



EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

BR-TP01

Project	GCRE Bridge Works	Easting	284116.12	Equipment	Insulated Hand Tools
Client	Walters UK Limited	Northing	210507.96	Method	TP
Project No	G23012B	Level	228.86 mAOD	Termination Reason	Terminated on obstruction

Sheet 2 of 2



BR-TP01 Face B



EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole
BR-TP02

Project	GCRE Bridge Works	Easting	284117.78	Equipment	Insulated Hand Tools
Client	Walters UK Limited	Northing	210511.67	Method	TP
Project No	G23012B	Level	230.56 mAOD	Termination Reason	Terminated on obstruction

Sheet 1 of 2



BR-TP02 Face A



BR-TP02 Spoil

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

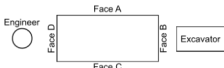
BR-TP02

Project	GCRE Bridge Works	Easting	284117.78	Equipment	Insulated Hand Tools
Client	Walters UK Limited	Northing	210511.67	Method	TP
Project No	G23012B	Level	230.56 mAOD	Termination Reason	Terminated on obstruction

Sheet 2 of 2



BR-TP02 Face B

		TRIAL PIT EXPLORATORY HOLE LOG						Exploratory Hole Progress by Time			Exploratory Hole				
								Date and Time		Depth	Water Depth	BR-TP03			
								02/06/2023 12:00 02/06/2023 13:00		0.00 0.70	Dry				
Project	GCRE Bridge Works			Equipment	Insulated Hand Tools			Sheet 1 of 1		Scale 1:20					
Client	Walters UK Limited			Method	TP										
Project No	G23012B	Level	232.03 mAOD	Orientation		0 degrees		Logged WH		Checked AP					
Easting	284125.91	Northing	210518.17	Length		0.30									
Termination Reason		Terminated on obstruction			Width		0.30								
Samples	Sampling and Testing Depths	Insitu Testing and Depth Related Remarks		Depth (Thickness)	Level (mAOD)	Legend	Description			Scale	Backfill				
1 ES	0.20 - 0.30			0.00	231.33		Greyish brown gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subrounded of siltstone and concrete. Cobbles are angular to subangular of brick, concrete and mudstone. (MADE GROUND)			0.50					
2 B	0.40 - 0.60			(0.70)											
3 ES	0.50 - 0.60			End of Exploratory Hole at 0.70m			1.00								
										1.50					
										2.00					
										2.50					
										3.00					
										3.50					
										4.00					
Weather	Sunny	Trial Pit Excavation Onsite Layout 					Water Strikes								
Shoring	None						Date and Time					Strike	Rising to	Time	Remarks
Stability	Stable						Log presents Face A unless otherwise noted.								
Remarks Hand excavated trial pit from GL to 1.20m															

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole
BR-TP03

Project	GCRE Bridge Works	Easting	284125.91	Equipment	Insulated Hand Tools
Client	Walters UK Limited	Northing	210518.17	Method	TP
Project No	G23012B	Level	232.03 mAOD	Termination Reason	Terminated on obstruction

Sheet 1 of 2



BR-TP03 Face A



BR-TP03 Spoil

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole

BR-TP03

Project	GCRE Bridge Works	Easting	284125.91	Equipment	Insulated Hand Tools
Client	Walters UK Limited	Northing	210518.17	Method	TP
Project No	G23012B	Level	232.03 mAOD	Termination Reason	Terminated on obstruction

Sheet 2 of 2



BR-TP03 Face B



EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole
BR-TP04

Project	GCRE Bridge Works	Easting	284136.66	Equipment	Insualetd Hand Tools
Client	Walters UK Limited	Northing	210501.15	Method	TP
Project No	G23012B	Level	228.40 mAOD	Termination Reason	Too dense to progress

Sheet 1 of 2



BR-TP04 Face A



BR-TP04 Spoil

EXPLORATORY HOLE PHOTOGRAPHS

Exploratory Hole
BR-TP04

Project	GCRE Bridge Works	Easting	284136.66	Equipment	Insualetd Hand Tools
Client	Walters UK Limited	Northing	210501.15	Method	TP
Project No	G23012B	Level	228.40 mAOD	Termination Reason	Too dense to progress

Sheet 2 of 2



BR-TP04 Face B

Appendix III

Geotechnical Testing

GSTL Report

Report number: 67120



Laboratory Report



Contract Number: 67120

Client Ref: **G23012B**

Client PO:

Date Received: **20-06-2023**

Date Completed: **30-06-2023**

Report Date: **30-06-2023**

Client: **Jackson Drilling Holdings Ltd**
Northwood Farm
Coxbridge Road
Baltonsborough
Somerset
BA6 8RA

This report has been checked and approved by:

Brendan Evans
Office Administrator

Contract Title: **GCRE Bridge Works**

For the attention of: **Adam Putt**

Test Description	Qty
Moisture Content of Soil BS1377 : Part 2 : Clause 3.2 : 1990 - * UKAS	3
4 Point Liquid & Plastic Limit BS 1377:1990 - Part 2 : 4.3 & 5.3 - * UKAS	2
PSD Wet & Dry Sieve method BS 1377:1990 - Part 2 : 9.2 - * UKAS	1
Determination of Point Load Value Axial or Diametrical including WC *Please note GSTL is not accredited for the water content of rock* ISRM Suggested Method for Point Load Strength - * UKAS	6
Disposal of samples for job	1

Notes: **Observations and Interpretations are outside the UKAS Accreditation**

* - denotes test included in laboratory scope of accreditation

- denotes test carried out by approved contractor

@ - denotes non accredited tests

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Approved Signatories:

Brendan Evans (Office Administrator) - Darren Bourne (Quality Senior Technician) - Paul Evans (Director)

Richard John (Quality/Technical Manager) - Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager)

Wayne Honey (Human Resources/ Health and Safety Manager)

GEO Site & Testing Services Ltd

Units 3-4, Heol Aur, Dafen, Llanelli, Carmarthenshire, Wales SA14 8QN

Tel: 01554 784040 Fax: 01554 784041 info@gstl.co.uk gstl.co.uk

Owain Davies



PARTICLE SIZE DISTRIBUTION
BS 1377 Part 2:1990
Wet Sieve, Clause 9.2

Contract Number 67120

Borehole/Pit No. BR-BH01

Project Name GCRE Bridge Works

Sample No. 101

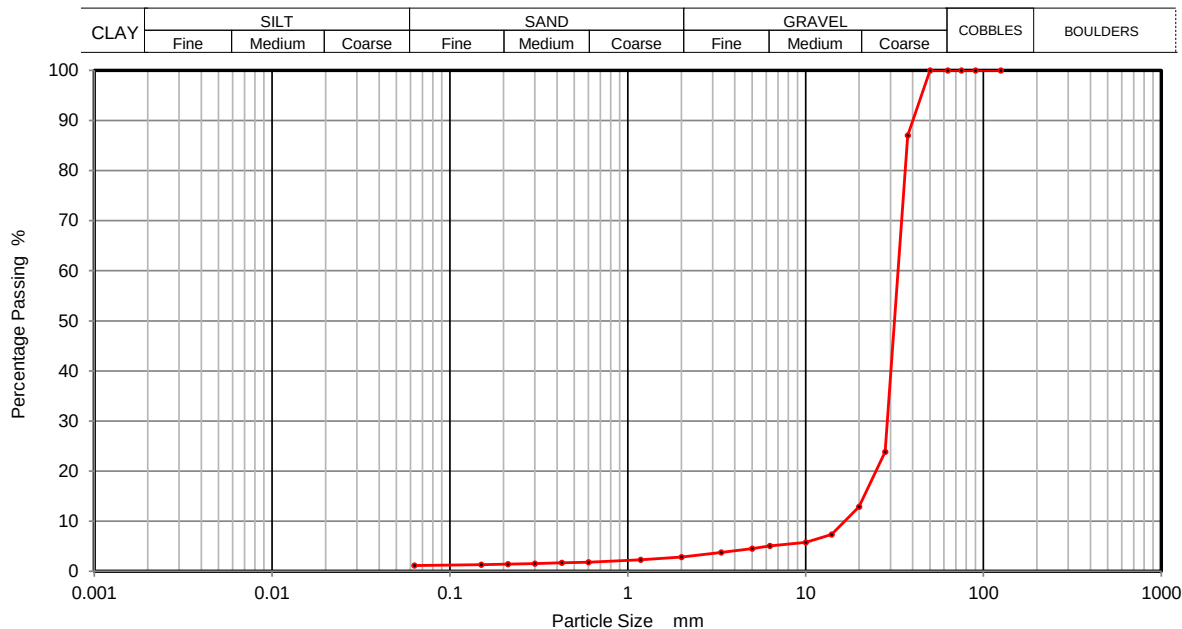
Soil Description Grey slightly silty/clayey slightly fine to coarse sandy fine to coarse GRAVEL

Depth Top 2.00

Depth Base 2.20

Date Tested 22/062023

Sample Type D



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	87		
28	24		
20	13		
14	7		
10	6		
6.3	5		
5	5		
3.35	4		
2	3		
1.18	2		
0.6	2		
0.425	2		
0.3	2		
0.212	1		
0.15	1		
0.063	1		

Sample Proportions	% dry mass
Cobbles	0
Gravel	97
Sand	2
Silt and Clay	1

Remarks

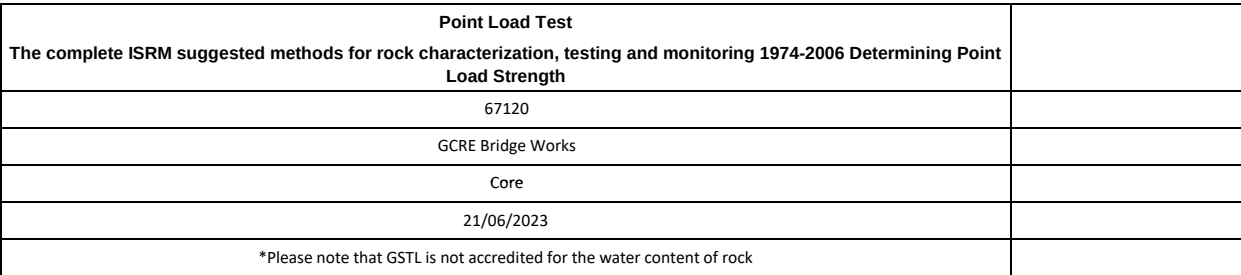
Preparation and testing in accordance with BS1377 unless noted below

Operator

David Edwards



2788



Key	Reported As
Width	(W) mm
Platen Separation	(D) mm
Failure Load	(P) kN
Equivalent Diameter	(De) mm
Point Load	(Is) MPa
Size Factor	(F)
Point Load Index	(Is(50)) MPa
Moisture Content	%
Description	SC



Appendix IV

Geoenvironmental and Geochemical Testing

Eurofins Chemtest Reports

23-18994

23-19146

23-19254

23-19888

23-22472



Amended Report

Report No.:	23-19146-2		
Initial Date of Issue:	19-Jun-2023	Date of Re-Issue:	26-Jun-2023
Re-Issue Details:	This report has been revised and directly supersedes 23-19146-1 in its entirety		
Client	Jackson Geo Services		
Client Address:	Northwood Farm Coxbridge Road Baltonsborough Somerset BA68 RA		
Contact(s):	Adam Putt James Power		
Project	G23012B Bridge Works		
Quotation No.:	Q23-31554	Date Received:	07-Jun-2023
Order No.:		Date Instructed:	12-Jun-2023
No. of Samples:	1		
Turnaround (Wkdays):	13	Results Due:	28-Jun-2023
Date Approved:	26-Jun-2023		
Approved By:			
Details:	Stuart Henderson, Technical Manager		

Results - Soil

Project: G23012B Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:		23-19146		
Quotation No.: Q23-31554	Chemtest Sample ID.:		1652269		
Order No.:	Client Sample Ref.:		1		
	Sample Location:		BR-BH02		
	Sample Type:		SOIL		
	Top Depth (m):		0.20		
	Bottom Depth (m):		0.40		
	Date Sampled:		05-Jun-2023		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	6.9
pH	U	2010		4.0	8.4
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40
Sulphate (2:1 Water Soluble) as SO4 mg/l	U	2120	mg/l	10.000	< 10
Cyanide (Free)	U	2300	mg/kg	0.50	< 0.50
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50
Arsenic	U	2455	mg/kg	0.5	33
Cadmium	U	2455	mg/kg	0.10	0.67
Chromium	U	2455	mg/kg	0.5	31
Copper	U	2455	mg/kg	0.50	170
Mercury	U	2455	mg/kg	0.05	0.29
Nickel	U	2455	mg/kg	0.50	52
Lead	U	2455	mg/kg	0.50	250
Selenium	U	2455	mg/kg	0.25	1.1
Vanadium	U	2455	mg/kg	0.5	35
Zinc	U	2455	mg/kg	0.50	160
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Aliphatic VPH >C5-C6	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C6-C7	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	N	2780	mg/kg	0.10	< 0.10
Total Aliphatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25
Aliphatic EPH >C10-C12	U	2690	mg/kg	2.00	5.7
Aliphatic VPH >C8-C10	U	2780	mg/kg	0.05	< 0.05
Aliphatic EPH >C12-C16	U	2690	mg/kg	1.00	4.6
Aliphatic EPH >C16-C21	U	2690	mg/kg	2.00	8.0
Aliphatic EPH >C21-C35	U	2690	mg/kg	3.00	15
Aliphatic EPH >C35-C40	N	2690	mg/kg	10.00	< 10
Total Aliphatic EPH >C10-C35	U	2690	mg/kg	5.00	33
Total Aliphatic EPH >C10-C40	N	2690	mg/kg	10.00	33
Aromatic VPH >C5-C7	U	2780	mg/kg	0.05	< 0.05
Aromatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05
Aromatic VPH >C8-C10	U	2780	mg/kg	0.05	< 0.05
Total Aromatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25

Results - Soil

Project: G23012B Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:		23-19146		
Quotation No.: Q23-31554	Chemtest Sample ID.:		1652269		
Order No.:	Client Sample Ref.:		1		
	Sample Location:		BR-BH02		
	Sample Type:		SOIL		
	Top Depth (m):		0.20		
	Bottom Depth (m):		0.40		
	Date Sampled:		05-Jun-2023		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Aromatic EPH >C10-C12	U	2690	mg/kg	1.00	< 1.0
Aromatic EPH >C12-C16	U	2690	mg/kg	1.00	< 1.0
Aromatic EPH >C16-C21	U	2690	mg/kg	2.00	11
Aromatic EPH >C21-C35	U	2690	mg/kg	2.00	150
Aromatic EPH >C35-C40	N	2690	mg/kg	1.00	19
Total Aromatic EPH >C10-C35	U	2690	mg/kg	5.00	160
Total Aromatic EPH >C10-C40	N	2690	mg/kg	10.00	180
Total VPH >C5-C10	U	2780	mg/kg	0.50	< 0.50
Total EPH >C10-C35	U	2690	mg/kg	10.00	200
Total EPH >C10-C40	N	2690	mg/kg	10.00	220
Organic Matter	U	2625	%	0.40	61
Total Organic Carbon	U	2625	%	0.20	35
Benzene	U	2760	µg/kg	1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0
Naphthalene	U	2800	mg/kg	0.10	2.4
Acenaphthylene	N	2800	mg/kg	0.10	0.24
Acenaphthene	U	2800	mg/kg	0.10	0.15
Fluorene	U	2800	mg/kg	0.10	0.17
Phenanthrene	U	2800	mg/kg	0.10	2.1
Anthracene	U	2800	mg/kg	0.10	0.61
Fluoranthene	U	2800	mg/kg	0.10	3.5
Pyrene	U	2800	mg/kg	0.10	2.9
Benzo[a]anthracene	U	2800	mg/kg	0.10	1.7
Chrysene	U	2800	mg/kg	0.10	2.6
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	3.6
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	0.98
Benzo[a]pyrene	U	2800	mg/kg	0.10	1.7
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	1.2
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.34
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	0.99
Total Of 16 PAH's	N	2800	mg/kg	2.0	25
PCB 81	N	2815	mg/kg	0.010	< 0.010
PCB 77	U	2815	mg/kg	0.010	< 0.010
PCB 105	N	2815	mg/kg	0.010	< 0.010

Results - Soil

Project: G23012B Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:		23-19146		
Quotation No.: Q23-31554	Chemtest Sample ID.:		1652269		
Order No.:	Client Sample Ref.:		1		
	Sample Location:		BR-BH02		
	Sample Type:		SOIL		
	Top Depth (m):		0.20		
	Bottom Depth (m):		0.40		
	Date Sampled:		05-Jun-2023		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
PCB 114	N	2815	mg/kg	0.010	< 0.010
PCB 118	N	2815	mg/kg	0.010	< 0.010
PCB 123	N	2815	mg/kg	0.010	< 0.010
PCB 126	N	2815	mg/kg	0.010	< 0.010
PCB 156	N	2815	mg/kg	0.010	< 0.010
PCB 157	N	2815	mg/kg	0.010	< 0.010
PCB 167	N	2815	mg/kg	0.010	< 0.010
PCB 169	N	2815	mg/kg	0.010	< 0.010
PCB 189	N	2815	mg/kg	0.010	< 0.010
Total PCBs (12 Congeners)	N	2815	mg/kg	0.12	< 0.12
Demeton-O	N	2820	mg/kg	0.20	< 0.20
Phorate	N	2820	mg/kg	0.20	< 0.20
Demeton-S	N	2820	mg/kg	0.20	< 0.20
Disulfoton	N	2820	mg/kg	0.20	< 0.20
Fenthion	N	2820	mg/kg	0.20	< 0.20
Trichloronate	N	2820	mg/kg	0.20	< 0.20
Prothiofos	N	2820	mg/kg	0.20	< 0.20
Fensulphothion	N	2820	mg/kg	0.20	< 0.20
Sulprofos	N	2820	mg/kg	0.20	< 0.20
Azinphos-Methyl	N	2820	mg/kg	0.20	< 0.20
Coumaphos	N	2820	mg/kg	0.20	< 0.20
Dichlorvos	N	2820	mg/kg	0.20	< 0.20
Atraton	N	2830	mg/kg	0.20	< 0.20
Prometon	N	2830	mg/kg	0.20	< 0.20
Simazine	N	2830	mg/kg	0.20	< 0.20
Atrazine	N	2830	mg/kg	0.20	< 0.20
Propazine	N	2830	mg/kg	0.20	< 0.20
Terbuthylazine	N	2830	mg/kg	0.20	< 0.20
Secbumeton	N	2830	mg/kg	0.20	< 0.20
Simetryn	N	2830	mg/kg	0.20	< 0.20
Ametryn	N	2830	mg/kg	0.20	< 0.20
Prometryn	N	2830	mg/kg	0.20	< 0.20
Terbutryn	N	2830	mg/kg	0.20	< 0.20
Alpha-HCH	N	2840	mg/kg	0.20	< 0.20
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20	< 0.20
Beta-HCH	N	2840	mg/kg	0.20	< 0.20
Delta-HCH	N	2840	mg/kg	0.20	< 0.20

Results - Soil

Project: G23012B Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:		23-19146		
Quotation No.: Q23-31554	Chemtest Sample ID.:		1652269		
Order No.:	Client Sample Ref.:		1		
	Sample Location:		BR-BH02		
	Sample Type:		SOIL		
	Top Depth (m):		0.20		
	Bottom Depth (m):		0.40		
	Date Sampled:		05-Jun-2023		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Heptachlor	N	2840	mg/kg	0.20	< 0.20
Aldrin	N	2840	mg/kg	0.20	< 0.20
Heptachlor Epoxide	N	2840	mg/kg	0.20	< 0.20
Gamma-Chlordane	N	2840	mg/kg	0.20	< 0.20
Alpha-Chlordane	N	2840	mg/kg	0.20	< 0.20
Endosulfan I	N	2840	mg/kg	0.20	< 0.20
4,4-DDE	N	2840	mg/kg	0.20	< 0.20
Dieldrin	N	2840	mg/kg	0.20	< 0.20
Endrin	N	2840	mg/kg	0.20	< 0.20
4,4-DDD	N	2840	mg/kg	0.20	< 0.20
Endosulfan II	N	2840	mg/kg	0.20	< 0.20
Endrin Aldehyde	N	2840	mg/kg	0.20	< 0.20
4,4-DDT	N	2840	mg/kg	0.20	< 0.20
Endosulfan Sulphate	N	2840	mg/kg	0.20	< 0.20
Methoxychlor	N	2840	mg/kg	0.20	< 0.20
Endrin Ketone	N	2840	mg/kg	0.20	< 0.20
Total Phenols	U	2920	mg/kg	0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	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 <37°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
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.
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-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
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
2810	Polychlorinated Biphenyls (PCB) as Aroclors in Soils by GC-ECD	Polychlorinated Biphenyls expressed as an Aroclor (normally reported as *Aroclor 1242)	Extraction of a soil sample, as received, into hexane/acetone (50:50) followed by gas chromatography (GC) using mass spectrometric (MS) detection for identification of polychlorinated biphenyls and electron capture detection (ECD) for quantitation if present.
2815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
2820	Organophosphorus (O-P) Pesticides in Soils by GC-MS	Organophosphorus pesticide representative suite including Parathion, Malathion etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2830	Organonitrogen (O-N) Pesticides in Soils by GC-MS	Organonitrogen pesticide representative suite including Triazines etc, plus client specific determinands	Dichloromethane extraction / GC-MS

Test Methods

SOP	Title	Parameters included	Method summary
2840	Organochlorine (O-Cl) Pesticides in Soils by GC-MS	Organochlorine pesticide representative suite including DDT and its metabolites, 'drins' and HCH etc, plus client specific determinands	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

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



Amended Report

Report No.:	23-19254-5		
Initial Date of Issue:	18-Jun-2023	Date of Re-Issue:	26-Jun-2023
Re-Issue Details:	This report has been revised and directly supersedes 23-19254-4 in its entirety		
Client	Jackson Geo Services		
Client Address:	Northwood Farm Coxbridge Road Baltonsborough Somerset BA68 RA		
Contact(s):	Adam Putt James Power		
Project	G23012B Global Centre of Rail Excellence (GCRE) Bridge Works		
Quotation No.:	Q22-29781	Date Received:	08-Jun-2023
Order No.:		Date Instructed:	12-Jun-2023
No. of Samples:	1		
Turnaround (Wkdays):	11	Results Due:	26-Jun-2023
Date Approved:	26-Jun-2023		
Approved By:			
Details:	Stuart Henderson, Technical Manager		

Results - Leachate

Project: G23012B Global Centre of Rail Excellence (GCRE) Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:					23-19254
Quotation No.: Q22-29781	Chemtest Sample ID.:					1652733
Order No.:	Client Sample Ref.:					1
	Sample Location:					BR-BH01
	Sample Type:					SOIL
	Top Depth (m):					0.20
	Bottom Depth (m):					0.30
	Date Sampled:					06-Jun-2023
Determinand	Accred.	SOP	Type	Units	LOD	
pH	U	1010	10:1		N/A	7.7
Sulphate	U	1220	10:1	mg/l	1.0	< 1.0
Cyanide (Total)	U	1300	10:1	mg/l	0.050	< 0.050
Cyanide (Free)	U	1300	10:1	mg/l	0.050	< 0.050
Arsenic (Dissolved)	U	1455	10:1	µg/l	0.20	2.3
Cadmium (Dissolved)	U	1455	10:1	µg/l	0.11	0.13
Chromium (Dissolved)	U	1455	10:1	µg/l	0.50	< 0.50
Copper (Dissolved)	U	1455	10:1	µg/l	0.50	8.4
Mercury (Dissolved)	U	1455	10:1	µg/l	0.05	< 0.05
Nickel (Dissolved)	U	1455	10:1	µg/l	0.50	2.9
Lead (Dissolved)	U	1455	10:1	µg/l	0.50	3.0
Selenium (Dissolved)	U	1455	10:1	µg/l	0.50	< 0.50
Vanadium (Dissolved)	U	1455	10:1	µg/l	0.50	0.73
Zinc (Dissolved)	U	1455	10:1	µg/l	2.5	22
Chromium (Hexavalent)	U	1490	10:1	µg/l	20	< 20
Total Phenols	U	1920	10:1	mg/l	0.030	< 0.030

Results - Soil

Project: G23012B Global Centre of Rail Excellence (GCRE) Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:				23-19254
Quotation No.: Q22-29781	Chemtest Sample ID.:				1652733
Order No.:	Client Sample Ref.:				1
	Sample Location:				BR-BH01
	Sample Type:				SOIL
	Top Depth (m):				0.20
	Bottom Depth (m):				0.30
	Date Sampled:				06-Jun-2023
	Asbestos Lab:				DURHAM
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	1.6
pH	U	2010		4.0	8.2
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.61
Sulphate (2:1 Water Soluble) as SO4 mg/l	U	2120	mg/l	10.000	< 10
Cyanide (Free)	U	2300	mg/kg	0.50	< 0.50
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50
Ammonium (Extractable)	U	2425	mg/kg	0.50	14
Arsenic	U	2455	mg/kg	0.5	10
Cadmium	U	2455	mg/kg	0.10	1.2
Chromium	U	2455	mg/kg	0.5	25
Copper	U	2455	mg/kg	0.50	27
Mercury	U	2455	mg/kg	0.05	< 0.05
Nickel	U	2455	mg/kg	0.50	17
Lead	U	2455	mg/kg	0.50	100
Selenium	U	2455	mg/kg	0.25	0.54
Vanadium	U	2455	mg/kg	0.5	51
Zinc	U	2455	mg/kg	0.50	150
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Aliphatic VPH >C5-C6	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C6-C7	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05
Aliphatic VPH >C6-C8 (Sum)	N	2780	mg/kg	0.10	< 0.10
Total Aliphatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25
Aliphatic EPH >C10-C12	U	2690	mg/kg	2.00	5.8
Aliphatic VPH >C8-C10	U	2780	mg/kg	0.05	0.18
Aliphatic EPH >C12-C16	U	2690	mg/kg	1.00	2.1
Aliphatic EPH >C16-C21	U	2690	mg/kg	2.00	6.4
Aliphatic EPH >C21-C35	U	2690	mg/kg	3.00	58
Aliphatic EPH >C35-C40	N	2690	mg/kg	10.00	< 10
Total Aliphatic EPH >C10-C35	U	2690	mg/kg	5.00	72
Total Aliphatic EPH >C10-C40	N	2690	mg/kg	10.00	72
Aromatic VPH >C5-C7	U	2780	mg/kg	0.05	< 0.05
Aromatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05

Results - Soil

Project: G23012B Global Centre of Rail Excellence (GCRE) Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:				23-19254
Quotation No.: Q22-29781	Chemtest Sample ID.:				1652733
Order No.:	Client Sample Ref.:				1
	Sample Location:				BR-BH01
	Sample Type:				SOIL
	Top Depth (m):				0.20
	Bottom Depth (m):				0.30
	Date Sampled:				06-Jun-2023
	Asbestos Lab:				DURHAM
Determinand	Accred.	SOP	Units	LOD	
Aromatic VPH >C8-C10	U	2780	mg/kg	0.05	< 0.05
Total Aromatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25
Aromatic EPH >C10-C12	U	2690	mg/kg	1.00	< 1.0
Aromatic EPH >C12-C16	U	2690	mg/kg	1.00	< 1.0
Aromatic EPH >C16-C21	U	2690	mg/kg	2.00	12
Aromatic EPH >C21-C35	U	2690	mg/kg	2.00	270
Aromatic EPH >C35-C40	N	2690	mg/kg	1.00	44
Total Aromatic EPH >C10-C35	U	2690	mg/kg	5.00	280
Total Aromatic EPH >C10-C40	N	2690	mg/kg	10.00	330
Total VPH >C5-C10	U	2780	mg/kg	0.50	< 0.50
Total EPH >C10-C35	U	2690	mg/kg	10.00	350
Total EPH >C10-C40	N	2690	mg/kg	10.00	400
Organic Matter	U	2625	%	0.40	13
Total Organic Carbon	U	2625	%	0.20	7.5
Dichlorodifluoromethane	U	2760	µg/kg	1.0	< 1.0
Chloromethane	U	2760	µg/kg	1.0	< 1.0
Vinyl Chloride	U	2760	µg/kg	1.0	< 1.0
Bromomethane	U	2760	µg/kg	20	< 20
Chloroethane	U	2760	µg/kg	2.0	< 2.0
Trichlorofluoromethane	U	2760	µg/kg	1.0	< 1.0
1,1-Dichloroethene	U	2760	µg/kg	1.0	< 1.0
Dichloromethane	N	2760	µg/kg	50	< 50
Trans 1,2-Dichloroethene	U	2760	µg/kg	1.0	< 1.0
1,1-Dichloroethane	U	2760	µg/kg	1.0	< 1.0
cis 1,2-Dichloroethene	U	2760	µg/kg	1.0	< 1.0
Bromochloromethane	U	2760	µg/kg	5.0	< 5.0
Trichloromethane	U	2760	µg/kg	1.0	< 1.0
1,1,1-Trichloroethane	U	2760	µg/kg	1.0	< 1.0
Tetrachloromethane	U	2760	µg/kg	1.0	< 1.0
1,1-Dichloropropene	U	2760	µg/kg	1.0	< 1.0
Benzene	U	2760	µg/kg	1.0	< 1.0
1,2-Dichloroethane	U	2760	µg/kg	2.0	< 2.0
Trichloroethene	N	2760	µg/kg	1.0	< 1.0
1,2-Dichloropropane	U	2760	µg/kg	1.0	< 1.0
Dibromomethane	U	2760	µg/kg	1.0	< 1.0
Bromodichloromethane	U	2760	µg/kg	5.0	< 5.0

Results - Soil

Project: G23012B Global Centre of Rail Excellence (GCRE) Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:				23-19254
Quotation No.: Q22-29781	Chemtest Sample ID.:				1652733
Order No.:	Client Sample Ref.:				1
	Sample Location:				BR-BH01
	Sample Type:				SOIL
	Top Depth (m):				0.20
	Bottom Depth (m):				0.30
	Date Sampled:				06-Jun-2023
	Asbestos Lab:				DURHAM
Determinand	Accred.	SOP	Units	LOD	
cis-1,3-Dichloropropene	N	2760	µg/kg	10	< 10
Toluene	U	2760	µg/kg	1.0	< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	< 10
1,1,2-Trichloroethane	U	2760	µg/kg	10	< 10
Tetrachloroethene	U	2760	µg/kg	1.0	< 1.0
1,3-Dichloropropane	U	2760	µg/kg	2.0	< 2.0
Dibromochloromethane	U	2760	µg/kg	10	< 10
1,2-Dibromoethane	U	2760	µg/kg	5.0	< 5.0
Chlorobenzene	U	2760	µg/kg	1.0	< 1.0
1,1,1,2-Tetrachloroethane	U	2760	µg/kg	2.0	< 2.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0
Styrene	U	2760	µg/kg	1.0	< 1.0
Tribromomethane	U	2760	µg/kg	1.0	< 1.0
Isopropylbenzene	U	2760	µg/kg	1.0	< 1.0
Bromobenzene	U	2760	µg/kg	1.0	< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50	< 50
N-Propylbenzene	U	2760	µg/kg	1.0	< 1.0
2-Chlorotoluene	U	2760	µg/kg	1.0	< 1.0
1,3,5-Trimethylbenzene	U	2760	µg/kg	1.0	< 1.0
4-Chlorotoluene	U	2760	µg/kg	1.0	< 1.0
Tert-Butylbenzene	U	2760	µg/kg	1.0	< 1.0
1,2,4-Trimethylbenzene	U	2760	µg/kg	1.0	< 1.0
Sec-Butylbenzene	U	2760	µg/kg	1.0	< 1.0
1,3-Dichlorobenzene	U	2760	µg/kg	1.0	< 1.0
4-Isopropyltoluene	U	2760	µg/kg	1.0	< 1.0
1,4-Dichlorobenzene	U	2760	µg/kg	1.0	< 1.0
N-Butylbenzene	U	2760	µg/kg	1.0	< 1.0
1,2-Dichlorobenzene	U	2760	µg/kg	1.0	< 1.0
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50	< 50
1,2,4-Trichlorobenzene	U	2760	µg/kg	1.0	< 1.0
Hexachlorobutadiene	N	2760	µg/kg	1.0	< 1.0
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0	< 2.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0
N-Nitrosodimethylamine	U	2790	mg/kg	0.50	< 0.50

Results - Soil

Project: G23012B Global Centre of Rail Excellence (GCRE) Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:				23-19254
Quotation No.: Q22-29781	Chemtest Sample ID.:				1652733
Order No.:	Client Sample Ref.:				1
	Sample Location:				BR-BH01
	Sample Type:				SOIL
	Top Depth (m):				0.20
	Bottom Depth (m):				0.30
	Date Sampled:				06-Jun-2023
	Asbestos Lab:				DURHAM
Determinand	Accred.	SOP	Units	LOD	
Phenol	U	2790	mg/kg	0.50	< 0.50
2-Chlorophenol	U	2790	mg/kg	0.50	< 0.50
Bis-(2-Chloroethyl)Ether	U	2790	mg/kg	0.50	< 0.50
1,3-Dichlorobenzene	U	2790	mg/kg	0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50
1,2-Dichlorobenzene	U	2790	mg/kg	0.50	< 0.50
2-Methylphenol	U	2790	mg/kg	0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	U	2790	mg/kg	0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50
N-Nitrosodi-n-propylamine	U	2790	mg/kg	0.50	< 0.50
4-Methylphenol	U	2790	mg/kg	0.50	< 0.50
Nitrobenzene	U	2790	mg/kg	0.50	< 0.50
Isophorone	U	2790	mg/kg	0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50
Bis(2-Chloroethoxy)Methane	U	2790	mg/kg	0.50	< 0.50
2,4-Dichlorophenol	U	2790	mg/kg	0.50	< 0.50
1,2,4-Trichlorobenzene	U	2790	mg/kg	0.50	< 0.50
Naphthalene	U	2790	mg/kg	0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50
Hexachlorobutadiene	U	2790	mg/kg	0.50	< 0.50
4-Chloro-3-Methylphenol	U	2790	mg/kg	0.50	< 0.50
2-Methylnaphthalene	U	2790	mg/kg	0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50
2,4,6-Trichlorophenol	U	2790	mg/kg	0.50	< 0.50
2,4,5-Trichlorophenol	U	2790	mg/kg	0.50	< 0.50
2-Chloronaphthalene	U	2790	mg/kg	0.50	< 0.50
2-Nitroaniline	U	2790	mg/kg	0.50	< 0.50
Acenaphthylene	U	2790	mg/kg	0.50	< 0.50
Dimethylphthalate	U	2790	mg/kg	0.50	< 0.50
2,6-Dinitrotoluene	U	2790	mg/kg	0.50	< 0.50
Acenaphthene	U	2790	mg/kg	0.50	< 0.50
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50
Dibenzofuran	U	2790	mg/kg	0.50	< 0.50
4-Chlorophenylphenylether	U	2790	mg/kg	0.50	< 0.50

Results - Soil

Project: G23012B Global Centre of Rail Excellence (GCRE) Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:				23-19254
Quotation No.: Q22-29781	Chemtest Sample ID.:				1652733
Order No.:	Client Sample Ref.:				1
	Sample Location:				BR-BH01
	Sample Type:				SOIL
	Top Depth (m):				0.20
	Bottom Depth (m):				0.30
	Date Sampled:				06-Jun-2023
	Asbestos Lab:				DURHAM
Determinand	Accred.	SOP	Units	LOD	
2,4-Dinitrotoluene	U	2790	mg/kg	0.50	< 0.50
Fluorene	U	2790	mg/kg	0.50	< 0.50
Diethyl Phthalate	U	2790	mg/kg	0.50	< 0.50
4-Nitroaniline	U	2790	mg/kg	0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50
Azobenzene	U	2790	mg/kg	0.50	< 0.50
4-Bromophenylphenyl Ether	U	2790	mg/kg	0.50	< 0.50
Hexachlorobenzene	U	2790	mg/kg	0.50	< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50
Phenanthrene	U	2790	mg/kg	0.50	< 0.50
Anthracene	U	2790	mg/kg	0.50	< 0.50
Carbazole	U	2790	mg/kg	0.50	< 0.50
Di-N-Butyl Phthalate	U	2790	mg/kg	0.50	< 0.50
Fluoranthene	U	2790	mg/kg	0.50	< 0.50
Pyrene	U	2790	mg/kg	0.50	< 0.50
Butylbenzyl Phthalate	U	2790	mg/kg	0.50	< 0.50
Benzo[a]anthracene	U	2790	mg/kg	0.50	< 0.50
Chrysene	U	2790	mg/kg	0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50
Di-N-Octyl Phthalate	U	2790	mg/kg	0.50	< 0.50
Benzo[b]fluoranthene	U	2790	mg/kg	0.50	< 0.50
Benzo[k]fluoranthene	U	2790	mg/kg	0.50	< 0.50
Benzo[a]pyrene	U	2790	mg/kg	0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene	U	2790	mg/kg	0.50	< 0.50
Dibenz(a,h)Anthracene	U	2790	mg/kg	0.50	< 0.50
Benzo[g,h,i]perylene	U	2790	mg/kg	0.50	< 0.50
Naphthalene	U	2800	mg/kg	0.10	1.2
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10
Acenaphthene	U	2800	mg/kg	0.10	< 0.10
Fluorene	U	2800	mg/kg	0.10	< 0.10
Phenanthrene	U	2800	mg/kg	0.10	0.84
Anthracene	U	2800	mg/kg	0.10	0.17
Fluoranthene	U	2800	mg/kg	0.10	1.0
Pyrene	U	2800	mg/kg	0.10	0.84
Benzo[a]anthracene	U	2800	mg/kg	0.10	0.58
Chrysene	U	2800	mg/kg	0.10	0.63

Results - Soil

Project: G23012B Global Centre of Rail Excellence (GCRE) Bridge Works

Client: Jackson Geo Services	Chemtest Job No.:		23-19254		
Quotation No.: Q22-29781	Chemtest Sample ID.:		1652733		
Order No.:	Client Sample Ref.:		1		
	Sample Location:		BR-BH01		
	Sample Type:		SOIL		
	Top Depth (m):		0.20		
	Bottom Depth (m):		0.30		
	Date Sampled:		06-Jun-2023		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Benzo[b]fluoranthene	U	2800	mg/kg	0.10	0.77
Benzo[k]fluoranthene	U	2800	mg/kg	0.10	0.27
Benzo[a]pyrene	U	2800	mg/kg	0.10	0.42
Indeno(1,2,3-c,d)Pyrene	U	2800	mg/kg	0.10	0.33
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.13
Benzo[g,h,i]perylene	U	2800	mg/kg	0.10	0.34
Total Of 16 PAH's	N	2800	mg/kg	2.0	7.5
Total Phenols	U	2920	mg/kg	0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	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 <37°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
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.
2425	Extractable Ammonium in soils	Ammonium	Extraction with potassium chloride solution / analysis by 'Aquakem 600' Discrete Analyser using sodium salicylate and sodium dichloroisocyanurate.
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.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
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

Test Methods

SOP	Title	Parameters included	Method summary
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 TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

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

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