



**VERIFICATION REPORT – 21
PINFOLD LANE**

GSL3327R01

VERSION 1

17 JULY 2025

FINAL

Prepared for:

Partnership LLP
Wyvern

Prepared by: A Ridge

GroundSolve Ltd

DOCUMENT CONTROL

Report No. : GSL3327R01**Report Status:** FINAL**Version No.:** 1**Project Engineer:** A Ridge**Date of Issue:** 17/07/2025

This report has been prepared by GroundSolve Ltd with all reasonable care and diligence, within the best practice and guidance current at the time of issue within the proposed redline boundary and proposed Site end use as presented by the Client.

This report is confidential to the Client and GroundSolve Ltd accepts no responsibility whatsoever to third parties to whom this report is presented.

Version No.	Description of Issue / Revision	Date of Issue	Author	Reviewed By	Approved By
1	FINAL	17/07/2025	A Ridge BSc (Hons) FGS	James Thorburn BSc FGS	Sam Fishburne BEng MSc FGS CGeol RoGEP

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1 INTRODUCTION

GroundSolve Ltd was commissioned by Wyvern Partnership LLP to undertake a verification of the imported topsoil, which have been used within the soft landscaped areas of the new development.

This report has been devised to generally comply with the relevant principles and requirements of a range of guidance including:

- Part IIA of the Environment Protection Act, 1990
- BS5930:2015: "Code of practice for site investigations"
- BS10175: 2011 +A2:2017 "Investigation of Potentially Contaminated Sites - Code of Practice"
- The Building Regulations 2010. Part C (HM Government 2013)
- Environment Agency: Land Contamination Risk Management (LCRM), Version 3, October 2020
- Environment Agency (2017) "The Environment Agency's Approach to Groundwater Protection" November 2018 Version 1.2.

1.1 Proposed Development

The proposed development is understood to be the demolition of the existing residential property and construction of a new residential property. It is understood that the Principal Contractor for the development is Wyvern Partnership.

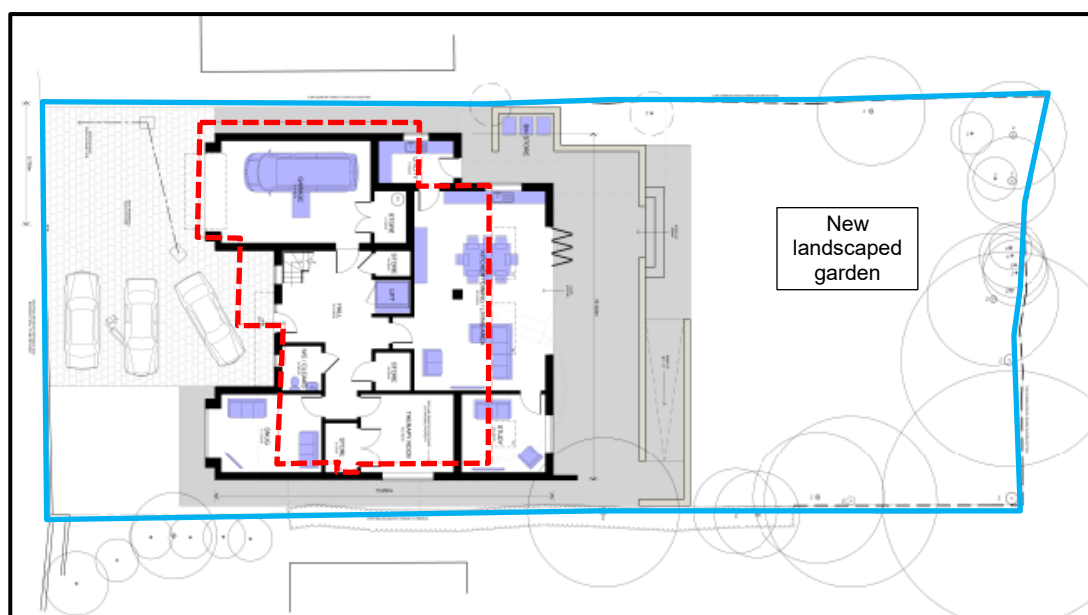


Figure 1 Extract from proposed development plan

The findings and conclusions of the risk assessments have been set out and recommendations given for the proposed residential end use.

1.2 Previous Investigations

The following reports have already been undertaken and will be summarised in Section 3:

- 2940R01-1 - Phase I PRA Pinfold Lane, Prestwich - June 2023
- 3003R01-1 - Phase 2 Interpretive Report Pinfold Lane Prestwich – November 2023

The previous site investigation reports are discussed and summarised in **Section 3** of this report.

1.3 Limitations

This report has been prepared for the sole use of Wyvern Partnership Ltd. No other third party may rely upon or reproduce the contents of this report without the written approval of GroundSolve Ltd. If any unauthorised third party comes into possession of this report, they rely on it entirely at their own risk.

2 SITE DETAILS AND DESCRIPTION

Table 2.1 Current Site Overview.

Site name	21 Pinfold Lane, Whitefield
Site address	21 Pinfold Lane, Whitefield, Bury, M45 7NY
National Grid Reference (NGR)	380541E, 405635N
Approximate Site area	900m ²
Site shape	Rectangular.
Current land use on the Site	Site is currently a residential property.
Surrounding land uses	Predominantly residential with Pinfold Lane to the north and a school playing field to the south.
General topography and ground levels	113.00mOAD

3 PREVIOUS INVESTIGATIONS

Previous reports have already been undertaken and the findings are summarised:

- 2940R01-1 - Phase I PRA Pinfold Lane, Prestwich - June 2023
- 3003R01-1 - Phase 2 Interpretive Report Pinfold Lane Prestwich – November 2023

Table 3.1 Summary of main findings from the Phase 1 Report.

Summary of main findings from the Phase 1 Report	
Site History	The earliest mapping (1850) shows the site was split between two fields from northwest to southeast, and the boundary was no longer present on the 1908 mapping. A residential property was then present on 1970 mapping. Offsite, there is a pond present 110m to the northwest of the site in 1893 mapping, potentially infilled by 1932 mapping.
Geological Setting	Superficial deposits – Till (Diamicton), Devensian. Bedrock – Pennine Middle Coal Measures Formation comprising mudstone, coal seams, siltstone and sandstone), Carboniferous.
Mining	The site is not located within a high-risk development area and no shafts or adits are present on or near the site.
Radon	The site is located in an area with affected properties less than 1%.
Hydrogeology	Superficial deposits (Glacial Till) – Secondary Undifferentiated Aquifer (medium vulnerability) Bedrock(Pennine Middle Coal Measure) – Secondary A Aquifer (low vulnerability). 261m southwest. Historical abstraction borehole at Whitefield Golf Club for spray irrigation.. The site is not located within 500m of a Source Protection Zone or Source Protection Zone within a confined aquifer
Waste	There are no records for current Environment Agency landfill records within 1km of the site There are no records for historic Environment Agency landfill sites within 1km of the site. 3 No. waste exemptions within 250m of the site, all are 154m northeast sorting and denaturing of controlled drugs for disposal. 2 No. historic ponds within 250m, both infilled by 1932 mapping.
Contamination Sources	Nearest 128m north, Slattery of Manchester Baking and Confectionery. No credible potential contamination sources. Contaminants from construction of existing dwelling could include heavy metals, polycyclic aromatic hydrocarbons (PAH), BTEX compounds, Volatile Organic Compounds (VOC), asbestos and ground gases (Carbon dioxide and methane).
Scope of Phase 2 Site Investigation	The scope of ground investigation works carried out at the site by GroundSolve comprised: • 5 No. window sampling boreholes to a maximum depth of 5.45mbgl, • 1No. falling head tests across 1 of the windowless sample boreholes • Sampling for chemical and geotechnical testing of soils,

Summary of main findings from the Phase 1 Report

Findings of the Phase 2 Ground Investigation	The sequence of strata encountered beneath the site was as follows: • Made Ground – Variable Made Ground was encountered in WS05 comprising: ○ Brick paving over. ○ Sand and gravelly clay comprising of brick. • Clay was encountered in all the exploratory holes with some thin bands of fine to coarse sand encountered.
Phase 2 Conclusions – Geoenvironmental	Human Health: None of the samples exceeded the SVG guidelines values for metals & non metals, PAH, petroleum hydrocarbons or other contaminants. Controlled Waters: No unacceptable risks. Ground Gases (Human Health / Property): No ground gas protection measures required. It was considered that no remediation measures were required on site. However, due to the use of additional topsoil material to be imported for use, additional testing has been carried out to confirm suitability.

4 VERIFICATION OF IMPORTED TOPSOIL

4.1 Introduction

The risk assessments have concluded that no remediation measures are required to address risks to human health, however it has been requested that verification of imported material should be undertaken.

The followings actions have been undertaken:

- 1 No. topsoil sample from imported material.

Imported topsoil has been analysed for a suitable suite of contaminants in relation to human health (in addition to topsoil being compliant with BS3882:2015).

4.2 Unexpected Contamination

No unexpected contamination was encountered during construction works.

4.3 Source of Topsoil / Subsoil

The source of the topsoil is understood to have been delivered to site on 20th June 2025 and stored in stockpiles on site. The Certificate of Analysis and import ticket are found in **Appendix A**

4.4 Site works

Groundsolve were present at the site on the 30th June 2025 to describe and take samples of the imported topsoil for chemical analysis. Photos are provided in **Appendix B**.

4.5 Description of Topsoil

Material was taken directly from the stockpile and was described as being a brown to dark brown slightly clayey silty fine to coarse sand with root material.

4.6 Verification of Topsoil and Subsoil – Sampling and Testing

A total of 1 no. samples of topsoil / subsoil were analysed from the stockpile.

The soil samples were sent to Eurofins Chemtest. The laboratory is UKAS accredited in accordance with ISO17025 and is also MCERTS accredited for soil analysis in accordance with the Environment Agency's scheme. The laboratory analysis results are presented in **Appendix C**.

Table 4.2 – Acceptance Criteria for imported material (Topsoil and Subsoil)

Analyte	Soil Re-Use and Importation Criteria		Analyte	Soil Re-Use and Importation Criteria	
	mg/kg	Reference		mg/kg	Reference
Metals			BTEX		
Arsenic (total)	37	S4UL	Benzene	0.087	S4UL
Cadmium (total)	11	S4UL	Toluene	130	S4UL
Chromium (total)	520	HWT	Ethyl Benzene	47	S4UL
Chromium (hexavalent)	6	S4UL	Xylene – O	60	S4UL
Copper (total)	200	BS3882	Xylene – M or P	56	S4UL
Lead (total)	200	C4SL			
Mercury (total inorganic)	40	S4UL	Petroleum Hydrocarbons[§]		
Nickel (total)	130	S4UL	Aliphatic > EC5 - EC6	42	S4UL
Selenium	250	S4UL	Aliphatic > EC6 - EC8	100	S4UL
Vanadium	410	S4UL	Aliphatic > EC8 - EC10	27	S4UL
Zinc (total)	2,009**	HWT	Aliphatic > EC10 - EC12	130	S4UL
			Aliphatic > EC12 - EC16	1000**	HWT
Inorganic			Aliphatic > EC16 - EC21	1000**	HWT
Sulphate	2400***	-	Aliphatic > EC21 - EC35	1000**	HWT
Phenol	120	S4UL			
			Aromatic > EC5 - EC7	70	S4UL
PAH[*]			Aromatic > EC7 - EC8	130	S4UL
Naphthalene	2.3	S4UL	Aromatic > EC8 - EC10	34	S4UL
Acenaphthylene	170	S4UL	Aromatic > EC10 - EC12	74	S4UL
Acenaphthene	210	S4UL	Aromatic > EC12 - EC16	140	S4UL
Fluorene	170	S4UL	Aromatic > EC16 - EC21	260	S4UL
Phenanthrene	95	S4UL	Aromatic > EC21 - EC35	1000**	HWT
Anthracene	2400	S4UL	Aromatic > EC35-44	1000**	HWT
Fluoranthene	280	S4UL	Aromatic > EC44-EC77	1000**	HWT
Pyrene	620	S4UL			
Benz(a)anthracene	7.2	S4UL	Asbestos		

Analyte	Soil Re-Use and Importation Criteria		Analyte	Soil Re-Use and Importation Criteria	
	mg/kg	Reference		mg/kg	Reference
Chrysene	15	S4UL		Not detected (<0.001%) for topsoil and subsoil	Lab LoD
Benzo(b)fluoranthene	2.6	S4UL			
Benzo(k)fluoranthene	77	S4UL			
Benzo(a)pyrene	2.2	S4UL			
Indeno(123cd)pyrene	27	S4UL			
Benzo(ghi)perylene	320	S4UL			
Dibenzo(ah)anthracene	0.28	S4UL			

The results of the samples collected were screened against Generic Assessment Criteria (GAC) for Human Health Risk Assessment (LQM/CIEH 2015) for a residential with gardens end-use, sandy soil with 6% SOM and pH 8.1 (presented in Table 4.1 and Appendix D).

Topsoil / Subsoil

1No. sample was selected from the stockpile material. The result passes the relevant screening criteria for residential landuse with plant uptake, therefore are suitable for use within the garden areas. The results are summarised in **Appendix D**.

5 CONCLUSIONS

5.1 Topsoil and subsoil Material

Laboratory chemical analysis results from the imported topsoil material show the this does not exceed the agreed GACs (6% SOM).

Laboratory analysis results of recovered samples show topsoil are generally in compliance with BS3883:2015.

5.2 Conclusions

The report indicates that the site inspections and chemical tests results from the stockpile have met all the requirements for human health and BS3882:2015.

6 REFERENCES

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- CIRIA C681 (2009) Unexploded ordnance (UXO) A guide for the construction industry (C681)
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- <https://www.epa.gov/pfas/basic-information-pfas>
- UK Maps of Radon, <http://www.ukradon.org/information/ukmaps>
- Health and Safety Executive (2015) Construction (Design and Management) Regulations.
- Coal Authority Interactive Map Viewer, <http://mapapps2.bgs.ac.uk/coalauthority/home.html>
- BGS Geology of Britain Viewer <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

7 DEFINITIONS

AOD	Above Ordnance Datum
bgl	Below ground level
BGS	British Geological Survey
BRE	Building Research Establishment
CBR	California Bearing Ratio (test)
COMAH	Control of Major Accident Hazards (regulations)
DQRA	Detailed Quantitative Risk Assessment
DWS	Drinking Water Standard
EQS	Environmental Quality Standard
GAC	Generic Assessment Criterion
GQA	General Quality Assessment (Environment Agency)
GQRA	Generic Quantitative Risk Assessment
GSV	Gas Screening Value
HCV	Health Criteria Value
IPPC	Integrated Pollution Prevention and Control (regulations)
NGR	National Grid Reference
NIHHS	Notification of Installations Handling Hazardous Substances (regulations)
OS	Ordnance Survey
Ppm	Parts per million
Ppmv	Parts per million by volume
SAC	Special Area of Conservation
SPZ	Source Protection Zone
SSAC	Site-Specific Assessment Criterion
SSSI	Site of Special Scientific Interest

APPENDIX A – IMPORT CERTIFICATION AND TOPSOIL SPECIFICATION



Certificate of Analysis

Client: STUART BALDWIN
(T283) SED SERVICES LTD
LANDGATE FARM
LANDGATE LANE
BRYN
WIGAN WN4 0EJ

Originator: SOIL

Lab ID: 17293 - 673685
Sample ID: SED, BRYN
Sample Weight: 825g

Date Received: 12/01/2024
Date Reported: 01/02/2024

BS 3882 : 2015 SPECIFICATION FOR TOPSOIL Multipurpose Grade

				Compliant with range (Y/N)					
				Multi-P	Acid	Calc	Low-F	Low-F Acid	Low-F Calc
		Unit	Result						
Texture:	Clay	% w/w	9						
	Silt	% w/w	5						
	Sand	% w/w	86						
	Textural Class		Organic Loamy Sand	Y	Y	Y	Y	Y	Y
Organic Matter:		% w/w	10.2	Y	Y	Y	Y	Y	Y
Coarse Fragment Content:	>2 mm	% w/w	0.9	Y	Y	Y	Y	Y	Y
	>20 mm	% w/w	0.0	Y	Y	Y	Y	Y	Y
	>50 mm	% w/w	0.0	Y	Y	Y	Y	Y	Y
Soil pH:			7.1	Y	N	N	Y	N	N
Carbonate:		% w/w	1.1			Y			Y
Available Plant Nutrients:	Nitrogen	% w/w	0.508	Y	Y	Y			
	Phosphorus	mg/l	71.2 (5)*	Y	Y	Y	N	N	N
	Potassium	mg/l	974.9 (6)*	Y	Y	Y			
	Magnesium	mg/l	173.1 (4)*	Y	Y	Y			
Carbon:Nitrogen Ratio:		:1	11.1	Y	Y	Y	Y	Y	Y
Exchangeable Sodium Percentage:		%	5.5						
Phytotoxic Contaminants:	Total Zinc	mg/kg	56.8	Y	Y	Y	Y	Y	Y
	Total Copper	mg/kg	18.9	Y	Y	Y	Y	Y	Y
	Total Nickel	mg/kg	<10	Y	Y	Y	Y	Y	Y
Visible Contaminants:	> 2mm	% w/w	0.00	Y	Y	Y	Y	Y	Y
	Plastics	% w/w	0.00	Y	Y	Y	Y	Y	Y
	Number of Sharps		0	Y	Y	Y	Y	Y	Y
Additional Analysis:	Available Sodium	mg/l	157.2						
	Available Calcium	mg/l	1361.6						
	Conductivity	uS/cm	2567	Y					
Compliance:				Y	N	N	N	N	N

Results are expressed on a dry matter basis.

* Soil indices from RB209

Released by:

Myles Nicholson

Date: 01/02/2023

DECLARATION:

I certify that this sample has been analysed by NRM in accordance with BS 3882 Specification for Topsoil (2015).

NRM Coopers Bridge, Braziers Lane, Bracknell, Berkshire RG42 6NS
Tel: +44 (0) 1344 886338 **Fax:** +44 (0) 1344 890972 **Email:** enquiries@nrm.uk.com **www:** nrm.uk.com



Analytical Report

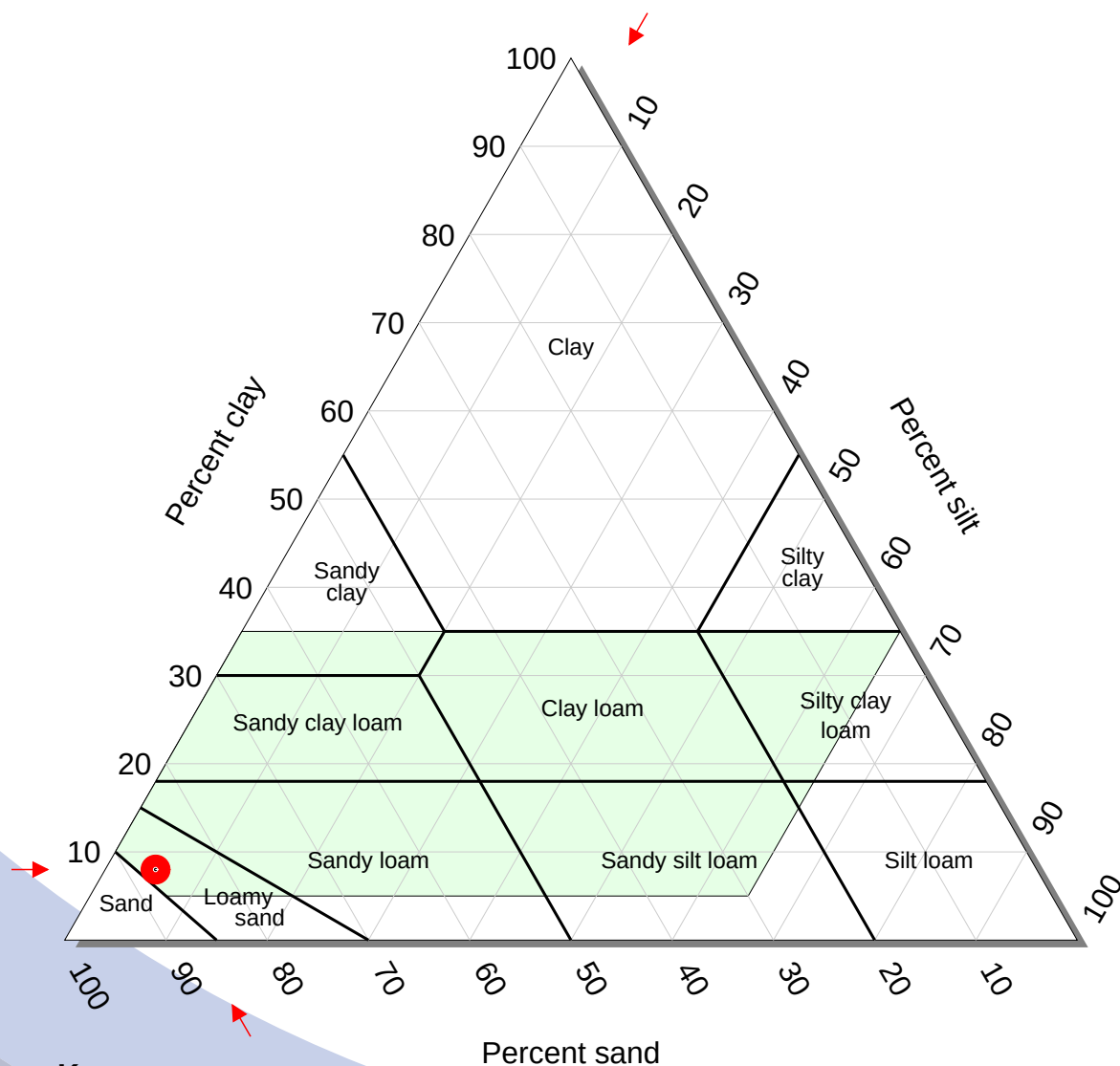
Client: STUART BALDWIN
(T283) SED SERVICES LTD
LANDGATE FARM
LANDGATE LANE
BRYN
WIGAN WN4 0EJ

Originator: SOIL

Lab ID: 17293 - 673685
Sample ID: SED, BRYN
Sample Weight: 825g

Date Received: 12/01/2024
Date Reported: 01/02/2024

Fig. 1. Textural Class: Organic Loamy Sand (compliant)



Key



Area within which texture of topsoil is required to fall.



WASTE TRANSFER NOTE / DUTY OF CARE

Permit : EPR/MP3135DF Permit : EPR/MP3093VU

Waste Carrier No : CBDU49854

Delivery Ticket No. 334512

Collection Date:	Delivery Date: <u>20/6/25</u>	Drivers Name: <u>M DEARBIEU</u>
From: <u>SED BRYN</u>	Deliver to: <u>GLAS ROYSTONE</u> <u>APPLEWOOD CONST. - WHITEFIELD</u>	
POC:	Stockpile:	
Product: <u>BGB</u>	EWC:	
Gross Weight:	Tare Weight:	Net Weight: <u>1x FULL LOAD</u>
Notes:		
Vehicle: <u>PN74BDV</u>	Trailer No:	

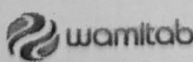
Producer of the Waste:- Goods Collected in Good Order and Condition

Signature:	Print Name:	Date:
------------	-------------	-------

Transfer Station:- Goods Received in Good Order and Condition

Signature: <u>[Signature]</u>	Print Name: <u>STEPA</u>	Date: <u>20/06/2025</u>
----------------------------------	-----------------------------	----------------------------

I certify that the "Waste Hierarchy" has been applied as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.



Landgate Farm, Landgate Lane, Bryn, Wigan WN4 0EJ

Tel: 01942 723479 Fax: 01942 726555

e-mail: info@sedservices.co.uk

VAT No: 873841200

Company Registration No: 05602201

APPENDIX B – STOCKPILE PHOTOGRAPHS



Rear Garden 21 Pinfold Lane, Prestwich

APPENDIX C – CHEMICAL TEST RESULTS



Final Report

Report No.: 25-21883-1

Initial Date of Issue: 09-Jul-2025

Re-Issue Details:

Client *Groundsolve Ltd*

Client Address: *Unit 1 Well House Barns
Chester Road
Bretton
Chester
CH4 0DH*

Contact(s): *James Thorburn*

Project *3327 21 Pinfold Lane, Prestwich*

Quotation No.: *Q25-38001*

Date Received: 03-Jul-2025

Order No.: *PO002585*

Date Instructed: 03-Jul-2025

No. of Samples: *1*

Turnaround (Wkdays): *5*

Results Due: 09-Jul-2025

Date Approved: 09-Jul-2025

Approved By:

Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: 3327 21 Pinfold Lane, Prestwich

Client: Groundsolve Ltd		Chemtest Job No.:		25-21883	
Quotation No.: Q25-38001		Chemtest Sample ID.:		1994390	
Order No.: PO002585		Client Sample Ref.:		1	
		Client Sample ID.:		SP01	
		Sample Type:		SOIL	
		Date Sampled:		30-Jun-2025	
		Asbestos Lab:		DURHAM	
Determinand	HWOL Code	Accred.	SOP	Units	LOD
ACM Type		N	2192		N/A
Asbestos Identification		U	2192		N/A
Moisture		N	2030	%	0.020
Soil Colour		N	2030		N/A
Other Material		N	2030		N/A
Soil Texture		N	2030		N/A
pH at 20C		M	2010		4.0
Cyanide (Total)		M	2300	mg/kg	0.50
Sulphate (Total)		U	2430	%	0.010
Sulphate (Acid Soluble)		U	2430	%	0.010
Arsenic		M	2455	mg/kg	0.5
Cadmium		M	2455	mg/kg	0.10
Chromium		M	2455	mg/kg	0.5
Copper		M	2455	mg/kg	0.50
Mercury		M	2455	mg/kg	0.05
Nickel		M	2455	mg/kg	0.50
Lead		M	2455	mg/kg	0.50
Selenium		M	2455	mg/kg	0.25
Zinc		M	2455	mg/kg	0.50
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00

Results - Soil

Project: 3327 21 Pinfold Lane, Prestwich

Client: Groundsolve Ltd		Chemtest Job No.:		25-21883		
Quotation No.: Q25-38001		Chemtest Sample ID.:		1994390		
Order No.: PO002585		Client Sample Ref.:		1		
		Client Sample ID.:		SP01		
		Sample Type:		SOIL		
		Date Sampled:		30-Jun-2025		
		Asbestos Lab:		DURHAM		
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
Aromatic EPH >C12-C16 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	130
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	130
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	140
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	56
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	480
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	540
Total VPH >C5-C10	HS_2D_Total	U	2780	mg/kg	0.50	< 0.50
Total EPH >C10-C35 MC	EH_2D_Total_#1	U	2690	mg/kg	10.00	590
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	640
Organic Matter		M	2625	%	0.40	9.8
Total Organic Carbon		M	2625	%	0.20	5.7
TPH >C6-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0
TPH >C10-C21	EH_1D_Total	N	2670	mg/kg	1.0	30
TPH >C21-C40	EH_1D_Total	N	2670	mg/kg	1.0	18
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	48
Benzene		M	2760	µg/kg	1.0	< 1.0
Toluene		M	2760	µg/kg	1.0	< 1.0
Ethylbenzene		M	2760	µg/kg	1.0	< 1.0
m & p-Xylene		M	2760	µg/kg	1.0	< 1.0
o-Xylene		M	2760	µg/kg	1.0	< 1.0
Methyl Tert-Butyl Ether		M	2760	µg/kg	1.0	< 1.0
Naphthalene		M	2800	mg/kg	0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	0.18
Anthracene		M	2800	mg/kg	0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.29
Pyrene		M	2800	mg/kg	0.10	0.27
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10
Coronene		N	2800	mg/kg	0.10	< 0.10
Total Of 17 PAH's		N	2800	mg/kg	2.0	< 2.0

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8–C10 Aromatics: >C5–C7,>C7–C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Text example All items indicated in italic font represent customer-supplied information that may not be independently verified by the laboratory
This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.
For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

NEW_ASB Eurofins Chemtest Limited, 11 Depot Road, Newmarket, CB8 0AL
DURHAM Eurofins Chemtest Limited, Unit A North Wing, Prospect Business Park, Crookhall Lane, Consett, Co Durham, DH8 7PW

Sample Deviation Codes

As a result of any of the below deviations applying, the test results may be unreliable

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - The required amount of sample for analysis was not received
- H - Appropriate cooling measures were not taken for sample transportation

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Report Information

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

Asbestos Tests LOD = LOQ

Limit of Detection = Limit of Quantification for asbestos results only

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

APPENDIX D –SUMMARY OF CHEMICAL TEST

Job No: 3327

Site Name: Pinfold Lane, Prestwich

Residential with gardens (6% SOM)

	SP01				
	-	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Metals & Non-Metals					
Arsenic	1.7	1	37	C4SL	0
Cadmium	0.1	1	22	C4SL	0
Chromium	5.3	1	910	S4UL	0
Copper	7.9	1	2400	S4UL	0
Lead	12	1	200	C4SL	0
Mercury	0.05	1	1.2	S4UL	0
Nickel	4.6	1	130	S4UL	0
Selenium	0.25	1	250	S4UL	0
Zinc	25	1	3700	S4UL	0

	SP01				
	-	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Petroleum Hydrocarbons					
Benzene	0.001	1	0.87	C4SL	0
Toluene	0.001	1	660	S4UL	0
Ethylbenzene	0.001	1	260	S4UL	0
m,p-Xylene	0.001	1	310	S4UL	0
>C5-C6 Aliphatic	0.05	1	160	S4UL	0
>C6-C8 Aliphatic	0.1	1	530	S4UL	0
>C8-C10 Aliphatic	0.05	1	150	S4UL	0
>C10-C12 Aliphatic	12	1	760	S4UL	0
>C12-C16 Aliphatic	14	1	4300	S4UL	0
>C16-C21 Aliphatic	140	1	110000	S4UL	0
>C35-C40 Aliphatic	56	1	110000	S4UL	0
>C6-C7 Aromatic	0.05	1	300	S4UL	0
>C7-C8 Aromatic	0.05	1	660	S4UL	0
>C8-C10 Aromatic	0.05	1	190	S4UL	0
>C10-C12 Aromatic	88	1	380	S4UL	0
>C12-C16 Aromatic	130	1	660	S4UL	0
>C16-C21 Aromatic	130	1	930	S4UL	0
>C21-C35 Aromatic	140	1	1700	S4UL	0
>C35-C40 Aromatic	56	1	1700	S4UL	0

	SP01				
	-	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Polyaromatic Hydrocarbons (PAH)					
Acenaphthene	0.1	1	1100	S4UL	0
Acenaphthylene	0.1	1	920	S4UL	0
Anthracene	0.1	1	11000	S4UL	0
Benzo(a)anthracene	0.1	1	13	S4UL	0
Benzo(a)pyrene	0.1	1	5	C4SL	0
Benzo(b)fluoranthene	0.1	1	3.7	S4UL	0
Benzo(g,h,i)perylene	0.1	1	350	S4UL	0
Benzo(k)fluoranthene	0.1	1	100	S4UL	0
Chrysene	0.1	1	27	S4UL	0
Dibenzo(a,h)anthracene	0.1	1	0.3	S4UL	0
Fluoranthene	0.29	1	890	S4UL	0
Fluorene	0.1	1	860	S4UL	0
Indeno(1,2,3-cd)pyrene	0.1	1	41	S4UL	0
Naphthalene	0.1	1	13	S4UL	0
Phenanthrene	0.18	1	440	S4UL	0
Pyrene	0.27	1	2000	S4UL	0

	SP01				
	-	Count	Adopted Guideline (mg/kg)	Source	Exceedances
Other Contaminants / Testing					
Total Organic Carbon	5.7	1	-	-	-
pH	8.1	1	-	-	-
Total Cyanide	0.5	1	-	-	-
Asbestos	No Asbestos Detected				