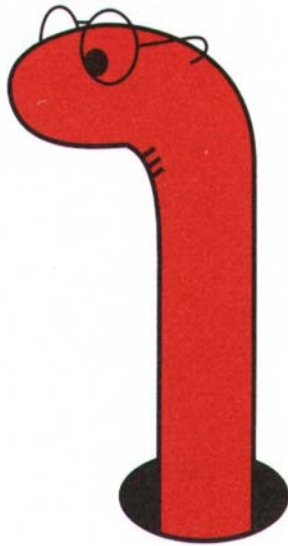


Electronic Report



WORMS EYE

Worms Eye Limited
PO Box 1157
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BB9 4HS

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info@wormseye.co.uk

Our Ref: Wilmslow Road / M20 4GJ / 2024
Date: 3 March 2025

Tim Greenwood
Elm Grange
559-561 Wilmslow Road
Manchester
M20 4GJ

Copy to: Roger Pike
roger@neilpikearchitects.co.uk

559 – 561 WILMSLOW ROAD, MANCHESTER, M20 4GJ

INTRUSIVE REPORT – Updated 3/3/25

INTRODUCTION

A residential extension is proposed. Following a Preliminary Risk Assessment (PRA 2/10/24) instructions were to carry out boreholes, tests and landfill gas testing to investigate potential contamination and ground gas issues. This is an updated version of our report dated 12/2/25 following supplementary gas monitoring.

SITE LOCATION

The overall plot is rectangular, 45 by 40m, located to the southeast of Wilmslow Road in Manchester and at OS Grid Reference 384970, 392440. There are two houses (each with a basement), converted into apartments, at the northeast and southwest, with parking at the northwest and southeast, and small landscaped areas. There are no obvious signs of contamination. The area of the development, referred to as 'The Site', comprises a single storey conservatory style extension, linking the apartment blocks, and landscaping to the rear.

The area slopes down gently to the northwest. There is a hospital to the northwest and houses to the northeast, southeast and southwest.

PROPOSED DEVELOPMENT

It is proposed build a larger extension (including a basement) to link apartment blocks. No new landscaped areas will be created, but landscaping at the centre and southeast middle will be removed for the extension and additional car parking respectively. The existing parking areas will also remain.

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PRELIMINARY RISK ASSESSMENT

Worms Eye carried out a PRA dated 2/10/24, the salient points were:

Contamination

The site is a conservatory style extension, linking two houses which were converted to apartments. Whilst this is not a source of contaminants at significantly high levels, low levels may be present from building materials (asbestos, sulphate, lead, PAHs). Furthermore, the site is underlain by a filled pond. The nature of the fill material is not known and may also be a source of contaminants at low levels, exceeding stringent residential thresholds.

There have been no nearby land uses which will affect the site, although there is a sub-station 50m southwest, PCBs (if present) from these do not migrate far from their source.

The development will be an extension linking two apartment blocks. There will be no new landscaping and existing landscaping will be reduced to allow the extension and additional parking to be built. Potential pollutant linkages are considered to be:

- Sulphate attack on buried concrete.

Although contaminants may exceed stringent residential thresholds the proposal is for an extension and increased car parking, where there will be no direct contact. No risks are expected to householders in the area of the extension and a limited intrusive investigation is suggested, consisting of boreholes/trial holes and tests to confirm the presence/absence and extent of contamination on the site. This will also help to design buried concrete and classify soil for disposal off-site.

Controlled Waters

There is an underlying Secondary A aquifer beneath clay. There are no nearby water abstraction points or source protection zone.

The extension and car park will remove existing landscaping and reduce opportunity for rainwater to pass through the surface soils. Furthermore, contaminants are not expected at high levels, the underlying clay will impede the migration of water. No risk is expected to controlled water and no further action is considered necessary at this stage.

Landfill Gas/Ground Gas

Although there are no landfill sites within 250m, the site was originally occupied by a pond which was filled in the 1800s. This suggests that fill material is likely to be inert (ash and soil based) and not a significant source of gases. However, this cannot be ruled out at this stage and a low gas risk may be present. A gas testing programme is required.

PRA Re-Cap Continued

Radon

Radon protection measures are not required.

Industry Profile

The site has had no industrial use, however, contaminants may be present from building materials or in fill material below the site.

Industry	Possible Contaminants
Building materials/ Filled ground	Metals: copper, zinc, chromium, nickel, lead, cadmium, arsenic, Inorganic compounds: cyanide, sulphates Phenols Mineral oils, fuel oils (TPHs) Asbestos General hydrocarbons (PAHs)

Pollutant Linkages

The potential pollutant linkages revealed by the PRA as requiring further investigation were:

Source	Receptors	Pathway	Potential/Likely Pollutant Linkage
Asbestos	End-users	No direct contact	No
	Off-site	Migration off-site	Unlikely
Inorganic contaminants	Householders	No direct contact	No
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Sulphate	Building fabric	Concrete directly in contact with soil	Possible
Hydrocarbons	Householders	No direct contact	No
	Service pipes	No new drinking water pipes required	No
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Hydrocarbon vapours	Householders	Inhalation of vapours indoors and outdoors	No
Landfill gas	End-users (inside)	Seeping into buildings, explosion, asphyxiation	Yes
Radon	End-users (inside)	Seeping into buildings	No

End of PRA Re-Cap

GROUND INVESTIGATIONS

Three boreholes were drilled and details are given on the enclosed location plan and borehole logs. These show similar conditions with made ground overlying possible made ground before clay and sand were encountered, however, depth of strata varied.

BH1 (west) encountered made ground (gravel, brick, clay) to about 2.0m overlying possible made ground (clay) to 2.7m where dense sand was seen before refusing at 3.1m deep.

BH2 (east/middle) found made ground (clay, soil, wood) to 0.4m overlying possible made ground (clay) to 1.5m before clay was seen. Dense sand was encountered below 1.8m becoming possible sandstone between 2.1m and 2.2m where it refused.

BH3 (east) had made ground (hardcore and clayey soil) to 0.4m overlying clay, with dense sand below 1.9m becoming possible sandstone between 2.4m and 2.6m where the borehole refused.

The following approximates to a section looking north.

Findings	BH1 (m)	BH2 (m)	BH3 (m)
Made ground	0.0 – 2.0	0.0 – 0.4	0.0 – 0.4
Possible made ground (clay)	2.0 – 2.7	0.4 – 1.5	-
Clay	-	1.5 – 1.8	0.4 – 1.9
Dense sand	2.7 – 3.1	1.8 – 2.1	1.9 – 2.4
Dense sand (possible rock)	3.1+	2.1 – 2.2+	2.4 – 2.6+
Water (monitored)	Dry	1.5	1.9

CONTAMINATION TESTING

Five samples (three shallow, two deeper) were tested for a range of contaminants indicated by the PRA. The maximum values have been compared with residential C4Ls (without homegrown vegetables), soil guideline values provided by CLEA and values based on the LQM/CIEH S4ULS. In accordance with guidance provided by the AGS, threshold values from other sources have been used for screening purposes. This information is brought together on the enclosed Comparison Table.

Asbestos – No asbestos fibres were detected.

Inorganics (metals etc.) – Levels of inorganic contaminants are below residential thresholds.

Sulphate – Water Soluble Sulphate levels are below the BRE action level for buried concrete.

Hydrocarbons – Phenols and TPHs are below residential thresholds.

Regarding PAHs, the following exceed the screening thresholds:

Benzo(a)anthracene (BaA)	-BH2 at 0.3m
Benzo(a)pyrene (BaP)	-BH1, BH2, BH3 at 0.3m
Benzo(b)fluoranthene (BbF)	-BH1, BH2, BH3 at 0.3m
Chrysene	- BH2 at 0.3m
Dibenzo(ah)anthracene (DbA)	- BH1, BH2, BH3 at 0.3m

DISPOSAL OF EXCAVATED SOIL

Results have been compared with hazardous waste thresholds and a Hazwaste Report is enclosed. This suggests excavated soil should not be classed as hazardous waste. However, WAC tests show levels of TOC, PAHs and fluoride exceed the threshold for disposal at inert waste landfill.

LEACHATE TESTING/WATER

Soil samples with raised levels of contaminants, seen to be a potential risk to controlled waters were tested to determine the leachate potential. The results are included and have been compared with the UK drinking water quality levels (DWQ) and Environmental Quality Standards (EQS) and the information has been brought together on the enclosed comparison table. This shows leachate levels to be below appropriate thresholds.

GAS TESTING

Gas Monitors

The boreholes were converted to gas monitors as follow:

	BH1 (m)	BH2 (m)	BH3 (m)
Plain pipe	0.0 – 1.0	0.0 – 0.5	0.0 – 1.0
Base of slotted pipe	2.9	2.2	2.6
Response zone	1.0 – 2.9	0.5 – 2.2	1.0 – 2.6

Twelve gas tests have been carried out on four occasions. Worst-case values are:

Gas	Site Value	Limit of detection
Methane %	5.7	0.1
Oxygen %	0.4	0.1
Carbon dioxide %	8.8	0.1
Flow rate l/hr	0.0	0.1

Assessing Risks - CIRIA

The method recommended in CIRIA Report **C665 (2007)** "Assessing risks posed by hazardous ground gases to building, Table 8.7", is used to classify the site. These range from a Characteristic Situation 1 (negligible gas) through to 6 (very high gas).

The gas screening values (GSV) are calculated from the worst-case values as follows:

	Site Value	Characteristic Situation 1		Characteristic Situation 2	
		Threshold	Pass/Fail	Threshold	Pass/Fail
Outflow (l/hr)	<0.1	-	-	70	-
Methane - Total (%)	5.7	1	F	-	-
Methane GSV (l/hr)	<0.0057	0.07	P	0.7	P
CO ₂ -Total (%)	8.8	5	F	-	-
CO ₂ GSV (l/hr)	<0.0088	0.07	P	0.7	P

Gas screening value = gas concentration (%) multiplied by outflow (l/hr)

These classify the site Situation 2 based on maximum methane and carbon dioxide levels.

DISCUSSION

Contamination

Contamination tests show the following PAHs to exceed their respective screening thresholds:

BH	Depth (m)	BaA	BaP	BbF	Chrysene	DbA
1	0.2		X	X		X
2	0.2	X	X	X	X	X
3	0.2		X	X		X

As the proposal does not include landscaping, to assess these further, Site Specific Assessment Criteria (SSAC) were derived based on a hard-surfaced development (extension and car park) with no harden or landscaping.

Comparing the level of PAHs against the SSAC shows the levels to be below the threshold. Bearing this in mind, and the development being fully hard-surfaced, it is considered there is no risk to householder and no further action is required with regards to contaminated soils.

Water Soluble Sulphate levels are below the threshold and sulphate resistant concrete is not required.

Volatile hydrocarbons are below the thresholds and there is no risk from hydrocarbon vapours.

Excavated Soils

Comparing result hazardous waste thresholds suggests excavated soil should not be classed as hazardous waste, and WAC tests indicate that TOC, PAHs and fluoride exceed the threshold for disposal at inert waste landfill and may pose difficulties for off-site disposal.

Controlled Waters

Regarding risks to controlled waters:

- The site is underlain by a Principal aquifer.
- The nearest water course is Shaw Brook, 344m north.
- Made ground will be taken away or covered, removing or considerably reducing the opportunity for leaching.
- The development is mostly hard surfaced; this will eliminate water soaking into the ground and leaching out contaminants.
- There are no nearby water abstraction points or source protection zones.
- Leachate tests are below appropriate thresholds.

Bearing in mind all of the above factors, it is considered that there are no risks to controlled waters and no significant pathway will arise.

Landfill Gas/Ground Gas

Tests show a gas situation 2 having raised methane and carbon dioxide, with very low GSVs suggesting a low risk. There has been very little variation in methane and carbon dioxide levels over the testing period and no detectable outflow.

The following are also considered:

- Boreholes show 2m of made ground at the front, rising to 0.4m at the rear.
- There is no obvious degradable material in the made ground.
- Tests show a worst case TOC level of 2.9%.
- Made ground has been in place since the houses were built circa late 1800s.
- Testing has been carried out under various weather conditions and temperatures.
- Testing has been carried out with variable atmospheric pressure including a fall of 13mb in 24 hours.

Bearing in mind the above it is considered the site can be classed as CS2 in line with Claire RB17 (made ground <3m and >20 years old, TOC <3%). This is in keeping with the gas monitoring and it is considered there is sufficient data to classify the site as CS2 without further monitoring.

The findings indicate that precautions are required to prevent the passage of methane and carbon dioxide into the building and it is considered that further testing will not show a change in the situation.

CONCEPTUAL MODEL

Source	Receptors	Pathway	Complete Pollutant Linkage
Asbestos (none detected)	End-users	No direct contact	No
	Off-site	Migration off-site	No
Inorganic contaminants (below threshold)	Householders	No direct contact	No
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Sulphate (below threshold)	Building fabric	Concrete directly in contact with soil	No
Hydrocarbons (below SSAC)	Householders	No direct contact	No
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Hydrocarbon vapours (low)	Householders	Inhalation of vapours indoors and outdoors	No
Landfill gas (raised methane and carbon dioxide)	End-users (inside)	Seeping into buildings, explosion, asphyxiation	Yes
Radon	End-users (inside)	Seeping into buildings	No

BREAKING PATHWAYS

Construction Workers

Site workers should be made aware of the hazards of working with contaminated soils, and appropriate procedures and PPE adopted to ensure the health and safety of the site operative. All site personnel should be briefed on the discovery strategy in the watching brief and what actions they must take in the event that further evidence of contamination is identified or suspected.

Normal precautions for an urban renewal type project are required. These would include the use of gloves and the provision of washing facilities to avoid ingestion of contaminants.

Watching Brief

A watching brief for unexpected contaminants should be maintained. If unexpected contaminants (e.g. asbestos, oily material, unusual smells) are seen, especially during excavations, work should cease and the consultant be notified and the site inspected.

Excavated Soils

The findings suggest excavated soil should not be classed as hazardous waste but WAC tests indicate TOC, PAHs and fluoride exceed the threshold for disposal at inert waste landfill.

The results should be issued to the receiving site to confirmation of its status.

Landfill/Ground Gases

Gas monitoring shows raised levels of methane and carbon dioxide and the findings indicate the site can be classed as CS2. Precautions are required to prevent their passage into the building and the following are considered suitable for the level of risk:

- Ventilation of confined spaces within building.
- A well-constructed reinforced concrete ground bearing slab.
- Minimum penetration of ground slab by services.
- Gas precautions should continue across the cavity and be incorporated into the basement wall construction.
- Gas precautions should be tied into the existing building.
- Visqueen gas barrier (blue with foil layer - resists methane, carbon dioxide and radon)

Each membrane should be used with the appropriate matching cavity tray (or cavity membrane), DPC and service duct 'top hat'. Joints to be lapped and sealed.

Validation of gas membrane will require:

- Summary of gas risk assessment.
- Details of who carried out installation.
- Details of who carried out verification and inspection regime.
- Description of protection measures installed, including photographs.
- Details of non-conformances and how they were rectified (if any).
- Completed gas measures inspection proforma confirming that the gas protection measures were installed as agreed, the membrane was free from tears and punctures, lapped and sealed as agreed at joints around services. This to be included in the Verification Report.

Testing required on imported material

The following tests are required on imported material, tested by the developer or by the supplier:

- Virgin quarried material – 1 or 2 tests depending on stone type. To include arsenic, cadmium, chromium (total), chromium VI, copper, mercury, nickel, lead, selenium, zinc.
- Crushed hardcore, stone, brick – minimum of 1 test per 1000m³. Testing to include arsenic, cadmium, chromium (total), chromium VI, copper, mercury, nickel, lead, selenium, zinc, PAH (16 USEPA speciation), asbestos, TPHs.
- Greenfield/manufactured soils – minimum of 3 tests or 1 test per 250m³ (whichever is greater). Testing to include arsenic, cadmium, chromium (total) chromium VI, copper, mercury, nickel, lead, selenium, zinc, PAH (16 USEPA speciation), asbestos, TPHs.
- Brownfield/screened soils – minimum of 6 tests or 1 per 100m³ (whichever is greater). Testing to include arsenic, cadmium, chromium (total) chromium VI, copper, mercury, nickel, lead, selenium, zinc, PAH (16 USEPA speciation), asbestos, TPHs and any additional analysis dependant on the history of the donor site.

Soil Screen Values

Tests carried out on the imported material, either by the supplier or the consultant, to be screened against residential values, based on 1% SOM. If these are exceeded, site specific value may be derived, subject to them being appropriate.

Validation

A validation report will be required on completion, this will require but not necessarily be limited to:

- Tickets from waste removal contractor and receiving landfill.
- Photographs of excavations to confirm depth.
- Contamination test results for tests on imported soils.
- Photographs to confirm thickness of imported soil types.
- Document (receipt, delivery notes) to show soil types and sources.
- Independent inspection of gas membrane and report.

This report is usually a collaboration between the contractor, who will collect the above documentation and Worms Eye, who can assist in preparing the Validation Report

OPINION

Contaminated Soils

Contamination tests show levels below residential thresholds appropriate for the development or, where raised, to be below SSAC derived for a hard-surfaced development (extension and car park). It is considered these suggest no risk to end-users and no further action is required.

Sulphate resistant concrete is not required.

There are no risks from hydrocarbon vapours.

Excavated Soils

The findings suggest excavated soil should not be classed as hazardous waste but WAC tests indicate TOC, PAHs and fluoride exceed the threshold for disposal at inert waste landfill and the results should be issued to the receiving site to confirmation of its status.

Controlled Waters

The findings show no risk to controlled waters and no further action is required.

Gas Testing

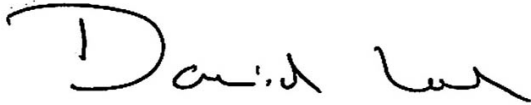
Testing has been carried out over one month and shows a gas situation 2 with raised methane and carbon dioxide, but no outflow and very low GSV.

Ground conditions show a CS2 classification from Claire RB17, agreeing with the gas monitoring.

It is considered that there is sufficient data to classify the site as CS2 without the need for further testing. It is considered that further testing will not show a change in the situation and that and precautions are required to prevent the passage of methane and carbon dioxide into the building.

Yours faithfully

on behalf of Worms Eye Ltd

A handwritten signature in black ink, appearing to read 'David Lord', with a stylized, cursive script.

David Lord

BSc (Hons)

FGS, MEnvSc, AIEMA

List of Appendices – Intrusive Report

List of Acronyms

Proposed site plan – showing borehole locations

Proposed site plan – showing borehole locations

Window Samper Borehole Logs

Contamination Test Results – Soil and Leachate

CLEA Calculation Results

Contamination Comparison Table – Soil

Contamination Comparison Table – Leachate

Contamination Test Results - WAC

Hazwaste Report

Gas Test Results

CONTAMINATION TEST UNITS

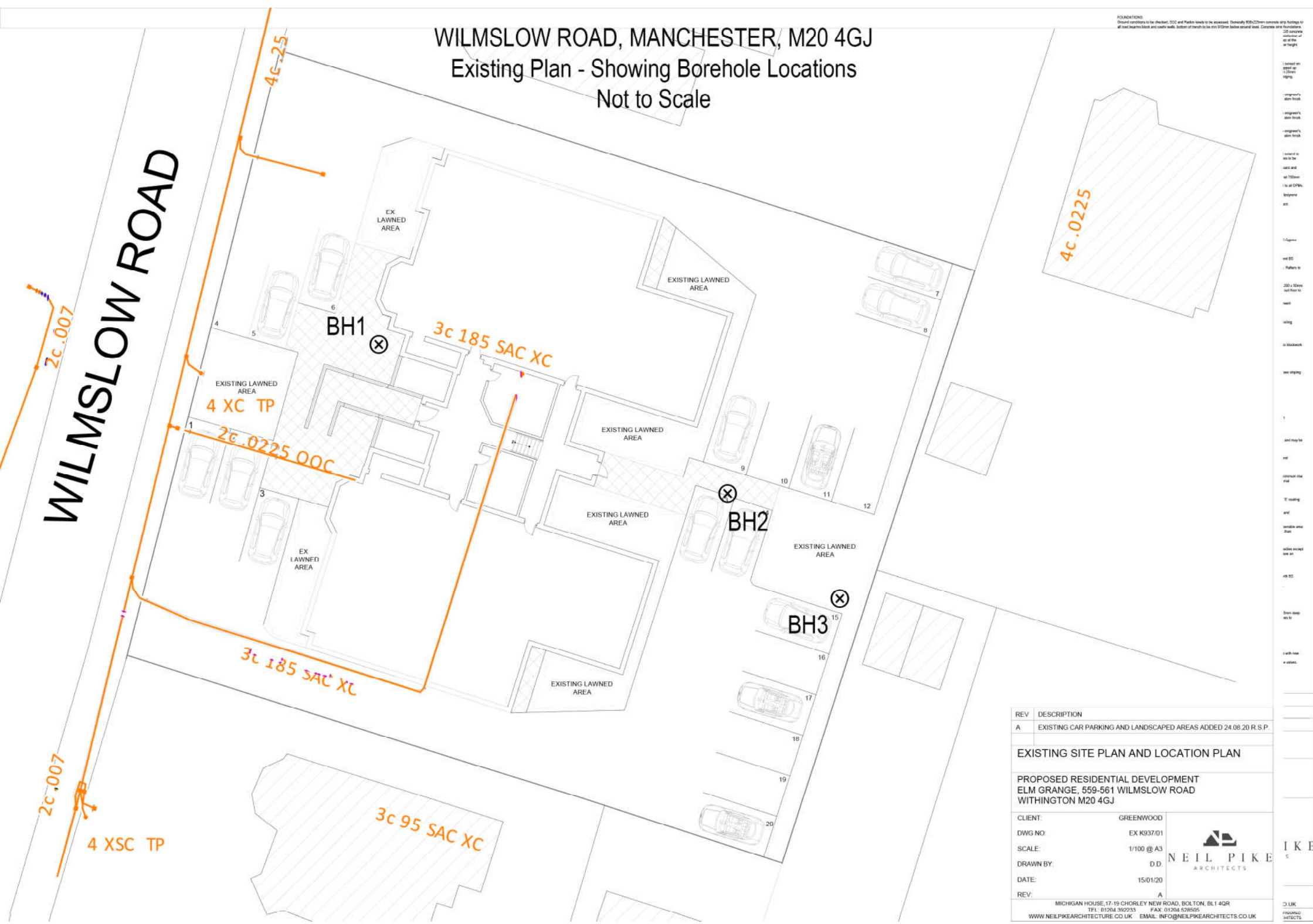
Conversion factor	Name	Symbol	Numerical Value	Alternative description	Commonly used for:
	per cent	%	1 in 100 (10 ²)		total sulphur, hazardous waste
% x10	parts per thousand	‰	1 in 1000 (10 ³)	g/l (grams per litre)	water soluble sulphate test
‰ x 1,000	parts per million	ppm	1 in 1,000,000 (10 ⁶)	mg/kg (milligrams per kilogram)	most soil tests
				mg/l (milligrams per litre)	water tests
ppm x 1,000	parts per billion	ppb	1 in 1,000,000,000 (10 ⁹)	µg/kg (micrograms per kilogram)	PAH soil tests
				µg/l (micrograms per litre)	water/leachate tests
ppb x 1,000	parts per trillion	ppt	1 in 1,000,000,000,000 (10 ¹²)	ng/kg (nanograms per kilogram)	PAH soil tests
				ng/l (nanograms per litre)	water/leachate tests

ABBREVIATIONS

<u>Chemical</u>	BAP	Benzo(a)pyrene
	BTEX	Benzene, toluene, ethylbenzene, xylene
	DAHA	Dibenzo(ah)anthracene
	MTBE	Methyl tertiaryt-butyl ether (additive to petrol)
	EPH	Extractable petroleum hydrocarbons (formerly diesel range organics – DRO)
	NFD	No fibres detected (asbestos test)
	PAH	Polycyclic aromatic hydrocarbons
	PCB	Polychlorinated biphenyls
	PCE	Perchloroethylene or tetrachloroethylene
	PID	Photo ionisation detector (screen for VOC)
	PRO/GRO	Petrol range organics/gasoline range organics
	SVOC	Semi-volatile organic compounds
	TCE	Trichloroethylene
	TPH	Total petroleum hydrocarbons
	VOC	Volatile organic compounds
<u>Other</u>	AGS	Association of Geotechnical Specialists
	BGS	British Geological Survey
	BRE	Building Research Establishment
	CBR	California Bearing Ratio
	CIEH	Chartered Institute of Environmental Health
	CIRIA	Construction Industry Research and Information Association
	CLEA	Contaminated Land Exposure Assessment (Environment Agency/DEFRA)
	CLR 8	Contaminated Land Research Report 8 (Environment Agency/DEFRA)
	DWQ	Drinking water quality
	EA	Environment Agency
	EQS	Environmental quality standards (for rivers etc.)
	ICRCL	Inter-departmental Commission for the Reclamation of Contaminated Land
	LQM	Land Quality Management Ltd (Land and Environmental Consultancy).
	NHBC	National House Builders Council
	SGV	Soil Guideline Values
	SPT	Standard penetration test

1. This report should be considered in relation to the objectives agreed between Worms Eye and the Client, outlined in the introduction.
2. For the work, reliance has been placed on publicly available data, obtained from the sources identified in the report. The information is not exhaustive and further information may be available from other sources. When using the information it has been assumed it is correct, and no attempt has been made to verify the information.
3. This report has been produced in accordance with current UK policy and guidelines, for land and groundwater contamination, enforced by the Local Authority and the Environment Agency.
4. During the site walkover, reasonable effort was made to obtain an overview of the site. However, no attempt was made to enter areas that are unsafe, a risk to health and safety, locked, barricaded, overgrown, or areas not made accessible.
5. Access, the presence of services and activities on the site, limited locations where sampling could be carried out and the techniques that could be used.
6. Assessments are based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
7. The conclusions and recommendations provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
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9. New information, revised practices, or changes in legislation, may necessitate the re-interpretation of the report, in whole or in part.

WILMSLOW ROAD, MANCHESTER, M20 4GJ
Existing Plan - Showing Borehole Locations
Not to Scale



REV	DESCRIPTION
A	EXISTING CAR PARKING AND LANDSCAPED AREAS ADDED 24.08.20 R.S.P.
EXISTING SITE PLAN AND LOCATION PLAN	
PROPOSED RESIDENTIAL DEVELOPMENT ELM GRANGE, 559-561 WILMSLOW ROAD WITHINGTON M20 4GJ	
CLIENT:	GREENWOOD
DWG NO:	EX K937/01
SCALE:	1/100 @ A3
DRAWN BY:	D.D.
DATE:	15/01/20
REV:	A
MICHIGAN HOUSE, 17-19 CHORLEY NEW ROAD, BOLTON, BL1 4QR TEL: 01204 392233 FAX: 01204 528505 WWW.NEILPIKEARCHITECTURE.CO.UK EMAIL: INFO@NEILPIKEARCHITECTS.CO.UK	



IKE

3 UK
HARDWARE
SHEETS

Worms Eye Limited PO Box 1157 COLNE, BB9 4HS					Site Wilmslow Road, Manchester			Number BH1		
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client			Job Number M20 4GJ	
		Location		Dates 22/01/2025		Project Contractor Worms Eye Ltd.			Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr	
					0.05 (0.57) 0.62 (1.38) 2.00 (0.60) 2.60 2.70 (0.40) 3.10	Flag paving stone (excavated by hand). MADE GROUND - Gravelly clayey soil with brick and hardcore (excavated by hand). MADE GROUND - Concrete and brick rubble. Probable MADE GROUND - Brown, sandy, gravelly clay. Possible MADE GROUND - Firm to stiff, brown, sandy, gravelly clay. Dense, reddish/brown SAND. Complete at 3.10m				
Remarks							Scale (approx)	Logged By		
							1:50	EW		
							Figure No. M20 4GJ.BH1			

Worms Eye Limited				PO Box 1157 COLNE, BB9 4HS		Site Wilmslow Road, Manchester		Number BH2			
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client		Job Number M20 4GJ			
		Location		Dates 22/01/2025				Project Contractor Worms Eye Ltd.		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr		
1.70	VANE 122kPa				0.04	Tarmac (excavated by hand).					
					(0.16)						
					(0.20)						
					(0.40)						
						MADE GROUND - Hardcore (excavated by hand).					
						Black, clayey soil and wood (excavated by hand).					
					(0.70)	Brownish grey clay (excavated by hand).					
					1.10	Probable MADE GROUND - Greyish/brown, sandy, gravelly clay.					
					(0.40)						
					1.50	Probable VIRGIN GROUND - Stiff, brown, sandy, gravelly clay.					
					(0.30)						
					1.80	Dense, reddish/brown SAND.					
					(0.30)						
					2.10	Dense, yellowish/brown, SAND or possible weathered sandstone.					
					2.20						
Complete at 2.20m											

Worms Eye Limited				PO Box 1157 COLNE, BB9 4HS		Site Wilmslow Road, Manchester		Number BH3	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client		Job Number M20 4GJ	
		Location		Dates 22/01/2025		Project Contractor Worms Eye Ltd.		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
1.40 									

Worms Eye Limited
52 Bank Parade
Burnley
Lancashire
BB11 1TS

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

e: david@wormseye.co.uk

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 25-003346

Replaces Analytical Report Number: 25-003346, issue no. 1
Additional analysis undertaken.

Leachate analysis added to samples 433816/818 and 820 as per client's request.

Project / Site name:	Wilmslow Road, Manchester	Samples received on:	27/01/2025
Your job number:	M20 4GJ	Samples instructed on/ Analysis started on:	27/01/2025
Your order number:		Analysis completed by:	07/02/2025
Report Issue Number:	2	Report issued on:	10/02/2025
Samples Analysed:	5 soil samples - 3 leachate samples		

Signed: 

Rachel Chappell
Key Account Manager
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
air	- once the analysis is complete

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

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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.

Analytical Report Number: 25-003346
Project / Site name: Wilmslow Road, Manchester

Lab Sample Number	433816	433817	433818	433819	433820
Sample Reference	BH1	BH1	BH2	BH2	BH3
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.30	2.50	0.30	2.20	0.20
Date Sampled	22/01/2025	22/01/2025	22/01/2025	22/01/2025	22/01/2025
Time Taken	1400	1400	1400	1400	1400
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	15.8	< 0.1	23.2	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	17	19	16	15
Total mass of sample received	kg	0.1	NONE	1.1	1.1	1.1	1.2	1.2

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	-	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DKI	-	DKI	-	DKI

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.4	8.7	8.3	8.1	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	-	< 5.0	-	< 5.0
Total Sulphate as SO ₄	%	0.005	MCERTS	0.137	-	0.149	-	0.031
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	670	45	990	110	42
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	335	-	494	-	21.1
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	22.4	-	53.4	-
Sulphide	mg/kg	1	MCERTS	5.4	-	17	-	< 1.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5	-	2.9	-	1.3

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.74	< 0.05	0.32
Acenaphthylene	mg/kg	0.05	MCERTS	0.35	< 0.05	1.6	< 0.05	0.17
Acenaphthene	mg/kg	0.05	MCERTS	0.28	0.07	5.5	< 0.05	1.8
Fluorene	mg/kg	0.05	MCERTS	0.22	0.07	4.5	< 0.05	1.4
Phenanthrene	mg/kg	0.05	MCERTS	2.7	0.71	36	0.33	11
Anthracene	mg/kg	0.05	MCERTS	1.2	0.12	9.4	0.06	2.6
Fluoranthene	mg/kg	0.05	MCERTS	12	0.63	71	0.49	15
Pyrene	mg/kg	0.05	MCERTS	13	0.63	72	0.49	14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.5	0.25	31	0.2	6.7
Chrysene	mg/kg	0.05	MCERTS	8	0.28	34	0.25	6.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	11	0.19	31	0.22	6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3.5	0.13	13	0.07	3.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	9.4	0.22	28	0.19	6.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	5.2	0.08	13	0.08	2.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.98	< 0.05	3.6	< 0.05	0.5
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	5.2	0.11	15	0.06	2.8

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	80	3.48	370	2.44	82.2
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.7	-	12	-	8.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	-	0.3	-	0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	< 1.8	-	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	-	19	-	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	-	60	-	22

Analytical Report Number: 25-003346
Project / Site name: Wilmslow Road, Manchester

Lab Sample Number				433816	433817	433818	433819	433820
Sample Reference				BH1	BH1	BH2	BH2	BH3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.30	2.50	0.30	2.20	0.20
Date Sampled				22/01/2025	22/01/2025	22/01/2025	22/01/2025	22/01/2025
Time Taken				1400	1400	1400	1400	1400
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Lead (aqua regia extractable)	mg/kg	1	MCERTS	170	-	95	-	43
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	-	19	-	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	95	-	81	-	67

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	4	< 2.0	4	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	8.5	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	22	< 8.0	72	< 8.0	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	26	< 10	84	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	30	< 2.0	10
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	27	< 10	250	< 10	32
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	100	< 10	390	< 10	33
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	130	< 10	670	< 10	75

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
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	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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

Analytical Report Number: 25-003346
Project / Site name: Wilmslow Road, Manchester

Lab Sample Number				433816	433818	433820
Sample Reference				BH1	BH2	BH3
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				0.30	0.30	0.20
Date Sampled				22/01/2025	22/01/2025	22/01/2025
Time Taken				1400	1400	1400
Analytical Parameter (Leachate Analysis)				Units	Test Limit of detection	Test Accreditation Status

Speciated PAHs

Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	0.02	0.02	0.01
Fluorene	µg/l	0.01	NONE	0.01	0.01	0.03
Phenanthrene	µg/l	0.01	NONE	0.04	0.04	0.1
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	0.04	0.04
Pyrene	µg/l	0.01	NONE	< 0.01	0.04	0.03
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	0.21
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1	ISO 17025	-	2.4	-
Copper (dissolved)	µg/l	0.7	ISO 17025	-	22	-
Lead (dissolved)	µg/l	1	ISO 17025	7.9	-	-
Zinc (dissolved)	µg/l	0.4	ISO 17025	8	-	-

Analytical Report Number: 25-003346
Project / Site name: Wilmslow Road, Manchester

Lab Sample Number	433816	433818	433820
Sample Reference	BH1	BH2	BH3
Sample Number	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A
Depth (m)	0.30	0.30	0.20
Date Sampled	22/01/2025	22/01/2025	22/01/2025
Time Taken	1400	1400	1400
Analytical Parameter (Leachate Analysis)	Units	Test Limit of detection	Test Accreditation Status

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS,1D,AL}	µg/l	1	NONE	-	< 1.0	-
TPH - Aliphatic >EC6 - EC8 _{HS,1D,AL}	µg/l	1	NONE	-	< 1.0	-
TPH - Aliphatic >EC8 - EC10 _{HS,1D,AL}	µg/l	1	NONE	-	< 1.0	-
TPH - Aliphatic >EC10 - EC12 _{EH,1D,AL,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aliphatic >EC12 - EC16 _{EH,1D,AL,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aliphatic >EC16 - EC21 _{EH,1D,AL,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aliphatic >EC21 - EC35 _{EH,1D,AL,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aliphatic >EC5 - EC35 _{HS+EH,1D,AL,MS}	µg/l	10	NONE	-	< 10	-

TPH - Aromatic >EC5 - EC7 _{HS,1D,AR}	µg/l	1	NONE	-	< 1.0	-
TPH - Aromatic >EC7 - EC8 _{HS,1D,AR}	µg/l	1	NONE	-	< 1.0	-
TPH - Aromatic >EC8 - EC10 _{EH,1D,AR,MS}	µg/l	1	NONE	-	< 1.0	-
TPH - Aromatic >EC10 - EC12 _{EH,1D,AR,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aromatic >EC12 - EC16 _{BH,1D,AR,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aromatic >EC16 - EC21 _{EH,1D,AR,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aromatic >EC21 - EC35 _{BH,1D,AR,MS}	µg/l	10	NONE	-	< 10	-
TPH - Aromatic >EC6 - EC35 _{HS+EH,1D,AR,MS}	µg/l	10	NONE	-	< 10	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	-	< 3.0	-
Benzene	µg/l	1	NONE	-	< 3.0	-
Toluene	µg/l	1	NONE	-	< 3.0	-
Ethylbenzene	µg/l	1	NONE	-	< 3.0	-
p & m-xylene	µg/l	1	NONE	-	< 3.0	-
o-xylene	µg/l	1	NONE	-	< 3.0	-

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

Analytical Report Number : 25-003346

Project / Site name: Wilmslow 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 *
433816	BH1	None Supplied	0.3	Brown loam and clay with gravel and stones
433817	BH1	None Supplied	2.5	Brown clay and loam
433818	BH2	None Supplied	0.3	Brown loam with vegetation and stones
433819	BH2	None Supplied	2.2	Brown clay and loam with gravel
433820	BH3	None Supplied	0.2	Brown loam and clay with gravel and vegetation

Analytical Report Number : 25-003346

Project / Site name: Wilmslow Road, Manchester

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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, 2021	A001B	D	ISO 17025
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
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
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
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	L038B	D	MCERTS
Total sulphate (as SO ₄ 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
Metals by ICP-OES in leachate	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
Speciated 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
Total petroleum hydrocarbons with carbon banding by GC-MS/GC-MS HS in leachate	Determination of total petroleum hydrocarbons in leachate by GC-MS/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L070B/L088-PL	W	NONE
BTEX and/or Volatile organic compounds in leachate	Determination of volatile organic compounds in leachate by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	NONE
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 with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 25-003346
Project / Site name: Wilmslow Road, Manchester

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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	L080-PL	W	MCERTS
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	L080-PL	W	MCERTS
Thiocyanate in soil	Determination of thiocyanate in soil by extraction in water followed by acidification followed by addition of ferric nitrate followed by discrete analyser (spectrophotometer)	In-house method	L082B	D	NONE
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
Speciated PAHs and/or Semi-volatile organic compounds in leachate	SVOCs and PAHs in leachate	In-house method	L102B		NONE
NRA Leachate 10:1		In-house method based on interim NRA guidance (1994)	L020B	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 30°C.

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 - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

STEP 5: RESULTS

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		Ratio of ADE to relevant Health Criteria Value			Soil Assessment Criteria		
		oral HCV	inhal HCV	Combined	oral HCV	inhal HCV	Combined
Number	Chemical	(dimensionless)	(dimensionless)	(dimensionless)	mg kg ⁻¹	mg kg ⁻¹	mg kg ⁻¹
1	Benz(a)anthracene	0.00	1.00	1.00	NR	3.88E+01	3.88E+01
2	Benzo[a]pyrene (C4SL child)	0.02	1.00	NR	2.41E+04	3.79E+02	NR
3	Benzo(b)fluoranthene	0.00	1.00	1.00	NR	1.56E+02	1.56E+02
4	Chrysene	0.00	1.00	1.00	NR	4.40E+02	4.40E+02
5	Dibenz(ah)anthracene	0.00	1.00	1.00	NR	9.04E+00	9.04E+00
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WILMSLOW ROAD, MANCHESTER, M20 4GJ

Comparison of Contamination Test Results with Various Thresholds

RESIDENTIAL WITHOUT HOMEGROWN VEGETABLES

Hydrocarbons at 1% SOM

Contaminant	Max Value	Threshold	Pass/ Fail	SSAC	Pass/ Fail	Failed Samples
HEAVY METALS						
- Arsenic	12	40*	✓			
- Cadmium	0.4	85*	✓			
- Chromium III	22	910*	✓			
- Chromium VI	<1.8	6*	✓			
- Copper	60	7100*	✓			
- Lead	170	300▲	✓			
- Inorganic Mercury	<0.3	56*	✓			
- Methyl Mercury	<0.3	15*	✓			
- Nickel	21	180*	✓			
- Selenium	<1.0	350#	✓			
- Zinc	95	40000*	✓			
OTHER INORGANICS						
- Asbestos	None detected		✓			
- Cyanide (total)	<1.0	20 (D)	✓			
- pH range	8.1 – 8.7	-	-			
- Sulphate (g/l)	0.49	0.5 (B)	✓			
- Sulphide	17	250 (E)	✓			
- Thiocyanate	<5.0		✓			
-TOC range (%)	1.3 – 2.9	-	-			

All units mg/kg (parts per million/ppm) unless shown otherwise

Metals & inorganic values derived using 6% SOM (soil organic mater)

Sources

- Soil Guideline Values ▲ - C4SL

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SSAC – Site Specific Assessment Criteria (derived with CLEA 1.06 software)

WILMSLOW ROAD, MANCHESTER, M20 4GJ

Comparison of Contamination Test Results with Various Thresholds

RESIDENTIAL WITHOUT HOMEGROWN VEGETABLES

Hydrocarbons at 1% SOM

Contaminant	Max Value	Threshold	Pass/Fail	SSAC	Pass/Fail	Failed Samples
PAHs						
- Acenaphthene	5.5	3000*	✓			
- Acenaphthylene	1.6	2900*	✓			
- Anthracene	9.4	31000*	✓			
- Benz(a)anthracene	31	11*	X	38	✓	BH2 – 0.30m
- Benzo(a)pyrene (BAP)*	28	3.2*	X	379	✓	BH1 – 0.30m, BH2 – 0.30m, BH3 – 0.20m
- Benzo(b)fluoranthene	31	3.9*	X	156	✓	BH1 – 0.30m, BH2 – 0.30m, BH3 – 0.20m
- Benzo(ghi)perylene	15	360*	✓			
- Benzo(k)fluoranthene	13	110*	✓			
- Chrysene	34	30*	X	440	✓	BH2 – 0.30m
- Dibenzo(ah)anthracene (DBA)	3.6	0.31*	X	9	✓	BH1 – 0.30m, BH2 – 0.30m, BH3 – 0.20,
- Fluoranthene	71	1500*	✓			
- Fluorene	4.5	2800*	✓			
- Indene (123-cd) pyrene	13	45*	✓			
- Naphthalene	0.74	2.3*	✓			
- Phenanthrene	36	1300*	✓			
- Pyrene	72	3700*	✓			
OTHER COMPOUNDS						
Phenols	<1.0	750*	✓			

All units mg/kg (parts per million/ppm) unless shown otherwise

Hydrocarbon values derived using 1% SOM

BAP is a marker for genotoxic PAHs

Sources

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WILMSLOW ROAD, MANCHESTER, M20 4GJ

Comparison of Contamination Test Results with Various Thresholds

RESIDENTIAL WITHOUT HOMEGROWN VEGETABLES

Hydrocarbons at 1% SOM

Contaminant	Max Value	Threshold	Pass/Fail	SSAC	Pass/Fail	Failed Samples
BTEX COMPOUNDS						
- Benzene	<0.005	0.38*	✓			
- Toluene	<0.005	880*	✓			
- Ethyl-benzene	<0.005	83*	✓			
- Xylene - O	<0.005	88*	✓			
- M/P	<0.008	79*	✓			
TPHs						
Aliphatics						
C ₅ – C ₆	<0.010	42*	✓			
C ₆ – C ₈	<0.010	100*	✓			
C ₈ – C ₁₀	<0.010	27*	✓			
C ₁₀ – C ₁₂	<1.0	130 (48 vap)*	✓			
C ₁₂ – C ₁₆	4	1100 (24 sol)*	✓			
C ₁₆ – C ₃₅	80.5	65000 (8.48 sol)*	✓			
Aromatics						
C ₅ – C ₇	<0.010	370*	✓			
C ₇ – C ₈	<0.010	860*	✓			
C ₈ – C ₁₀	<0.020	47*	✓			
C ₁₀ – C ₁₂	<1.0	250*	✓			
C ₁₂ – C ₁₆	30	1800*	✓			
C ₁₆ – C ₂₁	250	1900*	✓			
C ₂₁ – C ₃₅	390	1900*	✓			

All units mg/kg (parts per million/ppm) unless shown otherwise

Hydrocarbon values derived using 1% SOM

Vap – vapour saturation limit Soil – solubility saturation limit

Sources

- Soil Guideline Values ▲ - C4SL

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(D) – Dutch (B) - BRE – Building Research Establishment (E) - EA Disposal Threshold 2002

(H) – Hazardous Waste

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SSAC – Site Specific Assessment Criteria (derived with CLEA 1.06 software)



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Analytical Report Number : 25-005041

Project / Site name:	Wilmslow Road, Manchester	Samples received on:	27/01/2025
Your job number:	M20 4GJ	Samples instructed on/ Analysis started on:	04/02/2025
Your order number:		Analysis completed by:	07/02/2025
Report Issue Number:	1	Report issued on:	07/02/2025
Samples Analysed:	3 10:1 WAC samples		

Signed: 

Joanna Wawrzeczko
Senior 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
	air	- once the analysis is complete

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Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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.

Analytical Report Number: 25-005041

Project / Site name: Wilmslow Road, Manchester

Lab Sample Number				442753	442754	442755
Sample Reference				BH1	BH2	BH3
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				0.30	0.30	0.20
Date Sampled				22/01/2025	22/01/2025	22/01/2025
Time Taken				1400	1400	1400
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			

Stone Content	%	0.1	NONE	15.8	23.2	< 0.1
Moisture Content	%	0.01	NONE	21	19	15
Total mass of sample received	kg	0.1	NONE	1.1	1.1	1.2

General Inorganics

pH (L005B)	pH Units	N/A	MCERTS	8.3	7.3	7.9
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	3.4	1.1
Loss on Ignition @ 450°C	%	0.2	MCERTS	2.9	6.4	3.3
Acid Neutralisation Capacity	mmol/kg	>9999	NONE	24	4	10

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.06	1.1	0.17
Acenaphthylene	mg/kg	0.05	MCERTS	0.34	1.7	0.07
Acenaphthene	mg/kg	0.05	MCERTS	1	6.2	0.66
Fluorene	mg/kg	0.05	MCERTS	0.68	5.2	0.45
Phenanthrene	mg/kg	0.05	MCERTS	7	44	4
Anthracene	mg/kg	0.05	MCERTS	2.7	11	0.82
Fluoranthene	mg/kg	0.05	MCERTS	19	72	6.3
Pyrene	mg/kg	0.05	MCERTS	19	69	6.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	9.7	35	3.1
Chrysene	mg/kg	0.05	MCERTS	9.8	34	3.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	12	32	3.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	6.2	16	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	12	36	3.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	5.9	14	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1	3.7	0.45
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	6.5	18	1.8
Coronene	mg/kg	0.05	NONE	2.3	< 0.05	0.82

Total PAH

Total WAC-17 PAHs	mg/kg	0.85	NONE	115	398	37.7
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Petroleum Hydrocarbons

Mineral Oil (EC10 - EC40) _{EH_CU_10_AL}	mg/kg	10	NONE	39	53	< 10
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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	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

Total BTEX	µg/kg	10	MCERTS	< 10	< 10	< 10
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Analytical Report Number: 25-005041

Project / Site name: Wilmslow Road, Manchester

Lab Sample Number				442753	442754	442755
Sample Reference				BH1	BH2	BH3
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				0.30	0.30	0.20
Date Sampled				22/01/2025	22/01/2025	22/01/2025
Time Taken				1400	1400	1400
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			

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

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Waste Acceptance Criteria Analytical Results

Report No:	25-005041						
				Client: WORMSEYE			
Location	Wilmslow Road, Manchester						
Lab Reference (Sample Number)	442753			Landfill Waste Acceptance Criteria			
				Limits			
Sampling Date	22/01/2025			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID	BH1						
Depth (m)	0.30						
Solid Waste Analysis							
TOC (%)**	1.3			3%	5%	6%	
Loss on Ignition (%) **	2.9			--	--	10%	
BTEX (µg/kg) **	< 10			6000	--	--	
Sum of PCBs (mg/kg) **	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH, ID, CU, AL	39			500	--	--	
Total PAH (WAC-17) (mg/kg)	115			100	--	--	
pH (units)**	8.3			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	24			--	To be evaluated	To be evaluated	
Eluate Analysis		10:1		10:1	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)				using BS EN 12457-2 at L/S 10 l/kg (mg/kg)			
	mg/l			mg/kg			
Arsenic *	0.00700			0.0700	0.5	2	25
Barium *	0.0188			0.188	20	100	300
Cadmium *	< 0.000100			< 0.00100	0.04	1	5
Chromium *	0.0039			0.039	0.5	10	70
Copper *	0.0035			0.035	2	50	100
Mercury *	< 0.000500			< 0.00500	0.01	0.2	2
Molybdenum *	0.000975			0.00975	0.5	10	30
Nickel *	0.0022			0.022	0.4	10	40
Lead *	0.0070			0.070	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0054			0.054	4	50	200
Chloride *	2.3			23	800	15000	25000
Fluoride*	0.34			3.4	10	150	500
Sulphate *	18			180	1000	20000	50000
TDS*	70			700	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	7.20			72.0	500	800	1000
Leach Test Information							
Stone Content (%)	15.8						
Sample Mass (kg)	1.1						
Dry Matter (%)	79						
Moisture (%)	21						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited							

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Where colour coding is used on this report, this is for guidance purposes only. This does not constitute a statement of conformity of pass or fail.
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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Waste Acceptance Criteria Analytical Results

Report No:	25-005041					
				Client: WORMSEYE		
Location	Wilmslow Road, Manchester					
Lab Reference (Sample Number)	442754			Landfill Waste Acceptance Criteria		
Sampling Date	22/01/2025			Limits		
Sample ID	BH2			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.30					
Solid Waste Analysis						
TOC (%)**	3.4			3%	5%	6%
Loss on Ignition (%) **	6.4			--	--	10%
BTEX (µg/kg) **	< 10			6000	--	--
Sum of PCBs (mg/kg) **	< 0.007			1	--	--
Mineral Oil (mg/kg) EH, ID, CU, AL	53			500	--	--
Total PAH (WAC-17) (mg/kg)	398			100	--	--
pH (units)**	7.3			--	>6	--
Acid Neutralisation Capacity (mmol / kg)	4.0			--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1		10:1	Limit values for compliance leaching test		
	mg/l		mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.00498		0.0498	0.5	2	25
Barium *	0.0298		0.298	20	100	300
Cadmium *	< 0.000100		< 0.00100	0.04	1	5
Chromium *	< 0.00040		< 0.0040	0.5	10	70
Copper *	0.0056		0.056	2	50	100
Mercury *	< 0.000500		< 0.00500	0.01	0.2	2
Molybdenum *	0.0208		0.208	0.5	10	30
Nickel *	0.0020		0.020	0.4	10	40
Lead *	< 0.0010		< 0.010	0.5	10	50
Antimony *	< 0.0017		< 0.017	0.06	0.7	5
Selenium *	< 0.0040		< 0.040	0.1	0.5	7
Zinc *	0.0040		0.040	4	50	200
Chloride *	2.0		20	800	15000	25000
Fluoride*	0.49		4.9	10	150	500
Sulphate *	41		410	1000	20000	50000
TDS*	150		1500	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010		< 0.10	1	-	-
DOC	15.4		154	500	800	1000
Leach Test Information						
Stone Content (%)	23.2					
Sample Mass (kg)	1.1					
Dry Matter (%)	81					
Moisture (%)	19					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				* = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited		

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Waste Acceptance Criteria Analytical Results

Report No:	25-005041					
				Client: WORMSEYE		
Location	Wilmslow Road, Manchester					
Lab Reference (Sample Number)	442755			Landfill Waste Acceptance Criteria		
				Limits		
Sampling Date	22/01/2025			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	BH3					
Depth (m)	0.20					
Solid Waste Analysis						
TOC (%)**	1.1			3%	5%	6%
Loss on Ignition (%) **	3.3			--	--	10%
BTEX (µg/kg) **	< 10			6000	--	--
Sum of PCBs (mg/kg) **	< 0.007			1	--	--
Mineral Oil (mg/kg) EH, ID, CU, AL	< 10			500	--	--
Total PAH (WAC-17) (mg/kg)	37.7			100	--	--
pH (units)**	7.9			--	>6	--
Acid Neutralisation Capacity (mmol / kg)	10			--	To be evaluated	To be evaluated
Eluate Analysis		10:1		10:1	Limit values for compliance leaching test	
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)				using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
	mg/l			mg/kg		
Arsenic *	< 0.00100			< 0.0100	0.5	2
Barium *	0.0247			0.247	20	100
Cadmium *	< 0.000100			< 0.00100	0.04	1
Chromium *	0.0033			0.033	0.5	10
Copper *	0.0038			0.038	2	50
Mercury *	< 0.000500			< 0.00500	0.01	0.2
Molybdenum *	0.00482			0.0482	0.5	10
Nickel *	0.0026			0.026	0.4	10
Lead *	0.0032			0.032	0.5	10
Antimony *	< 0.0017			< 0.017	0.06	0.7
Selenium *	< 0.0040			< 0.040	0.1	0.5
Zinc *	0.0060			0.060	4	50
Chloride *	1.9			19	800	15000
Fluoride*	1.2			12	10	150
Sulphate *	6.6			66	1000	20000
TDS*	76			760	4000	60000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-
DOC	8.72			87.2	500	800
Leach Test Information						
Stone Content (%)	< 0.1					
Sample Mass (kg)	1.2					
Dry Matter (%)	85					
Moisture (%)	15					
Results are expressed on a dry weight basis, after correction for moisture content where applicable.						
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation						

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3. This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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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.

Analytical Report Number : 25-005041

Project / Site name: Wilmslow 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 *
442753	BH1	None Supplied	0.3	Brown loam and clay with gravel and stones
442754	BH2	None Supplied	0.3	Brown loam with vegetation and stones
442755	BH3	None Supplied	0.2	Brown loam and clay with gravel and vegetation

Analytical Report Number : 25-005041

Project / Site name: Wilmslow Road, Manchester

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI 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 1:1 ratio 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
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 on 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-PL	D	MCERTS
Speciated 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-PL	D/W	NONE

Analytical Report Number : 25-005041

Project / Site name: Wilmslow Road, Manchester

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

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

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.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

Analytical Report Number : 25-005041

Project / Site name: Wilmslow 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
BH1	N/A	S	442753	c	BTEX and/or Volatile organic compounds in soil	L073B	c
BH1	N/A	S	442753	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH1	N/A	S	442753	c	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088-PL	c
BH2	N/A	S	442754	c	BTEX and/or Volatile organic compounds in soil	L073B	c
BH2	N/A	S	442754	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH2	N/A	S	442754	c	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088-PL	c
BH3	N/A	S	442755	c	BTEX and/or Volatile organic compounds in soil	L073B	c
BH3	N/A	S	442755	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
BH3	N/A	S	442755	c	Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	L076B/L088-PL	c

559 – 561 WILMSLOW ROAD, MANCHESTER, M20 4GJ

Leachate Comparison of Contamination Test Results with Thresholds

All units µg/l (parts per billion/ppb) ¹ except pH and PID

Contaminant	Max	DWQ	Pass/ Fail	Comment
<u>INORGANIC</u>			√/x	
Metals				
Arsenic	2.4	10	✓	
Copper	22	2000	✓	Hardness dependent
Lead	7.9	10	✓	"
Zinc	8	3000	✓	"

Contaminant	Max Value	DWQ	Pass/ Fail	Source	Comment
<u>Hydrocarbons</u>					
MTBE	<3.0	20	✓	USEPA	
<u>BTEX</u>					
- Benzene	<3.0	1	✓	WHO	Below detection limits
- Toluene	<3.0	700	✓	WHO	
- Ethyl-benzene	<3.0	300	✓	WHO	
- Xylene	<6.0	500	✓	WHO	
<u>TPHs (see also BTEX)</u>					
<u>Aliphatics</u>					
C ₅ – C ₈	<2.0	15000	✓	WHO	
C ₈ – C ₁₆	<21	300	✓	WHO	
Total Aliphatics	<10	300	✓	WHO (conservative figure)	
<u>Aromatics</u>					
C ₁₀ – C ₁₆	<20	100	✓	WHO	
C ₁₆ – C ₃₅	<20	90	✓	WHO	
Total Aromatics	<10	90	✓	WHO (conservative figure)	

DWQ = Drinking Water Quality (UK)

EQS = Environmental Quality Standard (Rivers)

D = Dutch

EAL = Environment Agency Leachate

WHO = World Health Organisation

559 – 561 WILMSLOW ROAD, MANCHESTER, M20 4GJ

Leachate Comparison of Contamination Test Results with Thresholds

All units ug/l (parts per billion/ppb) unless shown otherwise

Contaminant	Max Value	Combine (if required)	DWQ	Pass/Fail	EQS	Pass/Fail	Comment
PAHs							
- Benzo(a)pyrene (BAP)	<0.01	-	0.01	✓	-	-	
- Naphthalene	<0.01	-	-	-	1.0	✓	
- Benzo(b/k)fluoranthene	<0.02	<0.04	0.1	✓	-	-	
- Ideno(123cd)pyrene	<0.01				-	-	
- Benzo(ghi)perylene	<0.01				-	-	

DWQ = Drinking Water Quality (UK)

EQS = Environmental Quality Standard (Rivers)

D = Dutch

EAL = Environment Agency Leachate

WHO = World Health Organisation

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:

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



HMBAT-248YO-TDJJG

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

Report is invalid if pages are removed.

Job name

Wilmslow Road, Manchester, M20 4GJ

Description/Comments

Project

Wilmslow Road, Manchester, M20 4GJ

Site

Wilmslow Road, Manchester, M20 4GJ

Classified by

Name: **David Lord**
Date: **10 Feb 2025 00:55 GMT**
Telephone: **01282 414649**
Company: **Worms Eye Ltd**
1st Floor Block C, The Wharf
Manchester Road
Burnley
BB11 1JG

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

Hazardous Waste Classification

Date

-

Purpose of classification

2 - Material Characterisation

Address of the waste

Wilmslow Road, Manchester

Post Code M20 4GJ

SIC for the process giving rise to the waste

Description of industry/producer giving rise to the waste

Redevelopment of site.

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

Excavated soil.

Description of the waste

Excavated soil.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	BH1 - 0.30m	0.30	Non Hazardous		3
2	BH1 - 2.50m	2.50	Non Hazardous		6
3	BH2 - 0.30m	0.30	Non Hazardous		8
4	BH2 - 2.20m	2.20	Non Hazardous		11
5	BH3 - 0.20m	0.20	Non Hazardous		13

Related documents

#	Name	Description
1	Worms Eye v3	waste stream template used to create this Job

Report

Created by: David Lord

Created date: 10 Feb 2025 00:55 GMT

Appendices

	Page
Appendix A: Classifier defined and non GB MCL determinands	16
Appendix B: Rationale for selection of metal species	17
Appendix C: Version	18

Classification of sample: BH1 - 0.30m

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

Sample details

Sample name:	LoW Code:
BH1 - 0.30m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.30 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
21%	
(no correction)	

Hazard properties

None identified

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	arsenic { arsenic trioxide }				9.7 mg/kg	1.32	12.807 mg/kg	0.00128 %			
	033-003-00-0	215-481-4	1327-53-3								
2	cadmium { cadmium sulfide }			1	0.4 mg/kg	1.285	0.514 mg/kg	0.00004 %			
	048-010-00-4	215-147-8	1306-23-6								
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19 mg/kg	1.462	27.77 mg/kg	0.00278 %			
		215-160-9	1308-38-9								
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
5	copper { dicopper oxide; copper (I) oxide }				36 mg/kg	1.126	40.532 mg/kg	0.00405 %			
	029-002-00-X	215-270-7	1317-39-1								
6	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
7	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	170 mg/kg		170 mg/kg	0.017 %			
	082-001-00-6										
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	nickel { nickel dihydroxide }				16 mg/kg	1.579	25.272 mg/kg	0.00253 %			
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10	pH				8.4 pH		8.4 pH	8.4 pH			
			PH								
11	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
12	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										
13	zinc { zinc oxide }				95 mg/kg	1.245	118.248 mg/kg	0.0118 %			
	030-013-00-7	215-222-5	1314-13-2								

#	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							
14	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
15	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
16	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
17	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<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]							
18	TPH (C6 to C40) petroleum group				156 mg/kg		156 mg/kg	0.0156 %		
			TPH							
19	confirm TPH has NOT arisen from diesel or petrol				☒					
20	acenaphthene				0.28 mg/kg		0.28 mg/kg	0.000028 %		
		201-469-6	83-32-9							
21	acenaphthylene				0.35 mg/kg		0.35 mg/kg	0.000035 %		
		205-917-1	208-96-8							
22	anthracene				1.2 mg/kg		1.2 mg/kg	0.00012 %		
		204-371-1	120-12-7							
23	benzo[a]anthracene				7.5 mg/kg		7.5 mg/kg	0.00075 %		
	601-033-00-9	200-280-6	56-55-3							
24	benzo[a]pyrene; benzo[def]chrysene				9.4 mg/kg		9.4 mg/kg	0.00094 %		
	601-032-00-3	200-028-5	50-32-8							
25	benzo[b]fluoranthene				11 mg/kg		11 mg/kg	0.0011 %		
	601-034-00-4	205-911-9	205-99-2							
26	benzo[k]fluoranthene				3.5 mg/kg		3.5 mg/kg	0.00035 %		
	601-036-00-5	205-916-6	207-08-9							
27	benzo[ghi]perylene				5.2 mg/kg		5.2 mg/kg	0.00052 %		
		205-883-8	191-24-2							
28	chrysene				8 mg/kg		8 mg/kg	0.0008 %		
	601-048-00-0	205-923-4	218-01-9							
29	dibenz[a,h]anthracene				0.98 mg/kg		0.98 mg/kg	0.000098 %		
	601-041-00-2	200-181-8	53-70-3							
30	fluoranthene				12 mg/kg		12 mg/kg	0.0012 %		
		205-912-4	206-44-0							
31	fluorene				0.22 mg/kg		0.22 mg/kg	0.000022 %		
		201-695-5	86-73-7							
32	indeno[123-cd]pyrene				5.2 mg/kg		5.2 mg/kg	0.00052 %		
		205-893-2	193-39-5							
33	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
34	phenanthrene				2.7 mg/kg		2.7 mg/kg	0.00027 %		
		201-581-5	85-01-8							
35	pyrene				13 mg/kg		13 mg/kg	0.0013 %		
		204-927-3	129-00-0							
36	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
Total:								0.064 %		

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 Determinand - 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 for cumulative determinand results below the threshold of: 800 mg/kg (0.08%)
because: No liquid present, no diesel present.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0156%)

Classification of sample: BH1 - 2.50m

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

Sample details

Sample name:	LoW Code:
BH1 - 2.50m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.50 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
17%	
(no correction)	

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	pH		PH		8.7 pH		8.7 pH	8.7 pH		
2	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
3	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
4	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
5	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<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]							
6	TPH (C6 to C40) petroleum group				<20 mg/kg		<20 mg/kg	<0.002 %		<LOD
			TPH							
7	confirm TPH has NOT arisen from diesel or petrol				☑					
8	acenaphthene				0.07 mg/kg		0.07 mg/kg	0.000007 %		
		201-469-6	83-32-9							
9	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
10	anthracene				0.12 mg/kg		0.12 mg/kg	0.000012 %		
		204-371-1	120-12-7							
11	benzo[a]anthracene				0.25 mg/kg		0.25 mg/kg	0.000025 %		
	601-033-00-9	200-280-6	56-55-3							
12	benzo[a]pyrene; benzo[def]chrysene				0.22 mg/kg		0.22 mg/kg	0.000022 %		
	601-032-00-3	200-028-5	50-32-8							
13	benzo[b]fluoranthene				0.19 mg/kg		0.19 mg/kg	0.000019 %		
	601-034-00-4	205-911-9	205-99-2							
14	benzo[k]fluoranthene				0.13 mg/kg		0.13 mg/kg	0.000013 %		
	601-036-00-5	205-916-6	207-08-9							
15	benzo[ghi]perylene				0.11 mg/kg		0.11 mg/kg	0.000011 %		
		205-883-8	191-24-2							

WORMS EYE LIMITED

#	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							
16	chrysene				0.28 mg/kg		0.28 mg/kg	0.000028 %		
	601-048-00-0	205-923-4	218-01-9							
17	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
18	fluoranthene				0.63 mg/kg		0.63 mg/kg	0.000063 %		
		205-912-4	206-44-0							
19	fluorene				0.07 mg/kg		0.07 mg/kg	0.000007 %		
		201-695-5	86-73-7							
20	indeno[123-cd]pyrene				0.08 mg/kg		0.08 mg/kg	0.000008 %		
		205-893-2	193-39-5							
21	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	phenanthrene				0.71 mg/kg		0.71 mg/kg	0.000071 %		
		201-581-5	85-01-8							
23	pyrene				0.63 mg/kg		0.63 mg/kg	0.000063 %		
		204-927-3	129-00-0							
Total:								0.00237 %		

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: BH2 - 0.30m

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

Sample details

Sample name:	LoW Code:
BH2 - 0.30m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.30 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
19%	
(no correction)	

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	arsenic { arsenic trioxide }				12 mg/kg	1.32	15.844 mg/kg	0.00158 %			
	033-003-00-0	215-481-4	1327-53-3								
2	cadmium { cadmium sulfide }			1	0.3 mg/kg	1.285	0.386 mg/kg	0.00003 %			
	048-010-00-4	215-147-8	1306-23-6								
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19 mg/kg	1.462	27.77 mg/kg	0.00278 %			
		215-160-9	1308-38-9								
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
5	copper { dicopper oxide; copper (I) oxide }				60 mg/kg	1.126	67.553 mg/kg	0.00676 %			
	029-002-00-X	215-270-7	1317-39-1								
6	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
7	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	95 mg/kg		95 mg/kg	0.0095 %			
	082-001-00-6										
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	nickel { nickel dihydroxide }				19 mg/kg	1.579	30.01 mg/kg	0.003 %			
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10	pH				8.3 pH		8.3 pH	8.3 pH			
			PH								
11	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
12	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										
13	zinc { zinc oxide }				81 mg/kg	1.245	100.822 mg/kg	0.0101 %			
	030-013-00-7	215-222-5	1314-13-2								

#	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							
14	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
15	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
16	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
17	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<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]							
18	TPH (C6 to C40) petroleum group				754 mg/kg		754 mg/kg	0.0754 %		
			TPH							
19	confirm TPH has NOT arisen from diesel or petrol				☒					
20	acenaphthene				5.5 mg/kg		5.5 mg/kg	0.00055 %		
		201-469-6	83-32-9							
21	acenaphthylene				1.6 mg/kg		1.6 mg/kg	0.00016 %		
		205-917-1	208-96-8							
22	anthracene				9.4 mg/kg		9.4 mg/kg	0.00094 %		
		204-371-1	120-12-7							
23	benzo[a]anthracene				31 mg/kg		31 mg/kg	0.0031 %		
	601-033-00-9	200-280-6	56-55-3							
24	benzo[a]pyrene; benzo[def]chrysene				28 mg/kg		28 mg/kg	0.0028 %		
	601-032-00-3	200-028-5	50-32-8							
25	benzo[b]fluoranthene				31 mg/kg		31 mg/kg	0.0031 %		
	601-034-00-4	205-911-9	205-99-2							
26	benzo[k]fluoranthene				13 mg/kg		13 mg/kg	0.0013 %		
	601-036-00-5	205-916-6	207-08-9							
27	benzo[ghi]perylene				15 mg/kg		15 mg/kg	0.0015 %		
		205-883-8	191-24-2							
28	chrysene				34 mg/kg		34 mg/kg	0.0034 %		
	601-048-00-0	205-923-4	218-01-9							
29	dibenz[a,h]anthracene				3.6 mg/kg		3.6 mg/kg	0.00036 %		
	601-041-00-2	200-181-8	53-70-3							
30	fluoranthene				71 mg/kg		71 mg/kg	0.0071 %		
		205-912-4	206-44-0							
31	fluorene				4.5 mg/kg		4.5 mg/kg	0.00045 %		
		201-695-5	86-73-7							
32	indeno[123-cd]pyrene				13 mg/kg		13 mg/kg	0.0013 %		
		205-893-2	193-39-5							
33	naphthalene				0.74 mg/kg		0.74 mg/kg	0.000074 %		
	601-052-00-2	202-049-5	91-20-3							
34	phenanthrene				36 mg/kg		36 mg/kg	0.0036 %		
		201-581-5	85-01-8							
35	pyrene				72 mg/kg		72 mg/kg	0.0072 %		
		204-927-3	129-00-0							
36	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
Total:								0.147 %		

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 Determinand - 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 for cumulative determinand results below the threshold of: 800 mg/kg (0.08%)

because: No liquid present, no diesel present.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0754%)

Classification of sample: BH2 - 2.20m

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

Sample details

Sample name:	LoW Code:
BH2 - 2.20m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.20 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
16%	
(no correction)	

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	pH				8.1	pH		8.1	pH	8.1 pH		
2	benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
3	toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
4	ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
5	xylene				<0.013	mg/kg		<0.013	mg/kg	<0.0000013 %		<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]									
6	TPH (C6 to C40) petroleum group				<20	mg/kg		<20	mg/kg	<0.002 %		<LOD
			TPH									
7	confirm TPH has NOT arisen from diesel or petrol				☒							
8	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
9	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
10	anthracene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		204-371-1	120-12-7									
11	benzo[a]anthracene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
	601-033-00-9	200-280-6	56-55-3									
12	benzo[a]pyrene; benzo[def]chrysene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
	601-032-00-3	200-028-5	50-32-8									
13	benzo[b]fluoranthene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
	601-034-00-4	205-911-9	205-99-2									
14	benzo[k]fluoranthene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
	601-036-00-5	205-916-6	207-08-9									
15	benzo[ghi]perylene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		205-883-8	191-24-2									

#	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							
16	chrysene				0.25 mg/kg		0.25 mg/kg	0.000025 %		
	601-048-00-0	205-923-4	218-01-9							
17	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
18	fluoranthene				0.49 mg/kg		0.49 mg/kg	0.000049 %		
		205-912-4	206-44-0							
19	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
20	indeno[123-cd]pyrene				0.08 mg/kg		0.08 mg/kg	0.000008 %		
		205-893-2	193-39-5							
21	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
22	phenanthrene				0.33 mg/kg		0.33 mg/kg	0.000033 %		
		201-581-5	85-01-8							
23	pyrene				0.49 mg/kg		0.49 mg/kg	0.000049 %		
		204-927-3	129-00-0							
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

Classification of sample: BH3 - 0.20m

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

Sample details

Sample name:	LoW Code:
BH3 - 0.20m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.20 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: 15% 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	arsenic { arsenic trioxide }				8.8 mg/kg	1.32	11.619 mg/kg	0.00116 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium sulfide }			1	0.2 mg/kg	1.285	0.257 mg/kg	0.00002 %		
	048-010-00-4	215-147-8	1306-23-6							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				22 mg/kg	1.462	32.154 mg/kg	0.00322 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
	029-002-00-X	215-270-7	1317-39-1							
6	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
7	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	43 mg/kg		43 mg/kg	0.0043 %		
	082-001-00-6									
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	nickel { nickel dihydroxide }				21 mg/kg	1.579	33.169 mg/kg	0.00332 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
10	pH		PH		8.1 pH		8.1 pH	8.1 pH		
11	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
12	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									
13	zinc { zinc oxide }				67 mg/kg	1.245	83.396 mg/kg	0.00834 %		
	030-013-00-7	215-222-5	1314-13-2							

#	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							
14	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
15	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
16	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
17	xylene				<0.013 mg/kg		<0.013 mg/kg	<0.0000013 %		<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]							
18	TPH (C6 to C40) petroleum group				85 mg/kg		85 mg/kg	0.0085 %		
			TPH							
19	confirm TPH has NOT arisen from diesel or petrol				☒					
20	acenaphthene				1.8 mg/kg		1.8 mg/kg	0.00018 %		
		201-469-6	83-32-9							
21	acenaphthylene				0.17 mg/kg		0.17 mg/kg	0.000017 %		
		205-917-1	208-96-8							
22	anthracene				2.6 mg/kg		2.6 mg/kg	0.00026 %		
		204-371-1	120-12-7							
23	benzo[a]anthracene				6.7 mg/kg		6.7 mg/kg	0.00067 %		
	601-033-00-9	200-280-6	56-55-3							
24	benzo[a]pyrene; benzo[def]chrysene				6.7 mg/kg		6.7 mg/kg	0.00067 %		
	601-032-00-3	200-028-5	50-32-8							
25	benzo[b]fluoranthene				6 mg/kg		6 mg/kg	0.0006 %		
	601-034-00-4	205-911-9	205-99-2							
26	benzo[k]fluoranthene				3.4 mg/kg		3.4 mg/kg	0.00034 %		
	601-036-00-5	205-916-6	207-08-9							
27	benzo[ghi]perylene				2.8 mg/kg		2.8 mg/kg	0.00028 %		
		205-883-8	191-24-2							
28	chrysene				6.8 mg/kg		6.8 mg/kg	0.00068 %		
	601-048-00-0	205-923-4	218-01-9							
29	dibenz[a,h]anthracene				0.5 mg/kg		0.5 mg/kg	0.00005 %		
	601-041-00-2	200-181-8	53-70-3							
30	fluoranthene				15 mg/kg		15 mg/kg	0.0015 %		
		205-912-4	206-44-0							
31	fluorene				1.4 mg/kg		1.4 mg/kg	0.00014 %		
		201-695-5	86-73-7							
32	indeno[123-cd]pyrene				2.6 mg/kg		2.6 mg/kg	0.00026 %		
		205-893-2	193-39-5							
33	naphthalene				0.32 mg/kg		0.32 mg/kg	0.000032 %		
	601-052-00-2	202-049-5	91-20-3							
34	phenanthrene				11 mg/kg		11 mg/kg	0.0011 %		
		201-581-5	85-01-8							
35	pyrene				14 mg/kg		14 mg/kg	0.0014 %		
		204-927-3	129-00-0							
36	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
Total:								0.0403 %		

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 Determinand - 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 for cumulative determinand results below the threshold of: 800 mg/kg (0.08%)
because: No liquid present, no diesel present.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0085%)

Appendix A: Classifier defined and non GB MCL determinands

• **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

• **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

• **lead compounds with the exception of those specified elsewhere in this Annex (worst case)**

GB MCL index number: 082-001-00-6

Description/Comments: Worst Case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers lead compounds from smelting industries, flue dust and similar to be Carcinogenic category 1A

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 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015

• **pH** (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **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

• **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

• **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

• **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

• **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

• **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

• **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

• **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

• **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

• **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

• **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

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on hazard statements

cadmium {cadmium sulfide}

Worst case species based on hazard statements

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Worst case species based on hazard statements

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case species based on hazard statements

copper {dicopper oxide; copper (I) oxide}

Most likely common species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

No chromium VI present

mercury {mercury dichloride}

Worst case species based on hazard statements

nickel {nickel dihydroxide}

Worst case species based on hazard statements

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on hazard statements

zinc {zinc oxide}

Suspected

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2025.24.6453.11761 (25 Jan 2025)

HazWasteOnline Database: 2025.24.6453.11761 (25 Jan 2025)

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 v3.0 - version 3.0 of 11th January 2024

GB MCL List v4.0 - version 4.0 of 2nd March 2024

GB MCL List v5.0 - version 5.0 of 26th June 2024

GROUND GAS TESTING RESULTS
559 – 561 WILMSLOW ROAD, MANCHESTER, M20 4GJ

Date	Barometric Pressure (mb)	Temp. °C	Weather	BH	Methane CH ₄ (%)	Oxygen O ₂ (%)	Carbon Dioxide CO ₂ (%)	Steady State CO ₂ (%)	Outflow from BH (l/hr)	Depth to water (m)	Comments
					0	20.9	0	0	0		Fresh air
					1.0 *		5.0 *		70 ❖		Threshold values
29.01.2025	1000 (+17 / 24hr)	7	Clear	1	0.0	20.4	0.0	0.0	0.0	Dry at 2.9	
				2	5.7	0.4	8.5	8.5	0.0	1.55	
				3	0.0	12.5	6.4	6.4	0.0	1.75	
07.02.2025	1030 (-13 / 24hr)	10	Overcast	1	0.0	20.4	0.0	0.0	0.0	Dry at 2.9	
				2	4.6	0.8	7.4	7.4	0.0	1.5	
				3	0.0	14.1	5.8	5.8	0.0	1.7	
24.02.2025	1005 (-6 / 24hr)	13	Overcast	1	0.0	20.4	0.0	0.0	0.0	Dry at 2.9	
				2	5.2	0.6	7.8	7.8	0.0	1.5	
				3	0.0	15.3	5.1	5.1	0.0	1.7	
03.03.25	1027 -4/24hr	12	Overcast	1	0.0	20.4	0.1	0.1	0.0	Dry at 2.9	
				2	4.9	0.8	8.8	8.8	0.0	1.5	
				3	0.0	16.3	4.8	4.8	0.0	1.7	

Testing machines: GFM 426

Outflow - 0 taken as < 0.1litres/hour flow of gas from borehole

* NHBC green limit, CIRIA situation 1 limit

❖ CIRIA situation 2 limit