
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	1.4	0.5	0.8	0.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	37	30	33	37

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Analytical Report Number: 24-80355
Project / Site name: Carmoor Road Manchester

Lab Sample Number				2939998	2939999	2940000	2940001	2940002
Sample Reference				TP001	TP001	TP002	WS001	WS001
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.50	0.50	0.40	0.60
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	24	44	40	42	45
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	65	62	180	150	150
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	41	5.3	3.3	21
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	92	13	17	73
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	22	96	21	93	110
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	28	230	40	110	210
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	2	1.7	2.8	1.4	1.2
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	8.3	22	15	9.2	14
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	27	44	70	47	37
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	39	28	79	67	44
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	76	96	170	130	95

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 24-80355
Project / Site name: Carmoor Road Manchester

Lab Sample Number				2940003	2940004	2940005	2940006
Sample Reference				WS002	WS002	WS003	WS004
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.50	0.50	0.60
Date Sampled				Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	21	23	23
Total mass of sample received	kg	0.001	NONE	1.3	1.3	1.3	1.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI	MWI	MWI

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.6	7.1	7.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.21	0.126	0.221	0.234
Sulphide	mg/kg	1	MCERTS	38	13	24	< 1.0
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.041	0.036	0.037	0.023

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	4	1.7	5.7	4.9
Acenaphthylene	mg/kg	0.05	MCERTS	0.95	< 0.05	9	0.95
Acenaphthene	mg/kg	0.05	MCERTS	2.3	0.34	5.9	2.2
Fluorene	mg/kg	0.05	MCERTS	2.8	1.1	19	2.4
Phenanthrene	mg/kg	0.05	MCERTS	23	3.3	120	23
Anthracene	mg/kg	0.05	MCERTS	5.9	0.72	30	5.4
Fluoranthene	mg/kg	0.05	MCERTS	31	3.7	140	30
Pyrene	mg/kg	0.05	MCERTS	31	3.8	130	30
Benzo(a)anthracene	mg/kg	0.05	MCERTS	15	2.1	62	14
Chrysene	mg/kg	0.05	MCERTS	15	1.8	58	13
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	16	2.3	57	17
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	6	0.81	27	4.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	14	1.7	56	13
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	7.1	0.91	29	5.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2	0.23	7.9	1.8
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.8	1	32	6.5
Coronene	mg/kg	0.05	NONE	< 0.05	< 0.05	12	3.9

Total PAH

Total WAC-17 PAHs	mg/kg	0.85	NONE	184	25.6	810	178

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	32	29	26	22
Barium (aqua regia extractable)	mg/kg	1	MCERTS	240	210	190	210
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.2	2.3	1.5	1.4
Boron (water soluble)	mg/kg	0.2	MCERTS	6.3	8.1	4.7	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	28	24	30
Copper (aqua regia extractable)	mg/kg	1	MCERTS	130	94	130	150
Lead (aqua regia extractable)	mg/kg	1	MCERTS	300	340	320	270
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.1	0.5	0.5	0.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	38	41	29	30

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Analytical Report Number: 24-80355
Project / Site name: Carmoor Road Manchester

Lab Sample Number				2940003	2940004	2940005	2940006
Sample Reference				WS002	WS002	WS003	WS004
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.50	0.50	0.60
Date Sampled				Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.1	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	44	50	38	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	310	93	130	140
Monoaromatics & Oxygenates							
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons							
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	2.4	1.1	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	66	140	< 2.0	4
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	190	550	< 8.0	8.4
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	1000	780	22	24
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	1300	1500	27	37
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	1.8	1.5	1.7	2.2
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	26	70	33	12
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	130	180	250	73
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	260	220	270	88
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	420	470	560	180

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 24-80355
Project / Site name: Carmoor Road Manchester

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2939998	TP001	None Supplied	0.2	Brown clay and sand with stones.
2939999	TP001	None Supplied	0.5	Brown clay and sand with gravel.
2940000	TP002	None Supplied	0.5	Brown clay and sand with gravel.
2940001	WS001	None Supplied	0.4	Brown clay and sand with gravel.
2940002	WS001	None Supplied	0.6	Brown clay and sand with gravel.
2940003	WS002	None Supplied	0.2	Brown clay and sand with gravel.
2940004	WS002	None Supplied	0.5	Brown clay and sand with gravel.
2940005	WS003	None Supplied	0.5	Brown clay and sand with gravel.
2940006	WS004	None Supplied	0.6	Brown clay with gravel.

Analytical Report Number : 24-80355
Project / Site name: Carmoor Road Manchester

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
Fraction Organic Carbon FOC Automated	Determination of fraction of organic carbon in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method	L009	D	MCERTS

Analytical Report Number : 24-80355
Project / Site name: Carmoor Road Manchester

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser.	L080-PL	W	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 24-80355
Project / Site name: Carmoor Road Manchester

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP001	None Supplied	S	2939998	a	None Supplied	None Supplied	None Supplied
TP001	None Supplied	S	2939999	a	None Supplied	None Supplied	None Supplied
TP002	None Supplied	S	2940000	a	None Supplied	None Supplied	None Supplied
WS001	None Supplied	S	2940001	a	None Supplied	None Supplied	None Supplied
WS001	None Supplied	S	2940002	a	None Supplied	None Supplied	None Supplied
WS002	None Supplied	S	2940003	a	None Supplied	None Supplied	None Supplied
WS002	None Supplied	S	2940004	a	None Supplied	None Supplied	None Supplied
WS003	None Supplied	S	2940005	a	None Supplied	None Supplied	None Supplied
WS004	None Supplied	S	2940006	a	None Supplied	None Supplied	None Supplied

HazWasteOnline™

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

DFAI6-1YJT2-QJJ73

Job name

LS7347 - 90 Carmoor Road, Manchester, M13 0FB

Description/Comments

Project

LS7347 - 90 Carmoor Road, Manchester, M13 0FB

Site

90 Carmoor Road, Manchester, M13 0FB

Classified by

Name:
Tom Kistruck
Date:
28 Mar 2024 14:59 GMT
Telephone:
01444 882 084

Company:
Land Science
Unit 10
19 Albert Drive
Burgess Hill
RH15 9TN

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Purpose of classification

4 - Classification of Waste Products

Address of the waste

Post Code

SIC for the process giving rise to the waste

Description of industry/producer giving rise to the waste

Description of the specific process, sub-process and/or activity that created the waste

Description of the waste

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP001	0.20	Non Hazardous		3
2	TP001[2]	0.50	Non Hazardous		6
3	TP002	0.50	Non Hazardous		9
4	WS001	0.40	Non Hazardous		12
5	WS001[2]	0.60	Non Hazardous		15
6	WS002	0.20	Hazardous	HP 3(i), HP 7, HP 11	18
7	WS002[2]	0.50	Hazardous	HP 3(i), HP 7, HP 11	21
8	WS003	0.50	Non Hazardous		24
9	WS004	0.60	Non Hazardous		27
10	BH001	1.20	Non Hazardous		30
11	BH002	1.20	Non Hazardous		32
12	BH003	1.20	Non Hazardous		34
13	BH004	1.20	Non Hazardous		36
14	BH005	1.20	Non Hazardous		38
15	TP001[3]	0.50	Non Hazardous		40
16	TP001[4]	0.60	Non Hazardous		42
17	TP001[5]	1.00	Non Hazardous		43
18	TP002[2]	0.50	Non Hazardous		45
19	TP002[3]	0.60	Non Hazardous		47
20	TP002[4]	0.90	Non Hazardous		48
21	WS001[3]	0.60	Non Hazardous		50
22	WS001[4]	1.20	Non Hazardous		52
23	WS002[3]	0.50	Non Hazardous		54
24	WS002[4]	0.60	Non Hazardous		56
25	WS002[5]	1.20	Non Hazardous		57
26	WS002[6]	1.70	Non Hazardous		59
27	WS002[7]	2.20	Non Hazardous		60
28	WS002[8]	2.70	Non Hazardous		61
29	WS003[2]	0.30	Non Hazardous		62
30	WS003[3]	0.50	Non Hazardous		63
31	WS004[2]	0.30	Non Hazardous		65
32	WS004[3]	0.40	Non Hazardous		66

Related documents

#	Name	Description
1	Land Science Template WM3 v1.2GB	waste stream template used to create this Job

Report

Created by: Tom Kistruck

Created date: 28 Mar 2024 14:59 GMT

Appendices	Page
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Classification of sample: TP001

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP001
Sample Depth:
0.20 m
Moisture content:
14%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		8.1	pH		8.1	pH	8.1 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		1.8	mg/kg		1.8	mg/kg	0.00018 %		
4	●	acenaphthylene		205-917-1	208-96-8		0.37	mg/kg		0.37	mg/kg	0.000037 %		
5	●	acenaphthene		201-469-6	83-32-9		0.42	mg/kg		0.42	mg/kg	0.000042 %		
6	●	fluorene		201-695-5	86-73-7		0.66	mg/kg		0.66	mg/kg	0.000066 %		
7	●	phenanthrene		201-581-5	85-01-8		5.5	mg/kg		5.5	mg/kg	0.00055 %		
8	●	anthracene		204-371-1	120-12-7		0.99	mg/kg		0.99	mg/kg	0.000099 %		
9	●	fluoranthene		205-912-4	206-44-0		7.6	mg/kg		7.6	mg/kg	0.00076 %		
10	●	pyrene		204-927-3	129-00-0		7.9	mg/kg		7.9	mg/kg	0.00079 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		3.5	mg/kg		3.5	mg/kg	0.00035 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		3.7	mg/kg		3.7	mg/kg	0.00037 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		3.7	mg/kg		3.7	mg/kg	0.00037 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.8	mg/kg		1.8	mg/kg	0.00018 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		3.4	mg/kg		3.4	mg/kg	0.00034 %		
16	●	indeno[123-cd]pyrene		205-893-2	193-39-5		1.5	mg/kg		1.5	mg/kg	0.00015 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.4	mg/kg		0.4	mg/kg	0.00004 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
18		benzo[ghi]perylene		205-883-8	191-24-2		1.7	mg/kg		1.7	mg/kg	0.00017 %		
19		coronene		205-881-7	191-07-1		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13	mg/kg	1.32	17.164	mg/kg	0.00172 %		
21		barium { barium oxide }		215-127-9	1304-28-5		120	mg/kg	1.117	133.981	mg/kg	0.0134 %		
22		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.98	mg/kg	2.775	2.72	mg/kg	0.000272 %		
23		boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1.6	mg/kg	3.22	5.152	mg/kg	0.000515 %		
24		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
25		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
26		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		44	mg/kg	1.126	49.539	mg/kg	0.00495 %		
27		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	89	mg/kg	1.56	138.824	mg/kg	0.0089 %		
28		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.353	0.406	mg/kg	0.0000406 %		
29		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18	mg/kg	2.976	53.573	mg/kg	0.00536 %		
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
31		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		24	mg/kg	1.785	42.844	mg/kg	0.00428 %		
32		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		65	mg/kg	2.774	180.32	mg/kg	0.018 %		
33		benzene	601-020-00-8	200-753-7	71-43-2		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
34		toluene	601-021-00-3	203-625-9	108-88-3		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
35		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
37		TPH (C6 to C40) petroleum group			TPH		104	mg/kg		104	mg/kg	0.0104 %		
											Total:	0.0749 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0104%)

Classification of sample: TP001[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP001[2]
Sample Depth:
0.50 m
Moisture content:
24%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 24% No Moisture Correction applied (MC)

#		Determinand EU CLP index number / EC Number / CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH PH		7	pH		7	pH	7pH		
2		phenol 604-001-00-2 / 203-632-7 / 108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
3		naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		2.1	mg/kg		2.1	mg/kg	0.00021 %		
4	●	acenaphthylene 205-917-1 / 208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
5	●	acenaphthene 201-469-6 / 83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
6	●	fluorene 201-695-5 / 86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
7	●	phenanthrene 201-581-5 / 85-01-8		0.71	mg/kg		0.71	mg/kg	0.000071 %		
8	●	anthracene 204-371-1 / 120-12-7		0.15	mg/kg		0.15	mg/kg	0.000015 %		
9	●	fluoranthene 205-912-4 / 206-44-0		0.92	mg/kg		0.92	mg/kg	0.000092 %		
10	●	pyrene 204-927-3 / 129-00-0		0.96	mg/kg		0.96	mg/kg	0.000096 %		
11		benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		0.51	mg/kg		0.51	mg/kg	0.000051 %		
12		chrysene 601-048-00-0 / 205-923-4 / 218-01-9		0.56	mg/kg		0.56	mg/kg	0.000056 %		
13		benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		0.49	mg/kg		0.49	mg/kg	0.000049 %		
14		benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		0.24	mg/kg		0.24	mg/kg	0.000024 %		
15		benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		0.41	mg/kg		0.41	mg/kg	0.000041 %		
16	●	indeno[123-cd]pyrene 205-893-2 / 193-39-5		0.15	mg/kg		0.15	mg/kg	0.000015 %		
17		dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18		benzo[ghi]perylene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
			205-883-8	191-24-2									
19		coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-881-7	191-07-1									
20		arsenic { arsenic trioxide }				17	mg/kg	1.32	22.446	mg/kg	0.00224 %		
		033-003-00-0	215-481-4	1327-53-3									
21		barium { barium oxide }				110	mg/kg	1.117	122.816	mg/kg	0.0123 %		
			215-127-9	1304-28-5									
22		beryllium { beryllium oxide }				1.9	mg/kg	2.775	5.273	mg/kg	0.000527 %		
		004-003-00-8	215-133-1	1304-56-9									
23		boron { diboron trioxide }				4.1	mg/kg	3.22	13.201	mg/kg	0.00132 %		
		005-008-00-8	215-125-8	1303-86-2									
24		cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
		048-002-00-0	215-146-2	1306-19-0									
25		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
26		copper { dicopper oxide; copper (I) oxide }				66	mg/kg	1.126	74.309	mg/kg	0.00743 %		
		029-002-00-X	215-270-7	1317-39-1									
27		lead { lead chromate }			1	77	mg/kg	1.56	120.106	mg/kg	0.0077 %		
		082-004-00-2	231-846-0	7758-97-6									
28		mercury { mercury dichloride }				1.4	mg/kg	1.353	1.895	mg/kg	0.000189 %		
		080-010-00-X	231-299-8	7487-94-7									
29		nickel { nickel chromate }				37	mg/kg	2.976	110.122	mg/kg	0.011 %		
		028-035-00-7	238-766-5	14721-18-7									
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
31		vanadium { divanadium pentaoxide; vanadium pentoxide }				44	mg/kg	1.785	78.548	mg/kg	0.00785 %		
		023-001-00-8	215-239-8	1314-62-1									
32		zinc { zinc chromate }				62	mg/kg	2.774	171.997	mg/kg	0.0172 %		
		024-007-00-3	236-878-9	13530-65-9									
33		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
37		TPH (C6 to C40) petroleum group				326	mg/kg		326	mg/kg	0.0326 %		
				TPH									
										Total:	0.104 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0326%)

Classification of sample: TP002

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP002
Sample Depth:
0.50 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		8	pH		8	pH	8pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		3	mg/kg		3	mg/kg	0.0003 %		
4	●	acenaphthylene		205-917-1	208-96-8		0.26	mg/kg		0.26	mg/kg	0.000026 %		
5	●	acenaphthene		201-469-6	83-32-9		1.1	mg/kg		1.1	mg/kg	0.00011 %		
6	●	fluorene		201-695-5	86-73-7		1.1	mg/kg		1.1	mg/kg	0.00011 %		
7	●	phenanthrene		201-581-5	85-01-8		14	mg/kg		14	mg/kg	0.0014 %		
8	●	anthracene		204-371-1	120-12-7		2.8	mg/kg		2.8	mg/kg	0.00028 %		
9	●	fluoranthene		205-912-4	206-44-0		21	mg/kg		21	mg/kg	0.0021 %		
10	●	pyrene		204-927-3	129-00-0		21	mg/kg		21	mg/kg	0.0021 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		9.4	mg/kg		9.4	mg/kg	0.00094 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		10	mg/kg		10	mg/kg	0.001 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		11	mg/kg		11	mg/kg	0.0011 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		4	mg/kg		4	mg/kg	0.0004 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		8.7	mg/kg		8.7	mg/kg	0.00087 %		
16	●	indeno[123-cd]pyrene		205-893-2	193-39-5		3.9	mg/kg		3.9	mg/kg	0.00039 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		1.2	mg/kg		1.2	mg/kg	0.00012 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18		benzo[ghi]perylene				4	mg/kg		4	mg/kg	0.0004 %		
			205-883-8	191-24-2									
19		coronene				2.4	mg/kg		2.4	mg/kg	0.00024 %		
			205-881-7	191-07-1									
20		arsenic { arsenic trioxide }				17	mg/kg	1.32	22.446	mg/kg	0.00224 %		
		033-003-00-0	215-481-4	1327-53-3									
21		barium { barium oxide }				220	mg/kg	1.117	245.631	mg/kg	0.0246 %		
			215-127-9	1304-28-5									
22		beryllium { beryllium oxide }				1.5	mg/kg	2.775	4.163	mg/kg	0.000416 %		
		004-003-00-8	215-133-1	1304-56-9									
23		boron { diboron trioxide }				4.5	mg/kg	3.22	14.489	mg/kg	0.00145 %		
		005-008-00-8	215-125-8	1303-86-2									
24		cadmium { cadmium oxide }				0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
		048-002-00-0	215-146-2	1306-19-0									
25		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
26		copper { dicopper oxide; copper (I) oxide }				86	mg/kg	1.126	96.826	mg/kg	0.00968 %		
		029-002-00-X	215-270-7	1317-39-1									
27		lead { lead chromate }			1	200	mg/kg	1.56	311.963	mg/kg	0.02 %		
		082-004-00-2	231-846-0	7758-97-6									
28		mercury { mercury dichloride }				0.5	mg/kg	1.353	0.677	mg/kg	0.0000677 %		
		080-010-00-X	231-299-8	7487-94-7									
29		nickel { nickel chromate }				30	mg/kg	2.976	89.288	mg/kg	0.00893 %		
		028-035-00-7	238-766-5	14721-18-7									
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
31		vanadium { divanadium pentaoxide; vanadium pentoxide }				40	mg/kg	1.785	71.407	mg/kg	0.00714 %		
		023-001-00-8	215-239-8	1314-62-1									
32		zinc { zinc chromate }				180	mg/kg	2.774	499.346	mg/kg	0.0499 %		
		024-007-00-3	236-878-9	13530-65-9									
33		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
37		TPH (C6 to C40) petroleum group				210	mg/kg		210	mg/kg	0.021 %		
				TPH									
										Total:	0.16 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.021%)

Classification of sample: WS001

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS001
Sample Depth:
0.40 m
Moisture content:
19%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		8.8	pH		8.8	pH	8.8 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		3.7	mg/kg		3.7	mg/kg	0.00037 %		
4		acenaphthylene		205-917-1	208-96-8		0.69	mg/kg		0.69	mg/kg	0.000069 %		
5		acenaphthene		201-469-6	83-32-9		1.6	mg/kg		1.6	mg/kg	0.00016 %		
6		fluorene		201-695-5	86-73-7		1.9	mg/kg		1.9	mg/kg	0.00019 %		
7		phenanthrene		201-581-5	85-01-8		16	mg/kg		16	mg/kg	0.0016 %		
8		anthracene		204-371-1	120-12-7		3.3	mg/kg		3.3	mg/kg	0.00033 %		
9		fluoranthene		205-912-4	206-44-0		21	mg/kg		21	mg/kg	0.0021 %		
10		pyrene		204-927-3	129-00-0		21	mg/kg		21	mg/kg	0.0021 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		9.5	mg/kg		9.5	mg/kg	0.00095 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		8.7	mg/kg		8.7	mg/kg	0.00087 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		11	mg/kg		11	mg/kg	0.0011 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		4.2	mg/kg		4.2	mg/kg	0.00042 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		9.2	mg/kg		9.2	mg/kg	0.00092 %		
16		indeno[123-cd]pyrene		205-893-2	193-39-5		4.2	mg/kg		4.2	mg/kg	0.00042 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		1.2	mg/kg		1.2	mg/kg	0.00012 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18		benzo[ghi]perylene				4.8	mg/kg		4.8	mg/kg	0.00048 %		
			205-883-8	191-24-2									
19		coronene				2.8	mg/kg		2.8	mg/kg	0.00028 %		
			205-881-7	191-07-1									
20		arsenic { arsenic trioxide }				24	mg/kg	1.32	31.688	mg/kg	0.00317 %		
		033-003-00-0	215-481-4	1327-53-3									
21		barium { barium oxide }				250	mg/kg	1.117	279.126	mg/kg	0.0279 %		
			215-127-9	1304-28-5									
22		beryllium { beryllium oxide }				1.8	mg/kg	2.775	4.996	mg/kg	0.0005 %		
		004-003-00-8	215-133-1	1304-56-9									
23		boron { diboron trioxide }				7.8	mg/kg	3.22	25.115	mg/kg	0.00251 %		
		005-008-00-8	215-125-8	1303-86-2									
24		cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
		048-002-00-0	215-146-2	1306-19-0									
25		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
26		copper { dicopper oxide; copper (I) oxide }				92	mg/kg	1.126	103.582	mg/kg	0.0104 %		
		029-002-00-X	215-270-7	1317-39-1									
27		lead { lead chromate }			1	380	mg/kg	1.56	592.73	mg/kg	0.038 %		
		082-004-00-2	231-846-0	7758-97-6									
28		mercury { mercury dichloride }				0.8	mg/kg	1.353	1.083	mg/kg	0.000108 %		
		080-010-00-X	231-299-8	7487-94-7									
29		nickel { nickel chromate }				33	mg/kg	2.976	98.217	mg/kg	0.00982 %		
		028-035-00-7	238-766-5	14721-18-7									
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
31		vanadium { divanadium pentaoxide; vanadium pentoxide }				42	mg/kg	1.785	74.978	mg/kg	0.0075 %		
		023-001-00-8	215-239-8	1314-62-1									
32		zinc { zinc chromate }				150	mg/kg	2.774	416.122	mg/kg	0.0416 %		
		024-007-00-3	236-878-9	13530-65-9									
33		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
37		TPH (C6 to C40) petroleum group				240	mg/kg		240	mg/kg	0.024 %		
				TPH									
										Total:	0.18 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.024%)

Classification of sample: WS001[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS001[2]
Sample Depth:
0.60 m
Moisture content:
18%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		7.9	pH		7.9	pH	7.9 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		2.9	mg/kg		2.9	mg/kg	0.00029 %		
4	●	acenaphthylene		205-917-1	208-96-8		0.24	mg/kg		0.24	mg/kg	0.000024 %		
5	●	acenaphthene		201-469-6	83-32-9		0.71	mg/kg		0.71	mg/kg	0.000071 %		
6	●	fluorene		201-695-5	86-73-7		0.75	mg/kg		0.75	mg/kg	0.000075 %		
7	●	phenanthrene		201-581-5	85-01-8		5.4	mg/kg		5.4	mg/kg	0.00054 %		
8	●	anthracene		204-371-1	120-12-7		1.2	mg/kg		1.2	mg/kg	0.00012 %		
9	●	fluoranthene		205-912-4	206-44-0		6.7	mg/kg		6.7	mg/kg	0.00067 %		
10	●	pyrene		204-927-3	129-00-0		6.8	mg/kg		6.8	mg/kg	0.00068 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		3	mg/kg		3	mg/kg	0.0003 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		3.5	mg/kg		3.5	mg/kg	0.00035 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		3.5	mg/kg		3.5	mg/kg	0.00035 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.2	mg/kg		1.2	mg/kg	0.00012 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		3	mg/kg		3	mg/kg	0.0003 %		
16	●	indeno[123-cd]pyrene		205-893-2	193-39-5		1.6	mg/kg		1.6	mg/kg	0.00016 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.39	mg/kg		0.39	mg/kg	0.000039 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
18		benzo[ghi]perylene		205-883-8	191-24-2		1.8	mg/kg		1.8	mg/kg	0.00018 %		
19		coronene		205-881-7	191-07-1		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21	mg/kg	1.32	27.727	mg/kg	0.00277 %		
21		barium { barium oxide }		215-127-9	1304-28-5		310	mg/kg	1.117	346.117	mg/kg	0.0346 %		
22		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		2.2	mg/kg	2.775	6.106	mg/kg	0.000611 %		
23		boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		2.8	mg/kg	3.22	9.016	mg/kg	0.000902 %		
24		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		
25		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
26		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		91	mg/kg	1.126	102.456	mg/kg	0.0102 %		
27		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	320	mg/kg	1.56	499.141	mg/kg	0.032 %		
28		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.9	mg/kg	1.353	1.218	mg/kg	0.000122 %		
29		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		37	mg/kg	2.976	110.122	mg/kg	0.011 %		
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
31		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		45	mg/kg	1.785	80.333	mg/kg	0.00803 %		
32		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		150	mg/kg	2.774	416.122	mg/kg	0.0416 %		
33		benzene	601-020-00-8	200-753-7	71-43-2		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
34		toluene	601-021-00-3	203-625-9	108-88-3		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
35		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
37		TPH (C6 to C40) petroleum group			TPH		305	mg/kg		305	mg/kg	0.0305 %		
											Total:	0.179 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0305%)

Classification of sample: WS002

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:
WS002
Sample Depth:
0.20 m
Moisture content:
19%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.172%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.172%)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.172%)

Determinands

Moisture content: 19% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1		pH		PH		7.6	pH		7.6	pH	7.6 pH		
2		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
3		naphthalene				4	mg/kg		4	mg/kg	0.0004 %		
		601-052-00-2	202-049-5	91-20-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
4		acenaphthylene	205-917-1	208-96-8		0.95	mg/kg		0.95	mg/kg	0.000095 %		
5		acenaphthene	201-469-6	83-32-9		2.3	mg/kg		2.3	mg/kg	0.00023 %		
6		fluorene	201-695-5	86-73-7		2.8	mg/kg		2.8	mg/kg	0.00028 %		
7		phenanthrene	201-581-5	85-01-8		23	mg/kg		23	mg/kg	0.0023 %		
8		anthracene	204-371-1	120-12-7		5.9	mg/kg		5.9	mg/kg	0.00059 %		
9		fluoranthene	205-912-4	206-44-0		31	mg/kg		31	mg/kg	0.0031 %		
10		pyrene	204-927-3	129-00-0		31	mg/kg		31	mg/kg	0.0031 %		
11		benzo[a]anthracene	200-280-6	56-55-3		15	mg/kg		15	mg/kg	0.0015 %		
		601-033-00-9											
12		chrysene	205-923-4	218-01-9		15	mg/kg		15	mg/kg	0.0015 %		
		601-048-00-0											
13		benzo[b]fluoranthene	205-911-9	205-99-2		16	mg/kg		16	mg/kg	0.0016 %		
		601-034-00-4											
14		benzo[k]fluoranthene	205-916-6	207-08-9		6	mg/kg		6	mg/kg	0.0006 %		
		601-036-00-5											
15		benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		14	mg/kg		14	mg/kg	0.0014 %		
		601-032-00-3											
16		indeno[123-cd]pyrene	205-893-2	193-39-5		7.1	mg/kg		7.1	mg/kg	0.00071 %		
17		dibenz[a,h]anthracene	200-181-8	53-70-3		2	mg/kg		2	mg/kg	0.0002 %		
		601-041-00-2											
18		benzo[ghi]perylene	205-883-8	191-24-2		7.8	mg/kg		7.8	mg/kg	0.00078 %		
19		coronene	205-881-7	191-07-1		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		arsenic { arsenic trioxide }	215-481-4	1327-53-3		32	mg/kg	1.32	42.25	mg/kg	0.00423 %		
		033-003-00-0											
21		barium { barium oxide }	215-127-9	1304-28-5		240	mg/kg	1.117	267.961	mg/kg	0.0268 %		
22		beryllium { beryllium oxide }	215-133-1	1304-56-9		2.2	mg/kg	2.775	6.106	mg/kg	0.000611 %		
		004-003-00-8											
23		boron { diboron trioxide }	215-125-8	1303-86-2		6.3	mg/kg	3.22	20.285	mg/kg	0.00203 %		
		005-008-00-8											
24		cadmium { cadmium oxide }	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
		048-002-00-0											
25		chromium in chromium(VI) compounds { chromium(VI) oxide }	215-607-8	1333-82-0		<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
		024-001-00-0											
26		copper { dicopper oxide; copper (I) oxide }	215-270-7	1317-39-1		130	mg/kg	1.126	146.365	mg/kg	0.0146 %		
		029-002-00-X											
27		lead { lead chromate }	231-846-0	7758-97-6	1	300	mg/kg	1.56	467.945	mg/kg	0.03 %		
		082-004-00-2											
28		mercury { mercury dichloride }	231-299-8	7487-94-7		1.1	mg/kg	1.353	1.489	mg/kg	0.000149 %		
		080-010-00-X											
29		nickel { nickel chromate }	238-766-5	14721-18-7		38	mg/kg	2.976	113.098	mg/kg	0.0113 %		
		028-035-00-7											
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
31		vanadium { divanadium pentaoxide; vanadium pentoxide }	215-239-8	1314-62-1		44	mg/kg	1.785	78.548	mg/kg	0.00785 %		
		023-001-00-8											

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
32		zinc { zinc chromate }				310	mg/kg	2.774	859.985	mg/kg	0.086 %		
		024-007-00-3	236-878-9	13530-65-9									
33		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
35		ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
37		TPH (C6 to C40) petroleum group				1720	mg/kg		1720	mg/kg	0.172 %		
				TPH									
										Total:	0.377 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS002[2]

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:
WS002[2]
Sample Depth:
0.50 m
Moisture content:
21%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.197%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.197%)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.197%)

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1		pH				7.6	pH		7.6	pH	7.6 pH		
				PH									
2		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
3		naphthalene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
		601-052-00-2	202-049-5	91-20-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
4		acenaphthylene	205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
5		acenaphthene	201-469-6	83-32-9		0.34	mg/kg		0.34	mg/kg	0.000034 %		
6		fluorene	201-695-5	86-73-7		1.1	mg/kg		1.1	mg/kg	0.00011 %		
7		phenanthrene	201-581-5	85-01-8		3.3	mg/kg		3.3	mg/kg	0.00033 %		
8		anthracene	204-371-1	120-12-7		0.72	mg/kg		0.72	mg/kg	0.000072 %		
9		fluoranthene	205-912-4	206-44-0		3.7	mg/kg		3.7	mg/kg	0.00037 %		
10		pyrene	204-927-3	129-00-0		3.8	mg/kg		3.8	mg/kg	0.00038 %		
11		benzo[a]anthracene	200-280-6	56-55-3		2.1	mg/kg		2.1	mg/kg	0.00021 %		
12		chrysene	205-923-4	218-01-9		1.8	mg/kg		1.8	mg/kg	0.00018 %		
13		benzo[b]fluoranthene	205-911-9	205-99-2		2.3	mg/kg		2.3	mg/kg	0.00023 %		
14		benzo[k]fluoranthene	205-916-6	207-08-9		0.81	mg/kg		0.81	mg/kg	0.000081 %		
15		benzo[a]pyrene; benzo[def]chrysene	200-028-5	50-32-8		1.7	mg/kg		1.7	mg/kg	0.00017 %		
16		indeno[123-cd]pyrene	205-893-2	193-39-5		0.91	mg/kg		0.91	mg/kg	0.000091 %		
17		dibenz[a,h]anthracene	200-181-8	53-70-3		0.23	mg/kg		0.23	mg/kg	0.000023 %		
18		benzo[ghi]perylene	205-883-8	191-24-2		1	mg/kg		1	mg/kg	0.0001 %		
19		coronene	205-881-7	191-07-1		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
20		arsenic { arsenic trioxide }	215-481-4	1327-53-3		29	mg/kg	1.32	38.289	mg/kg	0.00383 %		
21		barium { barium oxide }	215-127-9	1304-28-5		210	mg/kg	1.117	234.466	mg/kg	0.0234 %		
22		beryllium { beryllium oxide }	215-133-1	1304-56-9		2.3	mg/kg	2.775	6.383	mg/kg	0.000638 %		
23		boron { diboron trioxide }	215-125-8	1303-86-2		8.1	mg/kg	3.22	26.081	mg/kg	0.00261 %		
24		cadmium { cadmium oxide }	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
25		chromium in chromium(VI) compounds { chromium(VI) oxide }	215-607-8	1333-82-0		<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
26		copper { dicopper oxide; copper (I) oxide }	215-270-7	1317-39-1		94	mg/kg	1.126	105.834	mg/kg	0.0106 %		
27		lead { lead chromate }	231-846-0	7758-97-6	1	340	mg/kg	1.56	530.337	mg/kg	0.034 %		
28		mercury { mercury dichloride }	231-299-8	7487-94-7		0.5	mg/kg	1.353	0.677	mg/kg	0.0000677 %		
29		nickel { nickel chromate }	238-766-5	14721-18-7		41	mg/kg	2.976	122.027	mg/kg	0.0122 %		
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1.1	mg/kg	1.405	1.546	mg/kg	0.000155 %		
		034-002-00-8											
31		vanadium { divanadium pentaoxide; vanadium pentoxide }	215-239-8	1314-62-1		50	mg/kg	1.785	89.259	mg/kg	0.00893 %		
		023-001-00-8											

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
32		zinc { zinc chromate }				93	mg/kg	2.774	257.996	mg/kg	0.0258 %		
		024-007-00-3	236-878-9	13530-65-9									
33		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
37		TPH (C6 to C40) petroleum group				1970	mg/kg		1970	mg/kg	0.197 %		
				TPH									
										Total:	0.324 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS003

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS003
Sample Depth:
0.50 m
Moisture content:
23%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 23% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		7.1	pH		7.1	pH	7.1 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		5.7	mg/kg		5.7	mg/kg	0.00057 %		
4		acenaphthylene		205-917-1	208-96-8		9	mg/kg		9	mg/kg	0.0009 %		
5		acenaphthene		201-469-6	83-32-9		5.9	mg/kg		5.9	mg/kg	0.00059 %		
6		fluorene		201-695-5	86-73-7		19	mg/kg		19	mg/kg	0.0019 %		
7		phenanthrene		201-581-5	85-01-8		120	mg/kg		120	mg/kg	0.012 %		
8		anthracene		204-371-1	120-12-7		30	mg/kg		30	mg/kg	0.003 %		
9		fluoranthene		205-912-4	206-44-0		140	mg/kg		140	mg/kg	0.014 %		
10		pyrene		204-927-3	129-00-0		130	mg/kg		130	mg/kg	0.013 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		62	mg/kg		62	mg/kg	0.0062 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		58	mg/kg		58	mg/kg	0.0058 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		57	mg/kg		57	mg/kg	0.0057 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		27	mg/kg		27	mg/kg	0.0027 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		56	mg/kg		56	mg/kg	0.0056 %		
16		indeno[123-cd]pyrene		205-893-2	193-39-5		29	mg/kg		29	mg/kg	0.0029 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		7.9	mg/kg		7.9	mg/kg	0.00079 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
18		benzo[ghi]perylene		205-883-8	191-24-2		32	mg/kg		32	mg/kg	0.0032 %		
19		coronene		205-881-7	191-07-1		12	mg/kg		12	mg/kg	0.0012 %		
20		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		26	mg/kg	1.32	34.328	mg/kg	0.00343 %		
21		barium { barium oxide }		215-127-9	1304-28-5		190	mg/kg	1.117	212.136	mg/kg	0.0212 %		
22		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.5	mg/kg	2.775	4.163	mg/kg	0.000416 %		
23		boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		4.7	mg/kg	3.22	15.133	mg/kg	0.00151 %		
24		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
25		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
26		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		130	mg/kg	1.126	146.365	mg/kg	0.0146 %		
27		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	320	mg/kg	1.56	499.141	mg/kg	0.032 %		
28		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.5	mg/kg	1.353	0.677	mg/kg	0.0000677 %		
29		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		29	mg/kg	2.976	86.312	mg/kg	0.00863 %		
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
31		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		38	mg/kg	1.785	67.837	mg/kg	0.00678 %		
32		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		130	mg/kg	2.774	360.639	mg/kg	0.0361 %		
33		benzene	601-020-00-8	200-753-7	71-43-2		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
34		toluene	601-021-00-3	203-625-9	108-88-3		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
35		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
37		TPH (C6 to C40) petroleum group			TPH		587	mg/kg		587	mg/kg	0.0587 %		
											Total:	0.266 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0587%)

Classification of sample: WS004

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS004
Sample Depth:
0.60 m
Moisture content:
23%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 23% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		7.6	pH		7.6	pH	7.6 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		4.9	mg/kg		4.9	mg/kg	0.00049 %		
4	●	acenaphthylene		205-917-1	208-96-8		0.95	mg/kg		0.95	mg/kg	0.000095 %		
5	●	acenaphthene		201-469-6	83-32-9		2.2	mg/kg		2.2	mg/kg	0.00022 %		
6	●	fluorene		201-695-5	86-73-7		2.4	mg/kg		2.4	mg/kg	0.00024 %		
7	●	phenanthrene		201-581-5	85-01-8		23	mg/kg		23	mg/kg	0.0023 %		
8	●	anthracene		204-371-1	120-12-7		5.4	mg/kg		5.4	mg/kg	0.00054 %		
9	●	fluoranthene		205-912-4	206-44-0		30	mg/kg		30	mg/kg	0.003 %		
10	●	pyrene		204-927-3	129-00-0		30	mg/kg		30	mg/kg	0.003 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		14	mg/kg		14	mg/kg	0.0014 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		13	mg/kg		13	mg/kg	0.0013 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		17	mg/kg		17	mg/kg	0.0017 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		4.6	mg/kg		4.6	mg/kg	0.00046 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		13	mg/kg		13	mg/kg	0.0013 %		
16	●	indeno[123-cd]pyrene		205-893-2	193-39-5		5.9	mg/kg		5.9	mg/kg	0.00059 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		1.8	mg/kg		1.8	mg/kg	0.00018 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
18		benzo[ghi]perylene		205-883-8	191-24-2		6.5	mg/kg		6.5	mg/kg	0.00065 %		
19		coronene		205-881-7	191-07-1		3.9	mg/kg		3.9	mg/kg	0.00039 %		
20		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22	mg/kg	1.32	29.047	mg/kg	0.0029 %		
21		barium { barium oxide }		215-127-9	1304-28-5		210	mg/kg	1.117	234.466	mg/kg	0.0234 %		
22		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.4	mg/kg	2.775	3.885	mg/kg	0.000389 %		
23		boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2		1.6	mg/kg	3.22	5.152	mg/kg	0.000515 %		
24		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
25		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.2	mg/kg	1.923	<2.308	mg/kg	<0.000231 %		<LOD
26		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		150	mg/kg	1.126	168.883	mg/kg	0.0169 %		
27		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	270	mg/kg	1.56	421.15	mg/kg	0.027 %		
28		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.9	mg/kg	1.353	1.218	mg/kg	0.000122 %		
29		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		30	mg/kg	2.976	89.288	mg/kg	0.00893 %		
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
31		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		36	mg/kg	1.785	64.267	mg/kg	0.00643 %		
32		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		140	mg/kg	2.774	388.381	mg/kg	0.0388 %		
33		benzene	601-020-00-8	200-753-7	71-43-2		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
34		toluene	601-021-00-3	203-625-9	108-88-3		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
35		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
37		TPH (C6 to C40) petroleum group			TPH		217	mg/kg		217	mg/kg	0.0217 %		
											Total:	0.168 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0217%)

Classification of sample: BH001

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH001
Sample Depth:
1.20 m
Moisture content:
18%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		8.1	pH		8.1	pH	8.1 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.07	mg/kg		0.07	mg/kg	0.000007 %		
3	●	acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
4	●	acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
5	●	fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
6	●	phenanthrene		201-581-5	85-01-8		0.16	mg/kg		0.16	mg/kg	0.000016 %		
7	●	anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
8	●	fluoranthene		205-912-4	206-44-0		0.2	mg/kg		0.2	mg/kg	0.00002 %		
9	●	pyrene		204-927-3	129-00-0		0.2	mg/kg		0.2	mg/kg	0.00002 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.1	mg/kg		0.1	mg/kg	0.00001 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		0.13	mg/kg		0.13	mg/kg	0.000013 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.12	mg/kg		0.12	mg/kg	0.000012 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.1	mg/kg		0.1	mg/kg	0.00001 %		
15	●	indeno[123-cd]pyrene		205-893-2	193-39-5		0.05	mg/kg		0.05	mg/kg	0.000005 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17	●	benzo[ghi]perylene		205-883-8	191-24-2		0.08	mg/kg		0.08	mg/kg	0.000008 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				12	mg/kg		12	mg/kg	0.0012 %		
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00286 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 0.0012%)

Classification of sample: BH002

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH002
Sample Depth:
1.20 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		8.2	pH		8.2	pH	8.2 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
5		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
11		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
15		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				6.8	mg/kg		6.8	mg/kg	0.00068 %		
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00227 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 0.00068%)

Classification of sample: BH003

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH003
Sample Depth:
1.20 m
Moisture content:
21%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		8.1	pH		8.1	pH	8.1 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.5	mg/kg		0.5	mg/kg	0.00005 %		
3		acenaphthylene		205-917-1	208-96-8		0.05	mg/kg		0.05	mg/kg	0.000005 %		
4		acenaphthene		201-469-6	83-32-9		0.88	mg/kg		0.88	mg/kg	0.000088 %		
5		fluorene		201-695-5	86-73-7		0.73	mg/kg		0.73	mg/kg	0.000073 %		
6		phenanthrene		201-581-5	85-01-8		6.7	mg/kg		6.7	mg/kg	0.00067 %		
7		anthracene		204-371-1	120-12-7		1.8	mg/kg		1.8	mg/kg	0.00018 %		
8		fluoranthene		205-912-4	206-44-0		11	mg/kg		11	mg/kg	0.0011 %		
9		pyrene		204-927-3	129-00-0		10	mg/kg		10	mg/kg	0.001 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		5.4	mg/kg		5.4	mg/kg	0.00054 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		5.1	mg/kg		5.1	mg/kg	0.00051 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		5.8	mg/kg		5.8	mg/kg	0.00058 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2.2	mg/kg		2.2	mg/kg	0.00022 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		5.2	mg/kg		5.2	mg/kg	0.00052 %		
15		indeno[123-cd]pyrene		205-893-2	193-39-5		2.5	mg/kg		2.5	mg/kg	0.00025 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.67	mg/kg		0.67	mg/kg	0.000067 %		
17		benzo[ghi]perylene		205-883-8	191-24-2		2.9	mg/kg		2.9	mg/kg	0.00029 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00815 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: BH004

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH004
Sample Depth:
1.20 m
Moisture content:
15%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		8.2	pH		8.2	pH	8.2 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
5		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6		phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8		fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9		pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
11		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
15		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				6.9	mg/kg		6.9	mg/kg	0.00069 %		
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				12	mg/kg		12	mg/kg	0.0012 %		
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00298 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

toluene: (conc.: 0.00069%)
ethylbenzene: (conc.: 0.0012%)

Classification of sample: BH005

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
BH005
Sample Depth:
1.20 m
Moisture content:
28%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 28% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		7.8	pH		7.8	pH	7.8 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.11	mg/kg		0.11	mg/kg	0.000011 %		
3	●	acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
4	●	acenaphthene		201-469-6	83-32-9		0.19	mg/kg		0.19	mg/kg	0.000019 %		
5	●	fluorene		201-695-5	86-73-7		0.11	mg/kg		0.11	mg/kg	0.000011 %		
6	●	phenanthrene		201-581-5	85-01-8		0.96	mg/kg		0.96	mg/kg	0.000096 %		
7	●	anthracene		204-371-1	120-12-7		0.2	mg/kg		0.2	mg/kg	0.00002 %		
8	●	fluoranthene		205-912-4	206-44-0		1.1	mg/kg		1.1	mg/kg	0.00011 %		
9	●	pyrene		204-927-3	129-00-0		0.99	mg/kg		0.99	mg/kg	0.000099 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.49	mg/kg		0.49	mg/kg	0.000049 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		0.53	mg/kg		0.53	mg/kg	0.000053 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.57	mg/kg		0.57	mg/kg	0.000057 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.2	mg/kg		0.2	mg/kg	0.00002 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.47	mg/kg		0.47	mg/kg	0.000047 %		
15	●	indeno[123-cd]pyrene		205-893-2	193-39-5		0.23	mg/kg		0.23	mg/kg	0.000023 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.08	mg/kg		0.08	mg/kg	0.000008 %		
17	●	benzo[ghi]perylene		205-883-8	191-24-2		0.28	mg/kg		0.28	mg/kg	0.000028 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00266 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: TP001[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP001[3]
Sample Depth:
0.50 m
Moisture content:
21%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		7.6	pH		7.6	pH	7.6 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.07	mg/kg		0.07	mg/kg	0.000007 %		
3		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
4		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
5		fluorene		201-695-5	86-73-7		0.18	mg/kg		0.18	mg/kg	0.000018 %		
6		phenanthrene		201-581-5	85-01-8		0.52	mg/kg		0.52	mg/kg	0.000052 %		
7		anthracene		204-371-1	120-12-7		0.06	mg/kg		0.06	mg/kg	0.000006 %		
8		fluoranthene		205-912-4	206-44-0		0.5	mg/kg		0.5	mg/kg	0.00005 %		
9		pyrene		204-927-3	129-00-0		0.52	mg/kg		0.52	mg/kg	0.000052 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.23	mg/kg		0.23	mg/kg	0.000023 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		0.26	mg/kg		0.26	mg/kg	0.000026 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.28	mg/kg		0.28	mg/kg	0.000028 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.09	mg/kg		0.09	mg/kg	0.000009 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.2	mg/kg		0.2	mg/kg	0.00002 %		
15		indeno[123-cd]pyrene		205-893-2	193-39-5		0.11	mg/kg		0.11	mg/kg	0.000011 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		benzo[ghi]perylene		205-883-8	191-24-2		0.15	mg/kg		0.15	mg/kg	0.000015 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00234 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: TP001[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP001[4]
Sample Depth:
0.60 m
Moisture content:
19%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1	•	TPH (C6 to C40) petroleum group		TPH		180	mg/kg		180	mg/kg	0.018 %		
										Total:	0.018 %		

Key

	User supplied data
•	Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.018%)

Classification of sample: TP001[5]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP001[5]
Sample Depth:
1.00 m
Moisture content:
19%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		7.9	pH		7.9	pH	7.9 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	●	acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	●	acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
5	●	fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	●	phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	●	anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	●	fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	●	pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
11		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
15	●	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17	●	benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				12	mg/kg		12	mg/kg	0.0012 %		
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
				TPH									
24	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00379 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 0.0012%)

Classification of sample: TP002[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP002[2]
Sample Depth:
0.50 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		8.1	pH		8.1	pH	8.1 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.22	mg/kg		0.22	mg/kg	0.000022 %		
3	●	acenaphthylene		205-917-1	208-96-8		0.11	mg/kg		0.11	mg/kg	0.000011 %		
4	●	acenaphthene		201-469-6	83-32-9		0.71	mg/kg		0.71	mg/kg	0.000071 %		
5	●	fluorene		201-695-5	86-73-7		0.64	mg/kg		0.64	mg/kg	0.000064 %		
6	●	phenanthrene		201-581-5	85-01-8		6.1	mg/kg		6.1	mg/kg	0.00061 %		
7	●	anthracene		204-371-1	120-12-7		1.2	mg/kg		1.2	mg/kg	0.00012 %		
8	●	fluoranthene		205-912-4	206-44-0		8.9	mg/kg		8.9	mg/kg	0.00089 %		
9	●	pyrene		204-927-3	129-00-0		9	mg/kg		9	mg/kg	0.0009 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		4.2	mg/kg		4.2	mg/kg	0.00042 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		4.3	mg/kg		4.3	mg/kg	0.00043 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		4.7	mg/kg		4.7	mg/kg	0.00047 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.6	mg/kg		1.6	mg/kg	0.00016 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		4.2	mg/kg		4.2	mg/kg	0.00042 %		
15	●	indeno[123-cd]pyrene		205-893-2	193-39-5		1.9	mg/kg		1.9	mg/kg	0.00019 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.5	mg/kg		0.5	mg/kg	0.00005 %		
17	●	benzo[ghi]perylene		205-883-8	191-24-2		2.4	mg/kg		2.4	mg/kg	0.00024 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00707 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: TP002[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP002[3]
Sample Depth:
0.60 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1	●	TPH (C6 to C40) petroleum group		TPH		17	mg/kg		17	mg/kg	0.0017 %		
										Total:	0.0017 %		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0017%)

Classification of sample: TP002[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP002[4]
Sample Depth:
0.90 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		7.7	pH		7.7	pH	7.7 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
3		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
4		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
5		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
6		phenanthrene		201-581-5	85-01-8		0.08	mg/kg		0.08	mg/kg	0.000008 %		
7		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
8		fluoranthene		205-912-4	206-44-0		0.09	mg/kg		0.09	mg/kg	0.000009 %		
9		pyrene		204-927-3	129-00-0		0.08	mg/kg		0.08	mg/kg	0.000008 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
11		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
15		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		**<LOD**
				TPH									
24	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0031 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: WS001[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS001[3]
Sample Depth:
0.60 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		7.8	pH		7.8	pH	7.8 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.47	mg/kg		0.47	mg/kg	0.000047 %		
3		acenaphthylene		205-917-1	208-96-8		0.44	mg/kg		0.44	mg/kg	0.000044 %		
4		acenaphthene		201-469-6	83-32-9		1.1	mg/kg		1.1	mg/kg	0.00011 %		
5		fluorene		201-695-5	86-73-7		1.1	mg/kg		1.1	mg/kg	0.00011 %		
6		phenanthrene		201-581-5	85-01-8		11	mg/kg		11	mg/kg	0.0011 %		
7		anthracene		204-371-1	120-12-7		2.3	mg/kg		2.3	mg/kg	0.00023 %		
8		fluoranthene		205-912-4	206-44-0		18	mg/kg		18	mg/kg	0.0018 %		
9		pyrene		204-927-3	129-00-0		18	mg/kg		18	mg/kg	0.0018 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		8.2	mg/kg		8.2	mg/kg	0.00082 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		8.2	mg/kg		8.2	mg/kg	0.00082 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		9.5	mg/kg		9.5	mg/kg	0.00095 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		3	mg/kg		3	mg/kg	0.0003 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		7.8	mg/kg		7.8	mg/kg	0.00078 %		
15		indeno[123-cd]pyrene		205-893-2	193-39-5		3.7	mg/kg		3.7	mg/kg	0.00037 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.99	mg/kg		0.99	mg/kg	0.000099 %		
17		benzo[ghi]perylene		205-883-8	191-24-2		4.6	mg/kg		4.6	mg/kg	0.00046 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				12	mg/kg		12	mg/kg	0.0012 %		
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	TPH (C6 to C40) petroleum group				110	mg/kg		110	mg/kg	0.011 %		
				TPH									
24	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0237 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 0.0012%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.011%)

Classification of sample: WS001[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS001[4]
Sample Depth:
1.20 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		8.3	pH		8.3	pH	8.3 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.06	mg/kg		0.06	mg/kg	0.000006 %		
3		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
4		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
5		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
6		phenanthrene		201-581-5	85-01-8		0.22	mg/kg		0.22	mg/kg	0.000022 %		
7		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
8		fluoranthene		205-912-4	206-44-0		0.25	mg/kg		0.25	mg/kg	0.000025 %		
9		pyrene		204-927-3	129-00-0		0.28	mg/kg		0.28	mg/kg	0.000028 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.14	mg/kg		0.14	mg/kg	0.000014 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		0.2	mg/kg		0.2	mg/kg	0.00002 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.19	mg/kg		0.19	mg/kg	0.000019 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.09	mg/kg		0.09	mg/kg	0.000009 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.19	mg/kg		0.19	mg/kg	0.000019 %		
15		indeno[123-cd]pyrene		205-893-2	193-39-5		0.1	mg/kg		0.1	mg/kg	0.00001 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		benzo[ghi]perylene		205-883-8	191-24-2		0.15	mg/kg		0.15	mg/kg	0.000015 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00222 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: WS002[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS002[3]
Sample Depth:
0.50 m
Moisture content:
21%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		6.6	pH		6.6	pH	6.6 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		0.15	mg/kg		0.15	mg/kg	0.000015 %		
3		acenaphthylene		205-917-1	208-96-8		0.1	mg/kg		0.1	mg/kg	0.00001 %		
4		acenaphthene		201-469-6	83-32-9		0.2	mg/kg		0.2	mg/kg	0.00002 %		
5		fluorene		201-695-5	86-73-7		0.28	mg/kg		0.28	mg/kg	0.000028 %		
6		phenanthrene		201-581-5	85-01-8		1.8	mg/kg		1.8	mg/kg	0.00018 %		
7		anthracene		204-371-1	120-12-7		0.35	mg/kg		0.35	mg/kg	0.000035 %		
8		fluoranthene		205-912-4	206-44-0		2.2	mg/kg		2.2	mg/kg	0.00022 %		
9		pyrene		204-927-3	129-00-0		2.4	mg/kg		2.4	mg/kg	0.00024 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.2	mg/kg		1.2	mg/kg	0.00012 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		1.2	mg/kg		1.2	mg/kg	0.00012 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.3	mg/kg		1.3	mg/kg	0.00013 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.42	mg/kg		0.42	mg/kg	0.000042 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		1.2	mg/kg		1.2	mg/kg	0.00012 %		
15		indeno[123-cd]pyrene		205-893-2	193-39-5		0.53	mg/kg		0.53	mg/kg	0.000053 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.15	mg/kg		0.15	mg/kg	0.000015 %		
17		benzo[ghi]perylene		205-883-8	191-24-2		0.65	mg/kg		0.65	mg/kg	0.000065 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-881-7	191-07-1									
19		benzene				5.3	mg/kg		5.3	mg/kg	0.00053 %		
		601-020-00-8	200-753-7	71-43-2									
20		toluene				7.2	mg/kg		7.2	mg/kg	0.00072 %		
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		**<LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		**<LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00367 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

benzene: (conc.: 0.00053%)
toluene: (conc.: 0.00072%)

Classification of sample: WS002[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS002[4]
Sample Depth:
0.60 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1	●	TPH (C6 to C40) petroleum group		TPH		960	mg/kg		960	mg/kg	0.096 %		
										Total:	0.096 %		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.096%)

Classification of sample: WS002[5]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS002[5]
Sample Depth:
1.20 m
Moisture content:
12%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		8.1	pH		8.1	pH	8.1 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
3	●	acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
4	●	acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
5	●	fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
6	●	phenanthrene		201-581-5	85-01-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
7	●	anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
8	●	fluoranthene		205-912-4	206-44-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	●	pyrene		204-927-3	129-00-0		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
11		chrysene	601-048-00-0	205-923-4	218-01-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
15	●	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17	●	benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.00209 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: WS002[6]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS002[6]
Sample Depth:
1.70 m
Moisture content:
16%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 16% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: WS002[7]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS002[7]
Sample Depth:
2.20 m
Moisture content:
17%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1		TPH (C6 to C40) petroleum group		TPH		410	mg/kg		410	mg/kg	0.041 %		
										Total:	0.041 %		

Key

	User supplied data
	Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.041%)

Classification of sample: WS002[8]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS002[8]
Sample Depth:
2.70 m
Moisture content:
11%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1	●	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		**<LOD**
				TPH							
								Total:	0.001 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Classification of sample: WS003[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS003[2]
Sample Depth:
0.30 m
Moisture content:
24%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 24% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1	●	TPH (C6 to C40) petroleum group		TPH		670	mg/kg		670	mg/kg	0.067 %		
										Total:	0.067 %		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.067%)

Classification of sample: WS003[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS003[3]
Sample Depth:
0.50 m
Moisture content:
25%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 25% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		6.7	pH		6.7	pH	6.7 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		3.7	mg/kg		3.7	mg/kg	0.00037 %		
3	●	acenaphthylene		205-917-1	208-96-8		11	mg/kg		11	mg/kg	0.0011 %		
4	●	acenaphthene		201-469-6	83-32-9		8.1	mg/kg		8.1	mg/kg	0.00081 %		
5	●	fluorene		201-695-5	86-73-7		22	mg/kg		22	mg/kg	0.0022 %		
6	●	phenanthrene		201-581-5	85-01-8		180	mg/kg		180	mg/kg	0.018 %		
7	●	anthracene		204-371-1	120-12-7		43	mg/kg		43	mg/kg	0.0043 %		
8	●	fluoranthene		205-912-4	206-44-0		240	mg/kg		240	mg/kg	0.024 %		
9	●	pyrene		204-927-3	129-00-0		220	mg/kg		220	mg/kg	0.022 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		88	mg/kg		88	mg/kg	0.0088 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		85	mg/kg		85	mg/kg	0.0085 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		92	mg/kg		92	mg/kg	0.0092 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		30	mg/kg		30	mg/kg	0.003 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		85	mg/kg		85	mg/kg	0.0085 %		
15	●	indeno[123-cd]pyrene		205-893-2	193-39-5		41	mg/kg		41	mg/kg	0.0041 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		11	mg/kg		11	mg/kg	0.0011 %		
17	●	benzo[ghi]perylene		205-883-8	191-24-2		49	mg/kg		49	mg/kg	0.0049 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				14	mg/kg		14	mg/kg	0.0014 %		
			205-881-7	191-07-1									
19		benzene				5.5	mg/kg		5.5	mg/kg	0.00055 %		
		601-020-00-8	200-753-7	71-43-2									
20		toluene				7.5	mg/kg		7.5	mg/kg	0.00075 %		
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				13	mg/kg		13	mg/kg	0.0013 %		
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.125 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

benzene: (conc.: 0.00055%)
toluene: (conc.: 0.00075%)
ethylbenzene: (conc.: 0.0013%)

Classification of sample: WS004[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS004[2]
Sample Depth:
0.30 m
Moisture content:
18%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1	●	TPH (C6 to C40) petroleum group		TPH		52	mg/kg		52	mg/kg	0.0052 %		
										Total:	0.0052 %		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"
Force this Hazardous property to non hazardous because No elevated PIDs detected

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0052%)

Classification of sample: WS004[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
WS004[3]
Sample Depth:
0.40 m
Moisture content:
20%
(no correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 20% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1		pH			PH		7.8	pH		7.8	pH	7.8 pH		
2		naphthalene	601-052-00-2	202-049-5	91-20-3		4.6	mg/kg		4.6	mg/kg	0.00046 %		
3		acenaphthylene		205-917-1	208-96-8		3.5	mg/kg		3.5	mg/kg	0.00035 %		
4		acenaphthene		201-469-6	83-32-9		6.4	mg/kg		6.4	mg/kg	0.00064 %		
5		fluorene		201-695-5	86-73-7		9.2	mg/kg		9.2	mg/kg	0.00092 %		
6		phenanthrene		201-581-5	85-01-8		66	mg/kg		66	mg/kg	0.0066 %		
7		anthracene		204-371-1	120-12-7		16	mg/kg		16	mg/kg	0.0016 %		
8		fluoranthene		205-912-4	206-44-0		82	mg/kg		82	mg/kg	0.0082 %		
9		pyrene		204-927-3	129-00-0		78	mg/kg		78	mg/kg	0.0078 %		
10		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		37	mg/kg		37	mg/kg	0.0037 %		
11		chrysene	601-048-00-0	205-923-4	218-01-9		33	mg/kg		33	mg/kg	0.0033 %		
12		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		37	mg/kg		37	mg/kg	0.0037 %		
13		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		14	mg/kg		14	mg/kg	0.0014 %		
14		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		35	mg/kg		35	mg/kg	0.0035 %		
15		indeno[123-cd]pyrene		205-893-2	193-39-5		17	mg/kg		17	mg/kg	0.0017 %		
16		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		4.7	mg/kg		4.7	mg/kg	0.00047 %		
17		benzo[ghi]perylene		205-883-8	191-24-2		20	mg/kg		20	mg/kg	0.002 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18	●	coronene				5.5	mg/kg		5.5	mg/kg	0.00055 %		
			205-881-7	191-07-1									
19		benzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
20		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
21	●	ethylbenzene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
22		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
23	●	polychlorobiphenyls; PCB				<0.007	mg/kg		<0.007	mg/kg	<0.0000007 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
										Total:	0.0489 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
<LOD	Below limit of detection

Appendix A: Classifier defined and non GB MCL determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source: http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2; H371

barium oxide (EC Number: 215-127-9, CAS Number: 1304-28-5)

Description/Comments: Data from ECHA's C&L Inventory Database, Sigma Aldrich SDS dated 6/2/20
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/88825
Data source date: 02 Apr 2020
Hazard Statements: Acute Tox. 3; H301 , Skin Corr. 1B; H314 , Eye Dam. 1; H318 , Acute Tox. 1; H332

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

GB MCL index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans;

POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

barium {barium oxide}

No Chromium Vi detected

beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics (edit as required)

boron {diboron trioxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2024.80.5988.11077 (20 Mar 2024)
HazWasteOnline Database: 2024.80.5988.11077 (20 Mar 2024)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v4.0 - version 4.0 of 2nd March 2024