

Your Ref:
Our Ref: CRM.1027.147.GE.L.003

Date: 3rd July 2025
Email: Richard.Reece@enzygo.com

Harry Howard
Hill Ltd
The Power House
Gunpowder Mill
Powdermill Lane
Waltham Abbey
EN9 1BN

By Email: HarryHoward@hill.co.uk

Dear Harry

RE Foundation House, Icknield Way, Letchworth, SG6 1GD – Blocks D and E Soft Landscaping Verification

Background

Two site investigations were conducted at the above-named site by Subadra, report ref: IN17518 CL 001, and AGB Environmental Ltd, report ref: P3163.1.0, which identified elevated levels of Metals within the Made Ground. Asbestos was also identified. These reports included Preliminary Risk Assessments (PRAs) and Conceptual Site Models (CSM), highlighting potential sources, pathways, and receptors, including those off site. Within these reports, the results of the site investigations were evaluated, and Detailed Risk Assessments and revised CSMs were created to give an accurate evaluation of the risk to the end user and the surrounding environment, as required by sections 1 and 2 of Condition 24, of planning consent 20/01714/FP.

Based on the results of the initial ground investigations, the Preliminary Risk Assessment, Conceptual Site Model, Detailed Risk Assessment, and revised Conceptual Site Model, Enzygo Geo Environmental Ltd produced a Remedial Method Statement (RMS) report ref: CRM.1027.147.GE.R.001.B-RMS. Within this RMS it was proposed that a site wide strip was to be undertaken, and formation level testing would be carried out to confirm exposed formation level materials meet the GAC values. This was to address Section 3 of Condition 24, of planning consent 20/01714/FP. This was submitted to North Hertfordshire District Council and was accepted.

Whilst some areas of deeper Made Ground were encountered locally, the majority is around 400mm deep. Therefore, the proposed remediation approach was to remove Made Ground across the majority of the development footprint and test the exposed natural soils. A site strip was undertaken, and exposed formation level was tested to confirm the removal of Made Ground was effective. This was reported in Enzygo GeoEnvironmental report CRM.1027.147.GE.L.002.

Part of the site within the northwestern area was not to be stripped, due to a root protection zone. This area was instead to be encapsulated using 400mm of clean cover soils over a geotextile barrier.

Site Inspection

On 20th June 2025 Enzygo Geo Environmental Ltd undertook a site visit to excavate and confirm the presence of 400mm of cover materials within the soft landscaping areas of Blocks D and E. Three Hand

Pits (HP01, HP02 and HP03) were excavated within the soft landscaping areas. Photos of the Hand Pits are shown in Appendix A.

The Hand Pit locations are shown on drawing CRM.1027.147.GE.D.001, included in Appendix B. No further areas of contamination were identified during the construction phase or during the validation inspection, therefore no additional remedial measures were required or undertaken.

Cover Soils

Hand Pits confirmed the presence of 400mm cover soils over a geotextile barrier, meeting the required depth for communal soft landscaping. Photographs of the Hand Pits are included in Appendix A. Samples were recovered from the Hand Pits and were submitted to the laboratories of I2, who are UKAS and MCERTS accredited for testing.

Soil samples from the validation pits were collected in appropriate containers provided by the analytical laboratory. Samples were stored in cool boxed prior to dispatch to the laboratory. All samples were collected using appropriate sampling equipment that is cleaned at each sampling location.

Chemical Results

Chemical analysis reports have been supplied by the client prior to the materials being imported to site. These certificates meet the GAC values for residential use without plant uptake. No Asbestos was detected. These are included in Appendix C. Imported materials tickets are included in Appendix D. Waste tickets are included in Appendix E.

Soil samples were sent to the laboratories of I2 who are UKAS and MCERTS accredited. Samples were tested for the CLEA metal suite, pH, sulphate, cyanide, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAH), organic carbon, Speciated Total Petroleum Hydrocarbon (TPH CWG) and Asbestos screen.

Results show the materials used meet the agreed GAC values for residential use without plant uptake. These are included in Appendix F.

Conclusion

Based on the site inspection undertaken, information provided and chemical results, it is considered that remediation works within the communal soft landscaping areas of Blocks D and E are in accordance with the approved Remedial Methodology. This letter has been prepared to address condition Section 4 24 of planning application 20/01714/FP, in relation to Blocks D and E.

We hope that we have correctly interpreted your requirements.

Yours sincerely,
For and on behalf of Enzygo



Richard Reece
Environmental Consultant

HP01

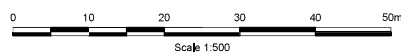


HP02



HP03





Key

-  Site Boundary
-  Validation Pits (HP)



Samuel House, 5 Fox Valley Way, Stocksbridge, Sheffield, S36 2AA

CLIENT: Hill Partnership Ltd		
SCALE: 1:500@A3	PROJECT REF: CRM.1027.147	
DRAWN: LW	CHECKED: SR	DATE: May 2023
PROJECT: Foundation House		
TITLE: Remediation Plan		
FIGURE NO: CRM.1027.147.GE.D.001		



Amended Report

Report No.:	25-02435-2		
Initial Date of Issue:	10-Feb-2025	Date of Re-Issue:	10-Feb-2025
Re-Issue Details:	This report has been revised and directly supersedes 25-02435-1 in its entirety		
Client	Springbridge Direct Ltd		
Client Address:	Oxford Road Denham Middlesex UB9 4DF		
Contact(s):	Tom Hawkins		
Project	Springbridge Yard		
Quotation No.:	Q25-37158	Date Received:	24-Jan-2025
Order No.:		Date Instructed:	24-Jan-2025
No. of Samples:	2		
Turnaround (Wkdays):	10	Results Due:	06-Feb-2025
Date Approved:	07-Feb-2025	Subcon Results Due:	06-Feb-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: Springbridge Yard

Client: Springbridge Direct Ltd		Chemtest Job No.:	25-02435			
Quotation No.: Q25-37158		Chemtest Sample ID.:	1922377			
Order No.:		Client Sample Ref.:	Subsoil			
		Client Sample ID.:	Sub			
		Sample Type:	SOIL			
		Date Sampled:	22-Jan-2025			
		Time Sampled:	11:26			
		Asbestos Lab:	DURHAM			
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
ACM Type		U	2192		N/A	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected
Moisture		N	2030	%	0.020	11
Soil Colour		N	2040		N/A	Brown
Other Material		N	2040		N/A	None
Soil Texture		N	2040		N/A	Sand
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40	< 0.40
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50
Arsenic		M	2455	mg/kg	0.5	2.7
Cadmium		M	2455	mg/kg	0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	8.7
Copper		M	2455	mg/kg	0.50	4.8
Mercury		M	2455	mg/kg	0.05	0.06
Nickel		M	2455	mg/kg	0.50	4.7
Lead		M	2455	mg/kg	0.50	16
Selenium		M	2455	mg/kg	0.25	< 0.25
Zinc		M	2455	mg/kg	0.50	19
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50

Results - Soil

Project: Springbridge Yard

Client: Springbridge Direct Ltd		Chemtest Job No.:				25-02435
Quotation No.: Q25-37158		Chemtest Sample ID.:				1922377
Order No.:		Client Sample Ref.:				Subsoil
		Client Sample ID.:				Sub
		Sample Type:				SOIL
		Date Sampled:				22-Jan-2025
		Time Sampled:				11:26
		Asbestos Lab:				DURHAM
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
Aliphatic VPH >C5-C6	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	2.1
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	1.7
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	< 2.0
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	14
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	13
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	19
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	32
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0

Results - Soil

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		Client Sample ID.:	Sub			
		Sample Type:	SOIL			
		Date Sampled:	22-Jan-2025			
		Time Sampled:	11:26			
		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	< 1.0
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	3.1
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	2.6
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	20
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	5.7
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	26
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	25
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	59
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
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

Results - Soil

Project: Springbridge Yard

Client: Springbridge Direct Ltd		Chemtest Job No.:	25-02435			
Quotation No.: Q25-37158		Chemtest Sample ID.:	1922377			
Order No.:		Client Sample Ref.:	Subsoil			
		Client Sample ID.:	Sub			
		Sample Type:	SOIL			
		Date Sampled:	22-Jan-2025			
		Time Sampled:	11:26			
		Asbestos Lab:	DURHAM			
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
Phenanthrene		M	2800	mg/kg	0.10	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	< 0.10
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
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10

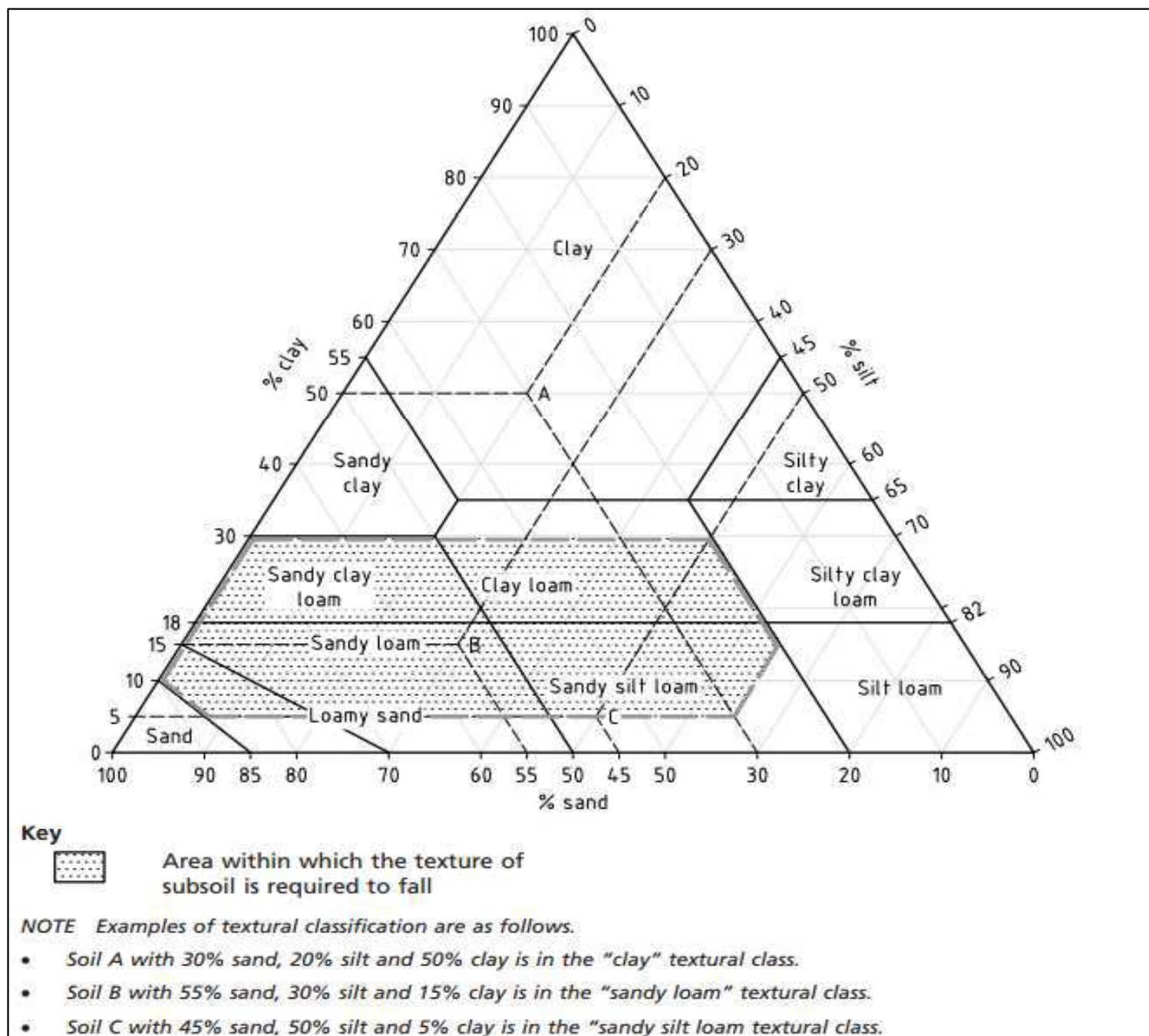
Results - Subsoil Report

BS8601:2013

Chemtest Job No.: 25-02435
Chemtest Sample ID.: 1922377
 Client Sample Ref.: Subsoil
 Sample Location:
Client Sample ID.: Sub
 Top Depth (m):
 Bottom Depth (m):
 Date Sampled: 22-Jan-2025
 Time Sampled:

Parameter	Units	Multipurpose Range	Result	Compliant with Multipurpose Range? (Y/N)	Compliant with Specific Purpose Range? (Y/N)	
Texture					Acid	Calc.
Clay content	%		5.0			
Silt content	%		10.0			
Sand content	%		85			
Soil texture class		See Attached Chart	Loamy Sand	YES		
Mass Loss on Ignition						
	%	<2	0.15	YES		
Stone Content	% m/m					
>2mm		0-40	5.8	YES		
>20mm		0-20	< 0.10	YES		
>50mm		0	< 0.10	YES		
Soil pH value		5.5-8.5	7.9	YES	NO	YES
Carbonate (Calcareous only)	%		1.1			YES
Electrical Conductivity	µS/cm	If >2800 do ESP	2600	YES		
Exchangeable sodium	%	<15	3.8	YES		
Available Calcium	mg/l		1700			
Available Sodium	mg/l		89			
Phytotoxic Contaminants (by soil pH)		< 6.0 6.0-7.0 > 7.0				
Zinc (Nitric Acid extract)	mg/kg	<200 <200 <300	24	YES		
Copper (Nitric Acid extract)	mg/kg	<100 <135 <200	< 5.0	YES		
Nickel (Nitric Acid extract)	mg/kg	<60 <75 <110	6.1	YES		
Visible Contaminants	% mm					
>2mm		<0.5	0.000	YES		
..... of which plastics		<0.25	0.000	YES		
..... man-made sharps		zero in 1kg	0.000	YES		

Subsoil: Texture Classification Chart



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British Standards can be obtained in PDF or hard copy formats from the BSI online shop: www.bsigroup.com/Shop or by contacting BSI Customer Services for hardcopies only: Tel: +44 (0)20 8996 9001, Email: cservices@bsigroup.com.

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2020	Electrical Conductivity	Electrical conductivity (EC) of aqueous extract or calcium sulphate solution for topsoil	Measurement of the electrical resistance of a 2:1 water/soil extract.	
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.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2260	Carbonate	Carbonate	Titration	
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.	
2400	Cations	Cations	ICP-MS	
2450	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.	
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.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.	
2620	LOI 440	LOI 440 Trommel Fines	Determination of the proportion by mass that is lost from a soil by ignition at 440°C.	
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*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and Trimethylphenols>Note: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

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

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

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 - Insufficient Sample (Applies to LOI in Trommel Fines Only)

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.

Water Sample Category Key for Accreditation

Report Information

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

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



Amended Report

Report No.:	25-02435-2		
Initial Date of Issue:	10-Feb-2025	Date of Re-Issue:	10-Feb-2025
Re-Issue Details:	This report has been revised and directly supersedes 25-02435-1 in its entirety		
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Contact(s):	Tom Hawkins		
Project	Springbridge Yard		
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Date Approved:	07-Feb-2025	Subcon Results Due:	06-Feb-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: Springbridge Yard

Client: Springbridge Direct Ltd		Chemtest Job No.:				25-02435
Quotation No.: Q25-37158		Chemtest Sample ID.:				1922378
Order No.:		Client Sample Ref.:				Topsoil
		Client Sample ID.:				Top
		Sample Type:				SOIL
		Date Sampled:				22-Jan-2025
		Time Sampled:				11:26
		Asbestos Lab:				DURHAM
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
ACM Type		U	2192		N/A	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected
Moisture		N	2030	%	0.020	17
Soil Colour		N	2040		N/A	Brown
Other Material		N	2040		N/A	Stones
Soil Texture		N	2040		N/A	Sand
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40	1.1
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50
Arsenic		M	2455	mg/kg	0.5	1.4
Cadmium		M	2455	mg/kg	0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	3.2
Copper		M	2455	mg/kg	0.50	3.2
Mercury		M	2455	mg/kg	0.05	< 0.05
Nickel		M	2455	mg/kg	0.50	2.0
Lead		M	2455	mg/kg	0.50	6.0
Selenium		M	2455	mg/kg	0.25	< 0.25
Zinc		M	2455	mg/kg	0.50	14
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50

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		Asbestos Lab:	DURHAM			
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
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Aliphatic VPH >C6-C7	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C7-C8	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	HS_2D_AL	N	2780	mg/kg	0.10	< 0.10
Aliphatic VPH >C8-C10	HS_2D_AL	U	2780	mg/kg	0.05	< 0.05
Total Aliphatic VPH >C5-C10	HS_2D_AL	U	2780	mg/kg	0.25	< 0.25
Aliphatic EPH >C10-C12 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	< 2.0
Aliphatic EPH >C12-C16 MC	EH_2D_AL_#1	M	2690	mg/kg	1.00	< 1.0
Aliphatic EPH >C16-C21 MC	EH_2D_AL_#1	M	2690	mg/kg	2.00	3.5
Aliphatic EPH >C21-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	3.00	25
Aliphatic EPH >C35-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	17
Total Aliphatic EPH >C10-C35 MC	EH_2D_AL_#1	M	2690	mg/kg	5.00	30
Total Aliphatic EPH >C10-C40 MC	EH_2D_AL_#1	N	2690	mg/kg	10.00	47
Aromatic VPH >C5-C7	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05
Aromatic VPH >C7-C8	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05
Aromatic VPH >C8-C10	HS_2D_AR	U	2780	mg/kg	0.05	< 0.05
Total Aromatic VPH >C5-C10	HS_2D_AR	U	2780	mg/kg	0.25	< 0.25
Aromatic EPH >C10-C12 MC	EH_2D_AR_#1	U	2690	mg/kg	1.00	< 1.0

Results - Soil

Project: Springbridge Yard

Client: Springbridge Direct Ltd		Chemtest Job No.:	25-02435			
Quotation No.: Q25-37158		Chemtest Sample ID.:	1922378			
Order No.:		Client Sample Ref.:	Topsoil			
		Client Sample ID.:	Top			
		Sample Type:	SOIL			
		Date Sampled:	22-Jan-2025			
		Time Sampled:	11:26			
		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	< 1.0
Aromatic EPH >C16-C21 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	11
Aromatic EPH >C21-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	2.00	6.0
Aromatic EPH >C35-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	1.00	31
Total Aromatic EPH >C10-C35 MC	EH_2D_AR_#1	U	2690	mg/kg	5.00	17
Total Aromatic EPH >C10-C40 MC	EH_2D_AR_#1	N	2690	mg/kg	10.00	48
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	47
Total EPH >C10-C40 MC	EH_2D_Total_#1	N	2690	mg/kg	10.00	95
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
Nitrogen (Total)		SN	2790	%	0.10	0.23
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

Results - Soil

Project: Springbridge Yard

Client: Springbridge Direct Ltd		Chemtest Job No.:				25-02435
Quotation No.: Q25-37158		Chemtest Sample ID.:				1922378
Order No.:		Client Sample Ref.:				Topsoil
		Client Sample ID.:				Top
		Sample Type:				SOIL
		Date Sampled:				22-Jan-2025
		Time Sampled:				11:26
		Asbestos Lab:				DURHAM
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
Fluorene		M	2800	mg/kg	0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	< 0.10
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
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10

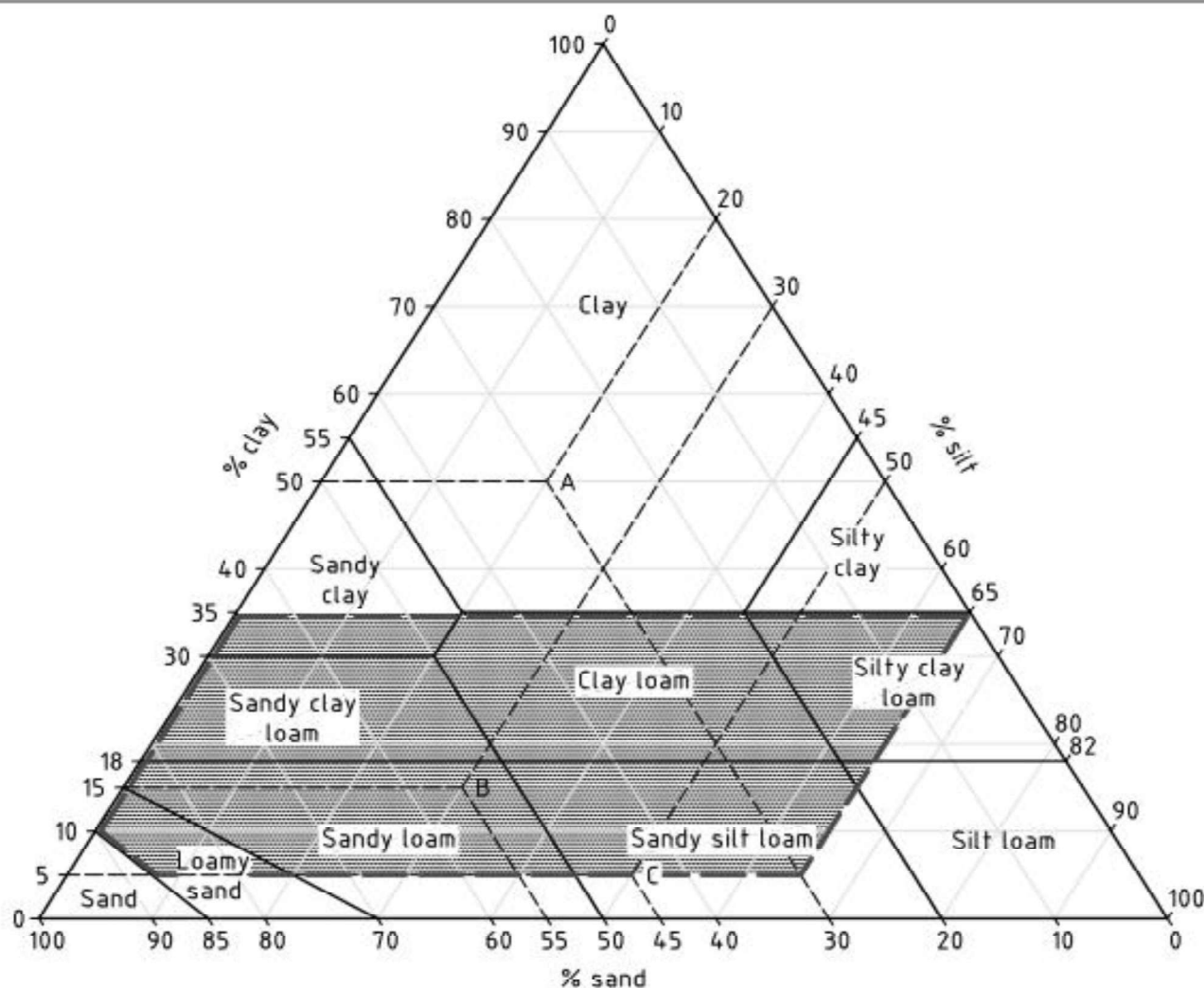
Results - Topsoil Report

BS3882:2015

Chemtest Job No.: 25-02435
 Chemtest Sample ID.: 1922378
 Client Sample Ref.: Topsoil
 Sample Location:
 Client Sample ID.: Top
 Top Depth (m):
 Bottom Depth (m):
 Date Sampled: 22-Jan-2025
 Time Sampled:

Parameter	Units	Multipurpose Range	Result	Compliant with Multipurpose Range? (Y/N)	Compliant with Specific Purpose Range? (Y/N)		
Texture					Acid	Low F	Calc.
Clay content (Sub Contracted)	%		6.0				
Silt content (Sub Contracted)	%		11.0				
Sand content (Sub Contracted)	%		84				
Soil texture class		See Attached Chart	Loamy Sand	YES			
Mass Loss on Ignition							
Clay 5-20%		3.0-20	3.1	YES	YES	YES	YES
Clay 20-35%		5.0-20					
Stone Content	% m/m						
>2mm (Sub Contracted)		0-30	4.2	YES			
>20mm (Sub Contracted)		0-10	0.70	YES			
>50mm (Sub Contracted)		0	< 0.10	YES			
Soil pH value		5.5-8.5	8.2	YES	NO	YES	YES
Carbonate (Calcareous only)	%		1.2				YES
Electrical Conductivity	µS/cm	If >3300 do ESP	3200	YES			
Available Nutrient Content							
Nitrogen %		>0.15	0.23	YES	YES		YES
Extractable phosphorus	mg/l	16-140	110	YES	YES	NO	YES
Extractable potassium	mg/l	121-1500	1400	YES	YES		YES
Extractable magnesium	mg/l	51-600	220	YES	YES		YES
Carbon : Nitrogen Ratio		<20:1	7.4/1	YES	YES	YES	YES
Exchangeable sodium	%	<15	4.2				
Available Calcium	mg/l		1700				
Available Sodium	mg/l		160				
Phytotoxic Contaminants (by soil pH)		< 6.0	6.0-7.0	> 7.0			
Zinc (Nitric Acid extract)	mg/kg	<200	<200	<300	38	YES	
Copper (Nitric Acid extract)	mg/kg	<100	<135	<200	8.6	YES	
Nickel (Nitric Acid extract)	mg/kg	<60	<75	<110	5.4	YES	
Visible Contaminants	% mm						
>2mm		<0.5	0.000	YES			
..... of which plastics		<0.25	0.000	YES			
..... man-made sharps		zero in 1kg	0.000	YES			

Topsoil: Texture Classification Chart



Key



Area within which the texture of topsoil is required to fall

NOTE Examples of textural classification are as follows.

- Soil A with 30% sand, 20% silt and 50% clay is in the "clay" textural class.
- Soil B with 55% sand, 30% silt and 15% clay is in the "sandy loam" textural class.
- Soil C with 45% sand, 50% silt and 5% clay is in the "sandy silt loam" textural class.

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Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2020	Electrical Conductivity	Electrical conductivity (EC) of aqueous extract or calcium sulphate solution for topsoil	Measurement of the electrical resistance of a 2:1 water/soil extract.	
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.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2115	Total Nitrogen in Soils	Nitrogen	Determination by elemental analyser	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2260	Carbonate	Carbonate	Titration	
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.	
2400	Cations	Cations	ICP-MS	
2420	Phosphate	Phosphate	Spectrophotometry - Discrete analyser	
2450	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.	
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.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'AquaKem 600' Discrete Analyser using 1,5-diphenylcarbazine.	
2620	LOI 440	LOI 440 Trommel Fines	Determination of the proportion by mass that is lost from a soil by ignition at 440°C.	
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	
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds(cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS	
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	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

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

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

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 - Insufficient Sample (Applies to LOI in Trommel Fines Only)

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.

Water Sample Category Key for Accreditation

Report Information

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

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