

eurofins Chemtest

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Amended Report

Report No.: 22-24011-2

Initial Date of Issue: 06-Jul-2022 Date of Re-Issue: 19-Jul-2022

Client Springbridge Direct Ltd

Client Address: Oxford Road

Denham Middlesex UB9 4DF

Contact(s): Tom Hawkins

Project Springbridge Yard

Quotation No.: Q22-26866 Date Received: 27-Jun-2022

Order No.: 124625 **Date Instructed:** 27-Jun-2022

No. of Samples: 2

Turnaround (Wkdays): 10 Results Due: 08-Jul-2022

Date Approved: 06-Jul-2022

Approved By:

Details: Stuart Henderson, Technical Manager

Results - Soil

Project: Springbridge Yard

Client: Springbridge Direct Ltd	Chemtest Job No.:			22-24011		
Quotation No.: Q22-26866		Chemtest Sample ID.:				
Order No.: 124625		Topsoil				
		Тор				
		Sample Type:			SOIL 23-Jun-2022	
		Date Sampled:				
				os Lab:	COVENTRY	
Determinand	Accred.	Accred. SOP Units LOD				
АСМ Туре	U	2192		N/A	-	
Asbestos Identification	U	2192		N/A	No Asbestos Detected	
Moisture	N	2030	%	0.020	9.6	
Soil Colour	N	2040		N/A	Brown	
Other Material	N	2040		N/A	None	
Soil Texture	N	2040		N/A	Loam	
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	2.1	
Cyanide (Total)	M	2300	mg/kg	0.50	0.60	
Arsenic	M	2455	mg/kg	0.5	8.2	
Cadmium	M	2455	mg/kg	0.10	< 0.10	
Chromium	M	2455	mg/kg	0.5	7.0	
Copper	M	2455		0.50	8.8	
Mercury	M	2455	mg/kg	0.05	3.2	
Nickel	M	2455	mg/kg	0.50	4.3	
Lead	M	2455	mg/kg	0.50	33	
Selenium	M	2455	mg/kg	0.25	1.1	
Zinc	M	2455	mg/kg	0.50	28	
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C10-C12	М	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C12-C16	М	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C16-C21	U	2680		1.0	< 1.0	
Aromatic TPH >C21-C35	М	2680		1.0	< 1.0	
Aromatic TPH >C35-C44	N	2680		1.0	< 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	
Naphthalene	N	2700	mg/kg	0.010	< 0.010	

Results - Soil

Project: Springbridge Yard

Client: Springbridge Direct Ltd		22-24011					
Quotation No.: Q22-26866	Chemtest Sample ID.:				1456183		
Order No.: 124625		Topsoil					
	Client Sample ID.:			Тор			
		Sample Type:			SOIL		
			Date Sa	mpled:	23-Jun-2022 COVENTRY		
		Asbestos Lab:					
Determinand	Accred.	SOP	Units	LOD			
Acenaphthylene	N	2700	mg/kg	0.010	< 0.010		
Acenaphthene	N	2700	mg/kg	0.010	< 0.010		
Fluorene	N	2700	mg/kg	0.010	< 0.010		
Phenanthrene	N	2700	mg/kg	0.010	< 0.010		
Anthracene	N	2700	mg/kg	0.010	< 0.010		
Fluoranthene	N	2700	mg/kg	0.010	0.82		
Pyrene	N	2700	mg/kg	0.010	0.82		
Benzo[a]anthracene	N	2700	mg/kg	0.010	0.34		
Chrysene	N	2700	mg/kg	0.010	0.57		
Benzo[b]fluoranthene	N	2700	mg/kg	0.010	0.50		
Benzo[k]fluoranthene	N	2700	mg/kg	0.010	0.16		
Benzo[a]pyrene	N	2700	mg/kg	0.010	0.35		
Indeno(1,2,3-c,d)Pyrene	N	2700	mg/kg	0.010	< 0.010		
Dibenz(a,h)Anthracene	N	2700	mg/kg	0.010	< 0.010		
Benzo[g,h,i]perylene	N	2700	mg/kg	0.010	< 0.010		
Total Of 16 PAH's	N	2700	mg/kg	0.20	3.6		
Benzene	М	2760	μg/kg	1.0	< 1.0		
Toluene	М	2760	μg/kg	1.0	< 1.0		
Ethylbenzene	М	2760	μg/kg	1.0	< 1.0		
m & p-Xylene	М	2760	μg/kg	1.0	< 1.0		
o-Xylene	М	2760	μg/kg	1.0	< 1.0		
Total Phenols	М	2920	mg/kg	0.10	< 0.10		

Results - Topsoil Report

BS3882:2015

Chemtest Job No.: 22-24011 Chemtest Sample ID.: 1456183 Client Sample Ref.: Topsoil

Sample Location: Client Sample ID.: Top

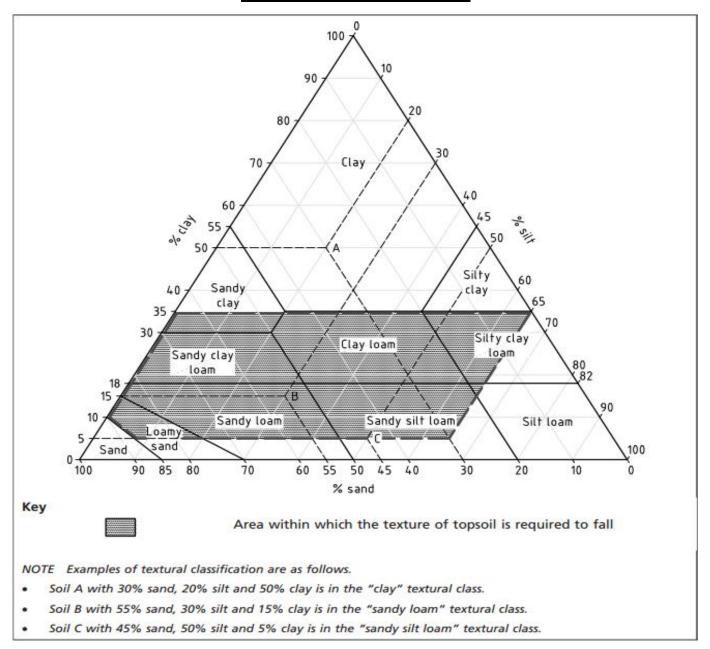
Top Depth (m):

Bottom Depth (m): Date Sampled: 23-Jun-2022

Time Sampled:

Parameter	Units	Multipurpose Range		Result	Compliant with Multipurpose Range? (Y/N)	Spe	Compliant with Specific Purpose Range? (Y/N)		
Texture							Acid	Low F	Calc.
Clay content	%				6.0				
Silt content	%				10.0				
Sand content	%			84					
Soil texture class		See Attached Chart		Sandy Loam	YES				
Mass Loss on Ignition									
Clay 5-20%			3.0-20		6.5	YES	YES	YES	YES
Clay 20-35%			5.0-20		0.5	163	IES	IES	IES
Stone Content	% m/m								
>2mm			0-30		16	YES			
>20mm			0-10		< 0.020	YES			
>50mm			0		< 0.020	YES			
Soil pH value		5.5-8.5		8.5	YES	NO	YES	YES	
Carbonate (Calcareous only)	%			0.51				NO	
Electrical Conductivity	μS/cm	If >3300 do ESP		2500	YES				
Available Nutrient Content									
Nitrogen %		>0.15		0.23	YES	YES		YES	
Extractable phosphorus	mg/l	16-140		32	YES	YES	NO	YES	
Extractable potassium	mg/l	121-1500		820	YES	YES		YES	
Extractable magnesium	mg/l	51-600		160	YES	YES		YES	
Carbon : Nitrogen Ratio		<20:1		16.6/1	YES	YES	YES	YES	
Exchangeable sodium	%	<15		2.6					
Available Calcium	mg/l			360					
Available Sodium	mg/l			75					
Phytotoxic Contaminants (by soil pH)			6.0-7.0	> 7.0					
Zinc (Nitric Acid extract)	mg/kg	<200	<200	<300	18	YES			
Copper (Nitric Acid extract)	mg/kg	<100	<135	<200	6.1	YES			
Nickel (Nitric Acid extract)	mg/kg	<60	<75	<110	< 5.0	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				

<u>Topsoil:</u> Texture Classification Chart



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Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	рН	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 <37°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	Allkaline 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.
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-diphenylcarbazide.
2620	LOI 440	LOI 440 Trommel Fines	Determination of the proportion by mass that is lost from a soil by ignition at 440°C.
2680	TPH A/A Split	Aliphatics: >C5-C6, >C6-C8,>C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21- C35, >C35- C44Aromatics: >C5-C7, >C7-C8, >C8-C10, >C10-C12, >C12-C16, >C16-C21, >C21-C35, >C35-C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	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-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
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.
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
Ν	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
Т	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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

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 TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°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

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

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