

LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH101

Sample Depth: 1.20-1.65m

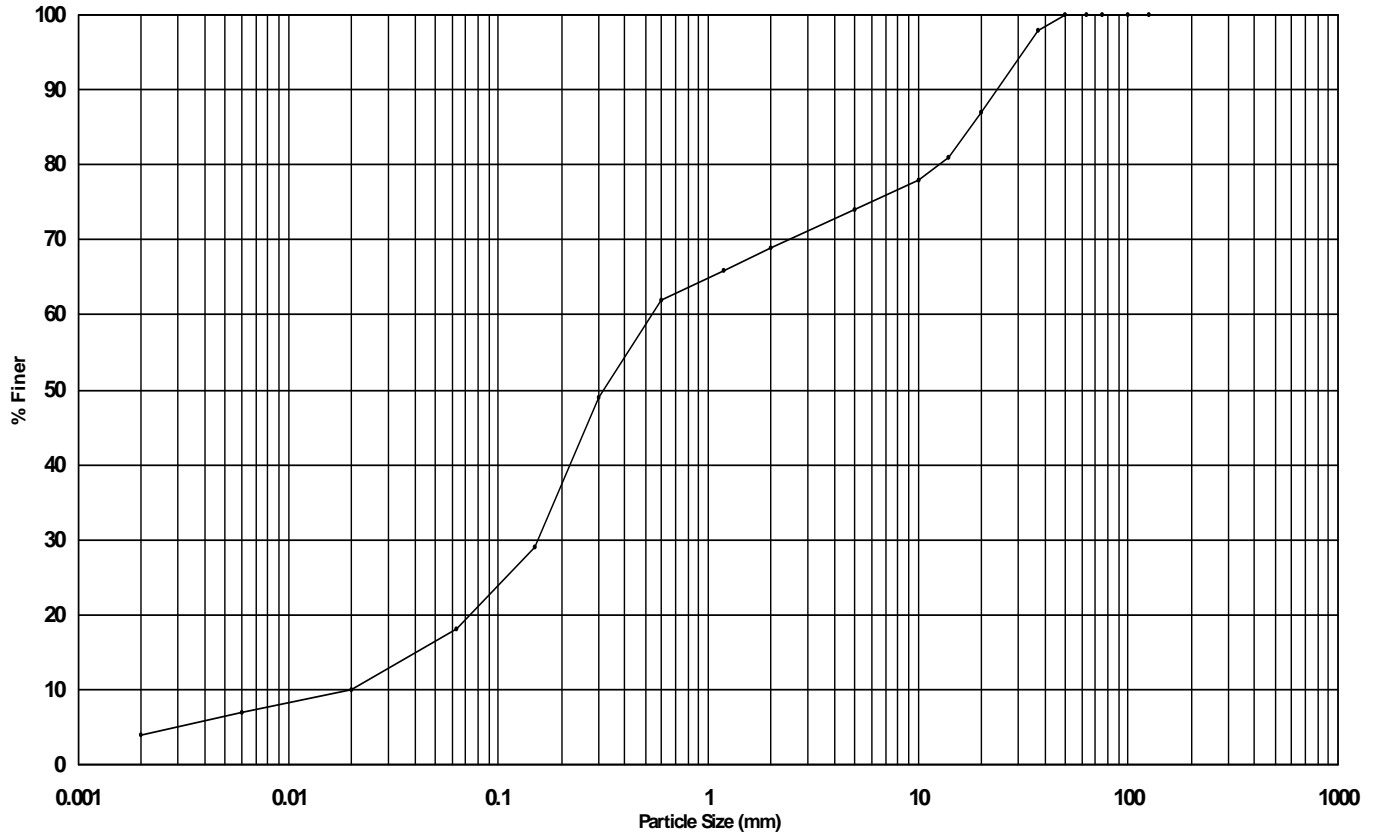
Project No: PN153428

Sample Type: B

Sample Ref: N61674

Sample Description

Yellowish brown clayey very gravelly fine to coarse SAND.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
CLAY	4
SILT	14
SAND	51
GRAVEL	31
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	98
20 mm	87
14 mm	81
10 mm	78
5 mm	74
2 mm	69
1.18 mm	66
600 µm	62
300 µm	49
150 µm	29
63 µm	18

Size	% Finer
20 µm	10
6 µm	7
2 µm	4

Uniformity Coefficient	
30.88	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	Pipette
Pre-treated with	Hydrogen Peroxide
% loss on Pre-treatment	0.00
Particle Density	2.65 (Assumed)

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH103

Project No: PN153428

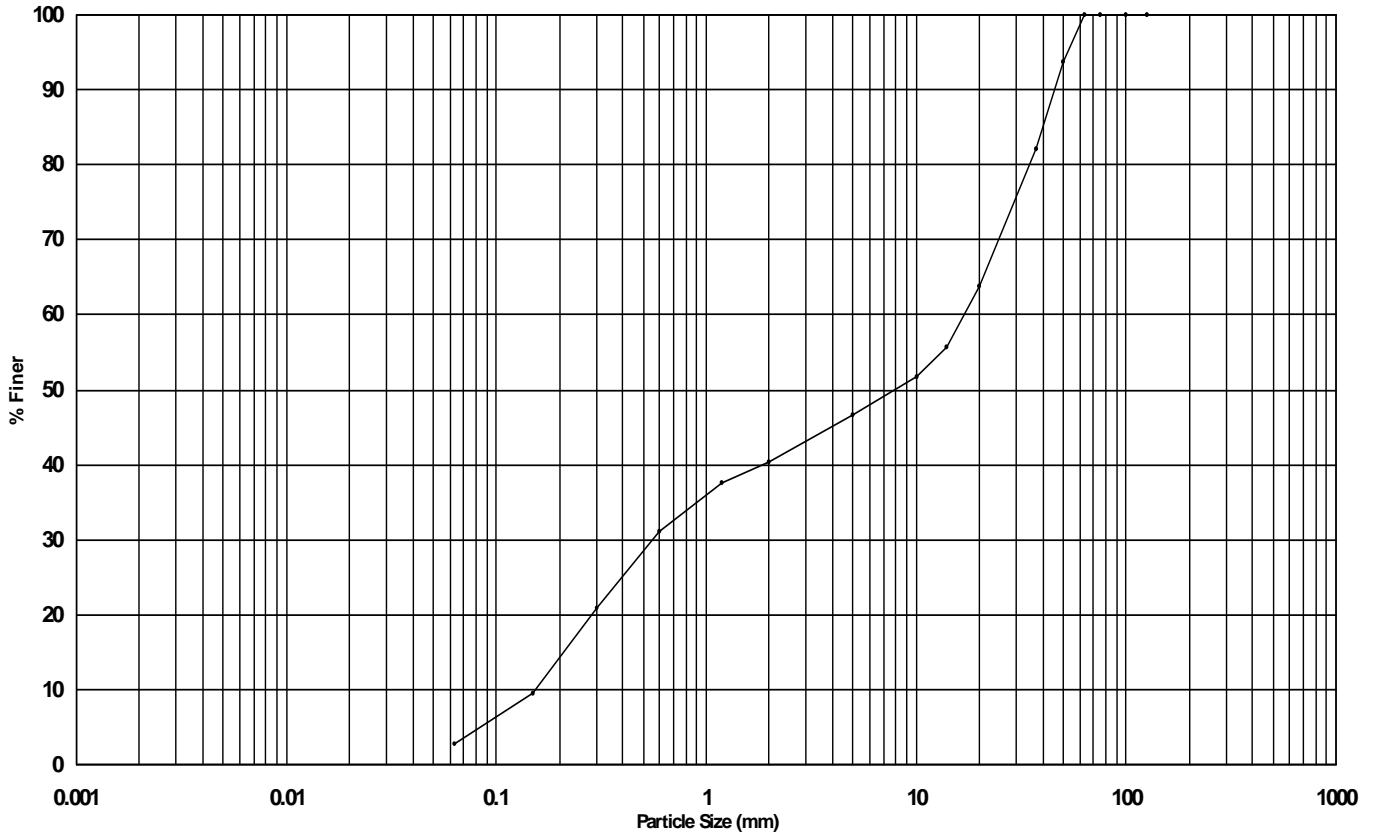
Sample Depth: 2.20-2.65m

Sample Type: B

Sample Ref: N61706

Sample Description

Yellowish brown and greyish brown slightly silty very sandy fine to coarse GRAVEL.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	3
SAND	37
GRAVEL	60
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	94
37.5 mm	82
20 mm	64
14 mm	56
10 mm	52
5 mm	47
2 mm	40
1.18 mm	38
600 μm	31
300 μm	21
150 μm	9
63 μm	3

Size	% Finer

Uniformity Coefficient	
109.10	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH105

Sample Depth: 2.00-2.50m

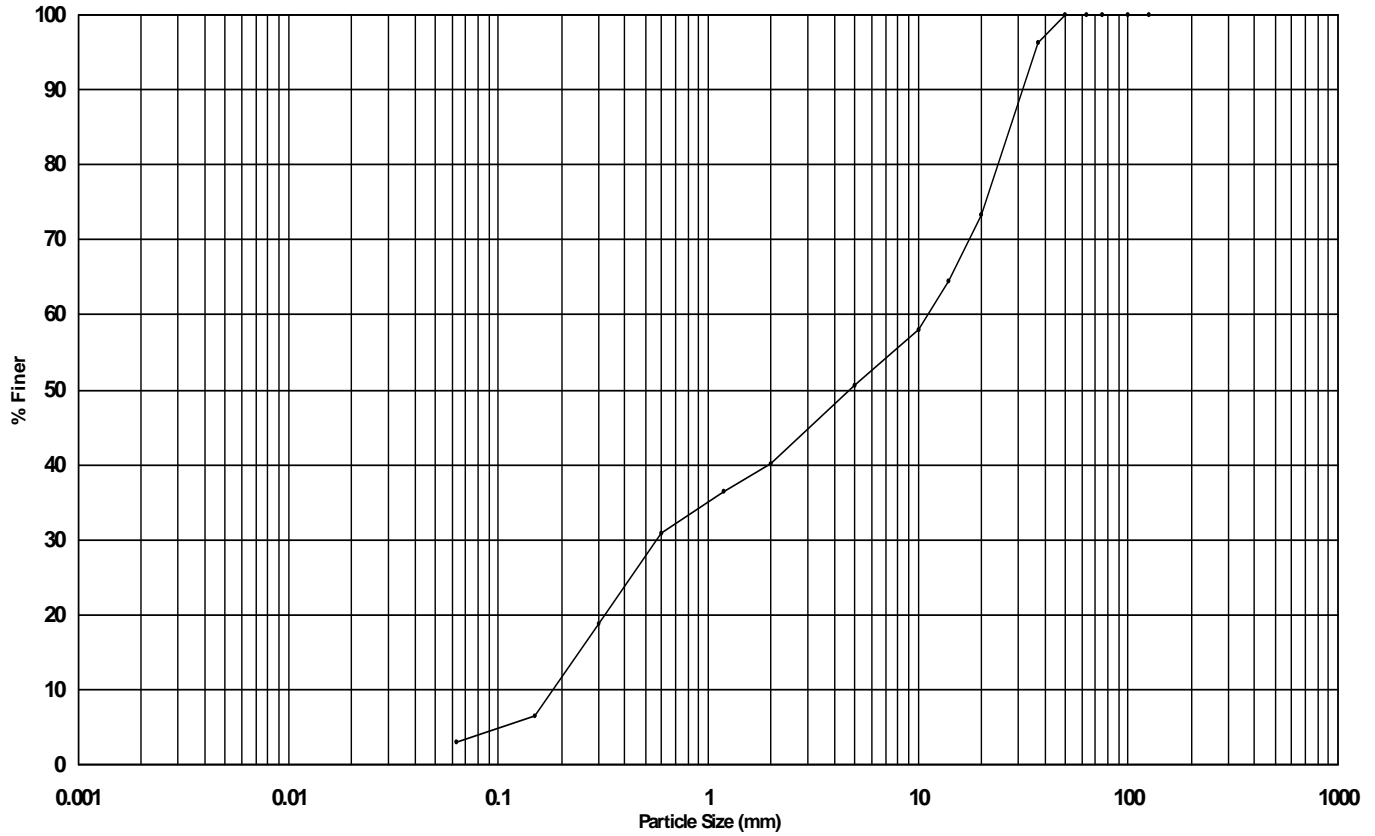
Project No: PN153428

Sample Type: B

Sample Ref: N61703

Sample Description

Yellowish brown very sandy fine to coarse GRAVEL.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	3
SAND	37
GRAVEL	60
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	96
20 mm	73
14 mm	65
10 mm	58
5 mm	51
2 mm	40
1.18 mm	37
600 µm	31
300 µm	19
150 µm	6
63 µm	3

Size	% Finer

Uniformity Coefficient	
60.83	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH107

Sample Depth: 1.20-1.31m

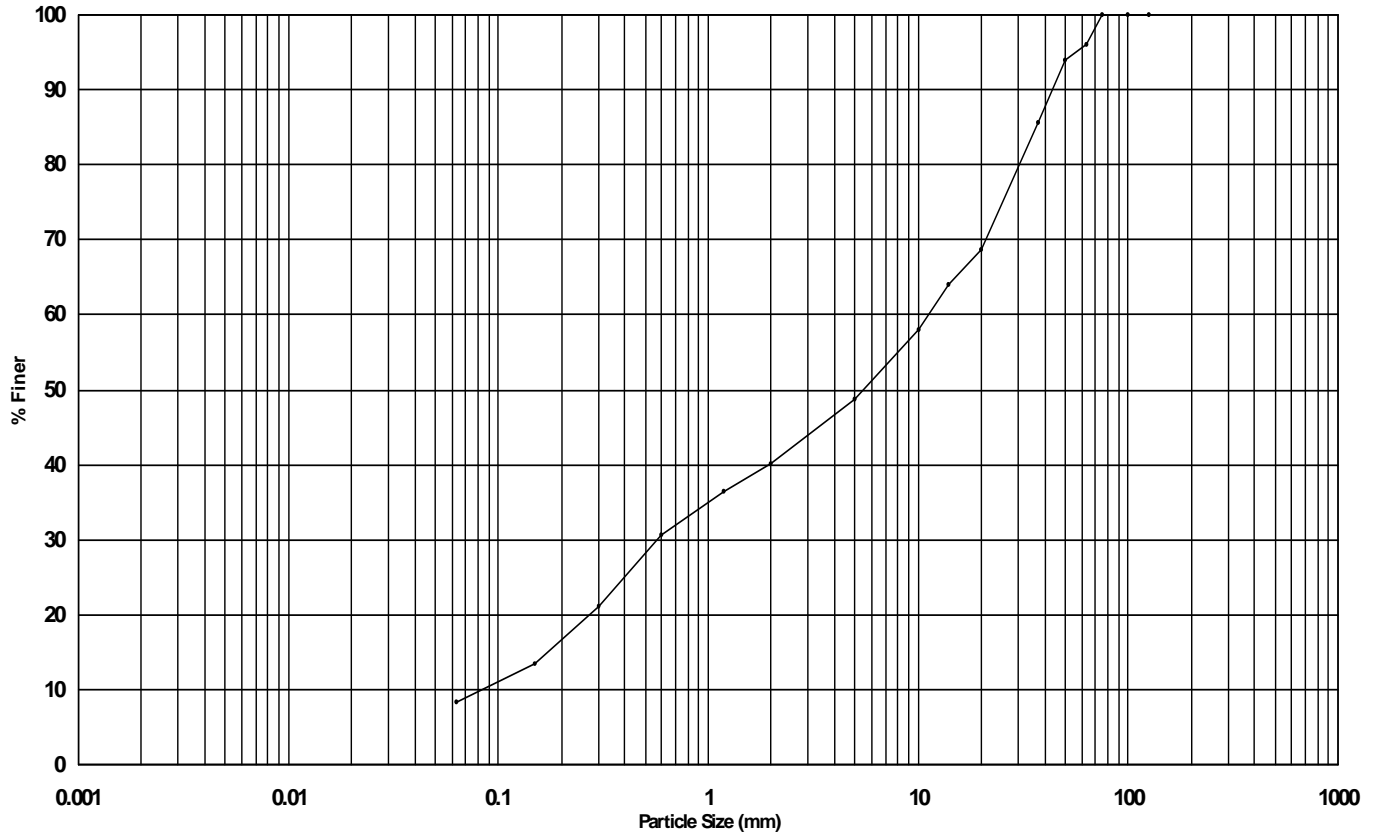
Project No: PN153428

Sample Type: B

Sample Ref: N61707

Sample Description

Yellowish brown silty very sandy fine to coarse GRAVEL with a low cobble content.



Classification	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
CLAY	SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	8
SAND	32
GRAVEL	56
COBBLES	4
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	96
50 mm	94
37.5 mm	86
20 mm	69
14 mm	64
10 mm	58
5 mm	49
2 mm	40
1.18 mm	36
600 μm	31
300 μm	21
150 μm	14
63 μm	8

Size	% Finer

Uniformity Coefficient	
135.64	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: BH112

Sample Depth: 3.00-3.50m

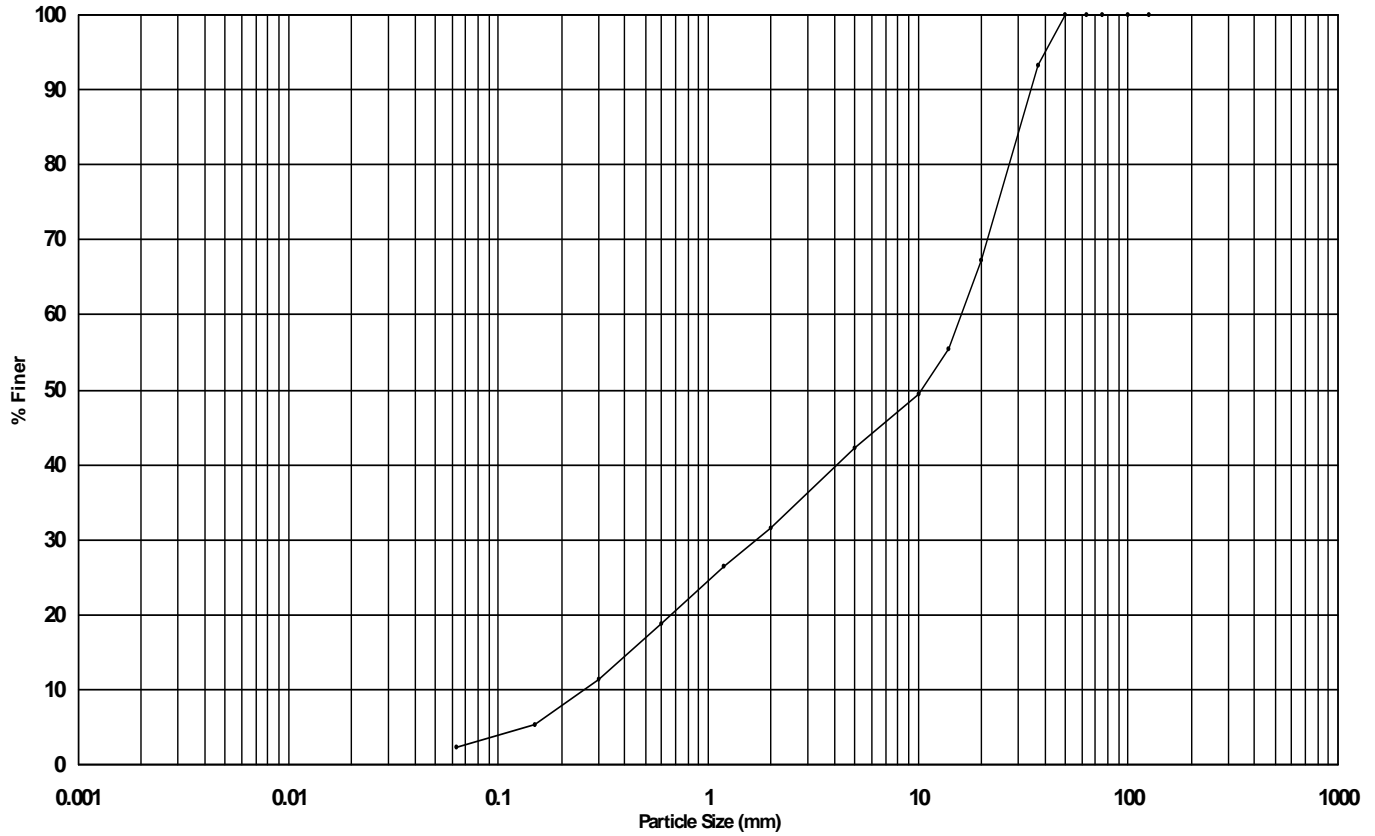
Project No: PN153428

Sample Type: B

Sample Ref: N61669

Sample Description

Yellowish brown very sandy fine to coarse GRAVEL.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	2
SAND	30
GRAVEL	68
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	93
20 mm	67
14 mm	55
10 mm	49
5 mm	42
2 mm	32
1.18 mm	26
600 μm	19
300 μm	11
150 μm	5
63 μm	2

Size	% Finer

Uniformity Coefficient	
63.29	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS210

Sample Depth: 2.00-3.00m

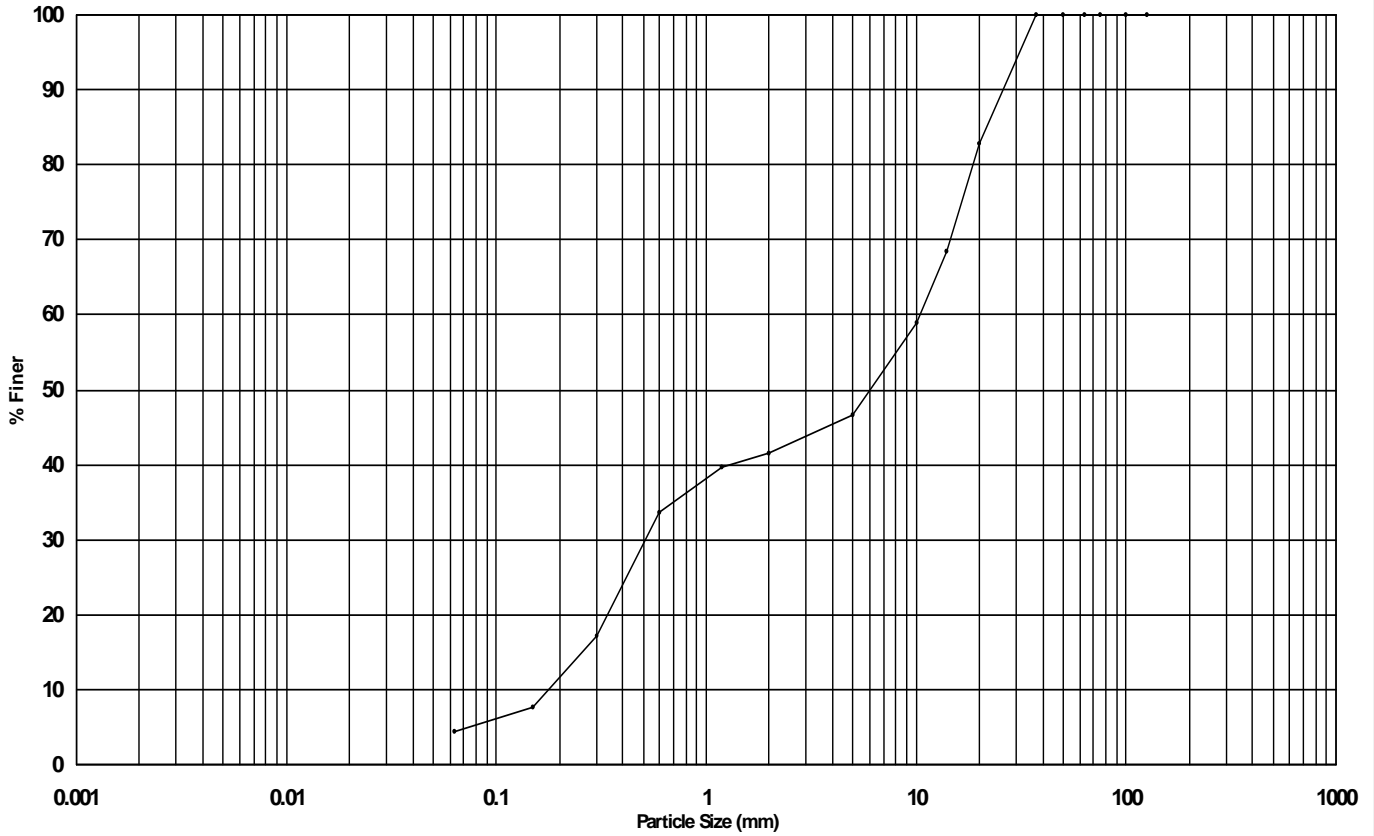
Project No: PN153428

Sample Type: B

Sample Ref: N61794

Sample Description

MADE GROUND: Dark brown and greyish orange slightly silty very sandy fine to coarse gravel with brick fragments.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
SILT (including CLAY)	4
SAND	38
GRAVEL	58
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	100
20 mm	83
14 mm	68
10 mm	59
5 mm	47
2 mm	42
1.18 mm	40
600 µm	34
300 µm	17
150 µm	8
63 µm	4

Size	% Finer

Uniformity Coefficient	
58.07	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	
Pre-treated with	
% loss on Pre-treatment	
Particle Density	

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016



LABORATORY RESULTS - Particle Size Distribution

Project: STOCKPORT BUS STATION

Hole: WS214

Sample Depth: 2.40-3.00m

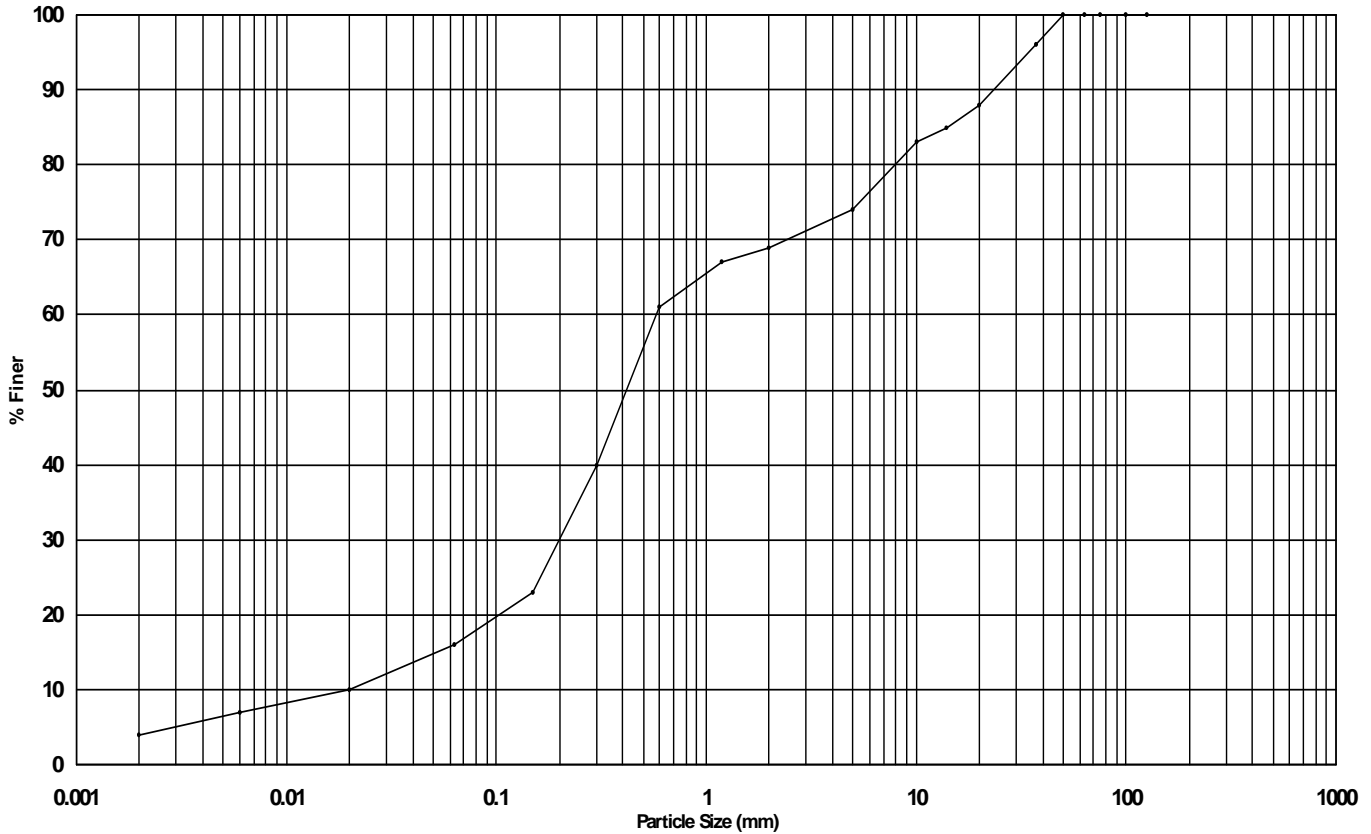
Project No: PN153428

Sample Type: B

Sample Ref: N61710

Sample Description

Reddish brown clayey very gravelly fine to coarse SAND.



Classification	CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
		SILT			SAND			Gravel				

Classification	% of each
CLAY	4
SILT	12
SAND	53
GRAVEL	31
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	96
20 mm	88
14 mm	85
10 mm	83
5 mm	74
2 mm	69
1.18 mm	67
600 µm	61
300 µm	40
150 µm	23
63 µm	16

Size	% Finer
20 µm	10
6 µm	7
2 µm	4

Uniformity Coefficient	
31.83	
Sieving Method	
Wet sieve	
Fine Particle Analysis	
Method	Pipette
Pre-treated with	Hydrogen Peroxide
% loss on Pre-treatment	0.00
Particle Density	2.65 (Assumed)

Remarks: Test performed in accordance with BS 1377:Part 2:1990

10/02/2016




LABORATORY RESULTS - MCV, Compaction, CBR

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					MCV		Compaction					CBR					
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	MCV	w %	Type	w (Opt) %	ρ_d Mg/m ³	γ_b Mg/m ³	γ_d (Max) Mg/m ³	Type	Top		Bottom		
													CBR %	w %	CBR %	w %	
BH106	1.20- 1.70 (1.20- 1.70)	B	N61702	Yellowish brown sandy fine to coarse GRAVEL.			2.5kg	(5.0) 6.4* 2.8 5.1 8.6 11.2	2.65a	*2.20 2.05 2.19 2.02 1.95	(2.10) *2.07 2.00 2.09 1.86 1.75						

Remarks  Particle Density - a=assumed, m=measured * = at natural moisture content
 NST - Not suitable for Test
 Water Content Test performed in accordance with BS EN ISO 17892 - 1: 2014
 All other Tests performed in accordance with BS1377: 1990



LABORATORY RESULTS - Compaction

Project: STOCKPORT BUS STATION

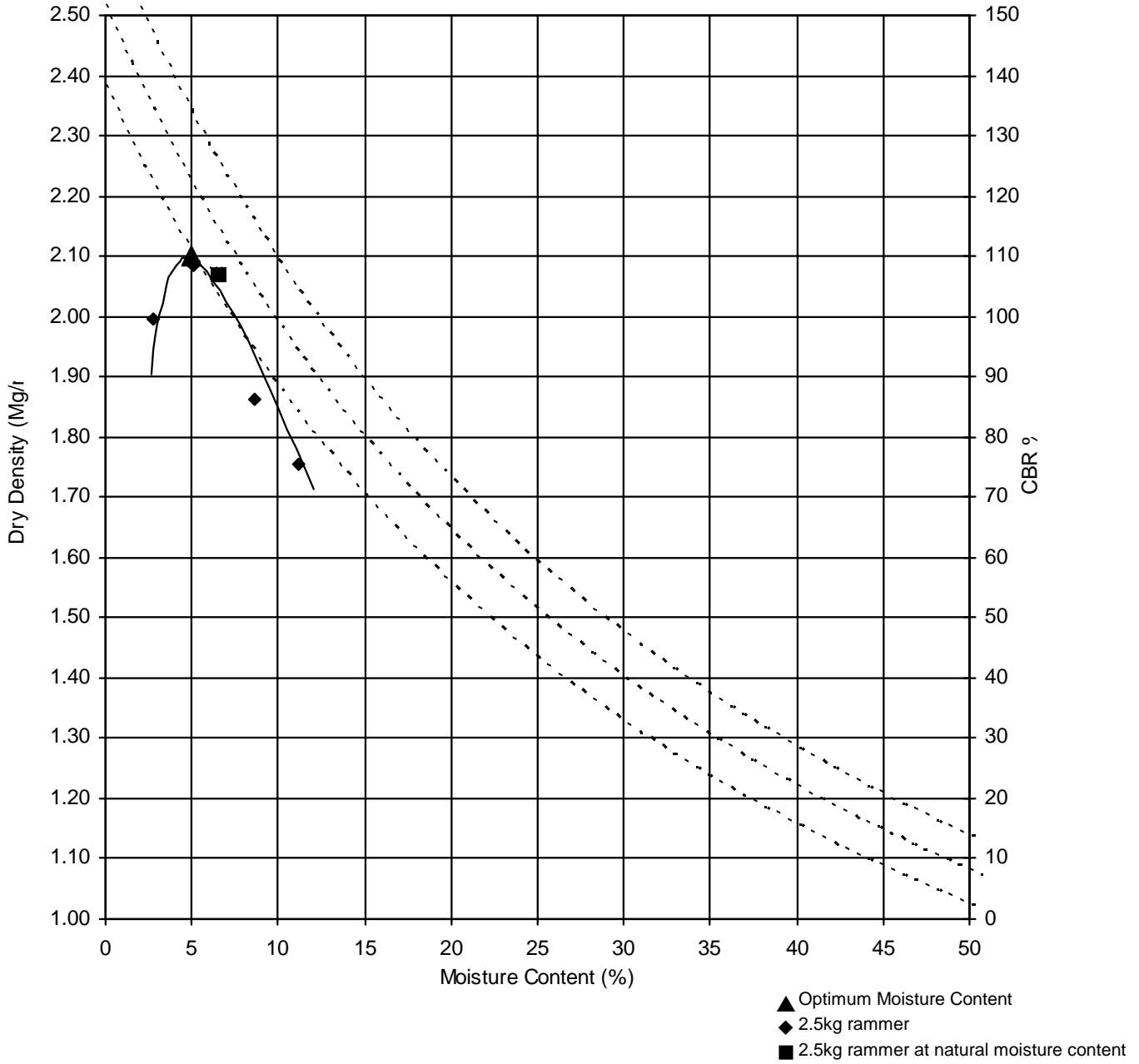
Hole: BH106

Sample Depth: 1.20-1.70m

Project No: PN153428

Sample Type: B

Sample Ref: N61702



Optimum Moisture Content	5.0	Particle Density	2.65 (Assumed)
Maximum Dry Density	2.10 Mg/m ³	Preparation	2.5kg
Gravel retained on		Description	
37.5mm sieve	10 %	Yellowish brown sandy fine to coarse GRAVEL.	
20mm sieve	18 %		

Remarks: BS1377 Part 4 1990 : Clause 3.3 and 3.4

09/02/2016



LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ² mm ²	Is MN/m ²	F	Is ₅₀ MN/m ²
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description										
BH101	6.40- 6.55 (6.40- 6.55)	C	N61764	Very weak reddish brown fine to coarse grained SANDSTONE.	9.8	83 82	82 72	0.37 0.67	D/PL A/PD	82.00 86.70	6724 7517	0.056 0.089	1.249 1.281	0.069 0.114
BH101	7.80- 7.94 (7.80- 7.94)	C	N61765	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	11.2	83 81	81 71	0.16 0.64	D/PL A/PD	81.00 85.57	6561 7322	0.024 0.088	1.243 1.274	0.030 0.112
BH102	5.17- 5.26 (5.17- 5.26)	C	N61770	Extremely weak to very weak reddish brown SANDSTONE.	9.7	85 83	83 61	0.17 0.63	D/PL A/PD	83.00 80.29	6889 6446	0.025 0.097	1.256 1.238	0.032 0.121
BH102	11.60- 11.70 (11.60- 11.70)	C	N61766	Very weak reddish brown SANDSTONE.	11.0	85 85	85 48	0.48 0.69	D/PL A/PD	85.00 72.08	7225 5195	0.067 0.133	1.270 1.179	0.085 0.157
BH103	6.70- 6.86 (6.70- 6.86)	C	N61771	Very weak reddish brown fine to coarse grained SANDSTONE.	12.5	85 83	83 61	0.38 0.35	D/PL A/PD	83.00 80.29	6889 6446	0.055 0.054	1.256 1.238	0.070 0.066
BH103	13.20- 13.39 (13.20- 13.39)	C	N62023	Very weak reddish brown fine to coarse grained SANDSTONE.	13.1	85 84 84	84 61 49	0.29 0.58 0.33	D/PL A/PD A/PD	84.00 80.77 72.39	7056 6524 5241	0.041 0.089 0.064	1.263 1.241 1.181	0.052 0.110 0.075
BH104	6.00- 6.10 (6.00- 6.10)	C	N61768	Extremely weak reddish brown fine to coarse grained SANDSTONE.	8.1	85 85	85 59	0.09 0.20	D/PL A/PD	85.00 79.91	7225 6385	0.012 0.032	1.270 1.235	0.016 0.039
BH104	8.50- 8.65 (8.50- 8.65)	C	N61769	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	16.7	84 84	84 69	0.16 0.37	D/PL A/PD	84.00 85.91	7056 7380	0.022 0.050	1.263 1.276	0.028 0.064
BH104	12.10- 12.20 (12.10- 12.20)	C	N61767	Very weak reddish brown fine to coarse grained SANDSTONE.	10.1	84 83	83 57	0.30 0.41	D/PL A/PD	83.00 77.61	6889 6024	0.043 0.069	1.256 1.219	0.054 0.084
BH105	7.10- 7.29 (7.10- 7.29)	C	N62024	Very weak reddish brown fine to coarse grained SANDSTONE.	9.6	84	67	0.31	A/PD	84.65	7166	0.044	1.267	0.056
BH105	13.00- 13.34 (13.00- 13.34)	C	N62025	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	5.9	84 83 83	83 64 50	0.15 0.81 0.69	D/PL A/PD A/PD	83.00 82.24 72.69	6889 6763 5284	0.022 0.120 0.131	1.256 1.251 1.183	0.028 0.150 0.155

Remarks Test Type D-Diametral, A-Axial, I-Lump or Irregular Test
 Direction PL-parallel to planes of weakness, PD - perpendicular to planes of weakness,
 R-Random or unknown orientation
 Fail Load UF-unacceptable failure



LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ² mm ²	Is MN/m ²	F	Is ₅₀ MN/m ²
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description										
BH106	3.70- 3.80 (3.70- 3.80)	C	N61758	Very weak reddish brown fine to coarse grained SANDSTONE.	7.8	85 85	85 48	0.24 0.63	D/PL A/PD	85.00 72.08	7225 5195	0.033 0.122	1.270 1.179	0.043 0.144
BH106	10.80- 10.90 (10.80- 10.90)	C	N61759	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	11.7	85 84	84 63	0.18 0.75	D/PL A/PD	84.00 82.09	7056 6738	0.026 0.112	1.263 1.250	0.033 0.139
BH108	11.80- 14.80 (11.80- 14.80)	C	N61762	Very weak reddish brown medium grained SANDSTONE.	13.4	85 85	85 71	0.25 0.33	D/PL A/PD	85.00 87.66	7225 7684	0.035 0.042	1.270 1.287	0.044 0.055
BH108	14.35- 14.61 (14.35- 14.61)	C	N62026	Very weak to weak reddish brown medium grained SANDSTONE.	7.7	85 84 84	84 64 61	0.46 1.53 1.46	D/PL A/PD A/PD	84.00 82.73 80.77	7056 6845 6524	0.065 0.224 0.223	1.263 1.254 1.241	0.082 0.281 0.277
BH108	15.30- 15.38 (15.30- 15.38)	C	N61763	Very weak to weak reddish brown medium grained SANDSTONE.	11.8	85 85	85 78	0.72 1.56	D/PL A/PD	85.00 91.88	7225 8442	0.100 0.185	1.270 1.315	0.127 0.243
BH108	17.30- 17.58 (17.30- 17.58)	C	N62027	Very weak reddish brown medium grained SANDSTONE.	11.3	85 85 85	85 61 52	0.51 0.68 0.57	D/PL A/PD A/PD	85.00 81.25 75.02	7225 6602 5628	0.070 0.103 0.101	1.270 1.244 1.200	0.089 0.128 0.122
BH109	9.40- 9.60 (9.40- 9.60)	C	N62028	Very weak reddish brown fine to coarse grained SANDSTONE.	10.4	85 85 85	85 61 60	0.36 0.56 0.57	D/PL A/PD A/PD	85.00 81.25 80.58	7225 6602 6494	0.050 0.085 0.087	1.270 1.244 1.240	0.064 0.105 0.108
BH109	12.30- 12.62 (12.30- 12.62)	C	N62029	Very weak reddish brown fine to coarse grained SANDSTONE.	13.8	80	69	0.65	A/PD	83.83	7028	0.093	1.262	0.117
BH109	13.90- 14.15 (13.90- 14.15)	C	N61760	Very weak reddish brown fine to coarse grained SANDSTONE.	15.5	85 84	84 82	0.26 0.75	D/PL A/PD	84.00 93.65	7056 8770	0.037 0.085	1.263 1.326	0.046 0.113
BH109	19.40- 19.60 (19.40- 19.60)	C	N61761	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	14.0	85 83	83 60	0.14 0.53	D/PL A/PD	83.00 79.63	6889 6341	0.020 0.084	1.256 1.233	0.026 0.104
BH109	19.70- 19.90 (19.70- 19.90)	C	N62030	Very weak reddish brown fine to coarse grained SANDSTONE.	11.6	85 84 84	84 69 79	0.53 0.74 0.81	D/PL A/PD A/PD	84.00 85.91 91.92	7056 7380 8449	0.075 0.101 0.096	1.263 1.276 1.315	0.094 0.129 0.126


Remarks	Test Type Direction D-Diametral, A-Axial, I-Lump or Irregular Test PL-parallel to planes of weakness, PD - perpendicular to planes of weakness, R-Random or unknown orientation Fail Load UF-unacceptable failure	
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LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION

Project No: PN153428

Sample					w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ² mm ²	Is MN/m ²	F	Is ₅₀ MN/m ²
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description										
BH112	6.50-	C	N62032	Extremely weak to very weak reddish brown fine to coarse grained SANDSTONE.	12.1	85	80	0.13	D/PL	80.00	6400	0.021	1.236	0.026
	6.80					80	71	0.50	A/PD	85.04	7232	0.069	1.270	0.087
	(6.50- 6.80)					80	57	0.57	A/PD	76.20	5806	0.099	1.209	0.119
BH112	9.60-	C	N62031	Very weak reddish brown fine to coarse grained SANDSTONE.	5.6	85	85	0.92	D/PL	85.00	7225	0.128	1.270	0.162
	9.80					85	89	1.45	A/PD	98.14	9632	0.151	1.355	0.204
	(9.60- 9.80)					85	76	1.32	A/PD	90.69	8225	0.161	1.307	0.210

Remarks  Test Type D-Diametral, A-Axial, I-Lump or Irregular Test
 Direction PL-parallel to planes of weakness, PD - perpendicular to planes of weakness,
 R-Random or unknown orientation
 Fail Load UF-unacceptable failure





Jones Environmental Laboratory

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Attention : Jon Hutchinson
Date : 14th January, 2016
Your reference : PN153428
Our reference : Test Report 16/3162 Batch 1
Location : Stockport Bus Station
Date samples received : 8th January, 2016
Status : Final report
Issue : 1

Twenty two samples were received for analysis on 8th January, 2016 of which twenty two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

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A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

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ABBREVIATIONS and ACRONYMS USED

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M	MCERTS accredited.
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NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes	Yes	AD	Yes
TM50	Acid soluble sulphate analysed by ICP-OES	PM29	Dried and ground solid sample is boiled with dilute hydrochloric acid, the resulting liquor is then analysed.			AD	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention : Jon Hutchinson
Date : 14th January, 2016
Your reference : PN153428
Our reference : Test Report 16/3162 Batch 2
Location : Stockport Bus Station
Date samples received : 11th January, 2016
Status : Final report
Issue : 1

Thirteen samples were received for analysis on 11th January, 2016 of which thirteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Jon Hutchinson
 JE Job No.: 16/3162

Report : Solid
 Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	23	24	25	26	27	28	29	30	31	32			
Sample ID	BH102	BH105	WS203	WS204	WS206	WS209	WS211	WS214	WS214	WS219			
Depth	0.10-0.15	0.70-0.80	0.20-0.50	0.50-1.00	0.50-1.00	0.60-1.00	0.20-0.50	0.50-1.00	0.50-1.00	0.50-0.90			
COC No / misc								LIGHT	DARK				
Containers	B	B	B	B	B	B	B	B	B	B			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016	11/01/2016			
Total Sulphate BRE	0.26	0.18	0.02	0.06	0.04	0.04	0.06	0.03	0.03	0.02	<0.01	%	TM50/PM29
Sulphate as SO4 (2:1 Ext) ^{#M}	<0.0015	0.0149	0.0185	0.0269	0.0622	0.0500	0.0917	0.0504	0.0302	0.0415	<0.0015	g/l	TM38/PM20
Organic Matter	<0.2	<0.2	3.0	4.4	2.9	14.8	30.9	12.1	15.1	<0.2	<0.2	%	TM21/PM24
pH ^{#M}	12.13	12.40	8.74	8.68	8.66	9.14	8.43	8.79	8.74	11.47	<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Loamy Sand	Sand		None	PM13/PM0
Sample Colour	Light Brown	Light Brown	Dark Brown	Medium Brown	Dark Brown	Dark Brown	Dark Brown	Dark Brown	Dark Brown	Light Brown		None	PM13/PM0
Other Items	stones	stones	stones	stones	stones	stones	stones	stones	stones	stones		None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Jon Hutchinson
JE Job No.: 16/3162

Report : Solid
Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	33	34	35								Please see attached notes for all abbreviations and acronyms				
Sample ID	WS220	WS223	WS224										LOD/LOR	Units	Method No.
Depth	0.20-0.50	0.50-1.00	0.50-1.00												
COC No / misc															
Containers	B	B	B												
Sample Date	<>	<>	<>												
Sample Type	Soil	Soil	Soil												
Batch Number	2	2	2												
Date of Receipt	11/01/2016	11/01/2016	11/01/2016												
Total Sulphate BRE	0.26	0.09	0.03									<0.01	%	TM50/PM29	
Sulphate as SO ₄ (2:1 Ext) ^{#M}	0.3102	0.0346	0.0210									<0.0015	g/l	TM38/PM20	
Organic Matter	5.2	<0.2	2.4									<0.2	%	TM21/PM24	
pH ^{#M}	11.84	12.26	8.52									<0.01	pH units	TM73/PM11	
Sample Type	Loamy Sand	Sand	Loam										None	PM13/PM0	
Sample Colour	Dark Brown	Light Brown	Dark Brown										None	PM13/PM0	
Other Items	stones	stones	stones										None	PM13/PM0	

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

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JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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Jones Environmental Laboratory

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Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781

Attention : Jon Hutchinson
Date : 3rd February, 2016
Your reference : PN153428
Our reference : Test Report 16/3162 Batch 4
Location : Stockport Bus Station
Date samples received : 27th January, 2016
Status : Final report
Issue : 1

One sample were received for analysis on 27th January, 2016 of which one were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
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Compiled By:

Paul Lee-Boden BSc
Project Manager

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Jon Hutchinson

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 16/3162						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
 Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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Geotechnics Limited,
The Geotechnical Centre,
Unit 1 Borders Ind. Est
River Lane, SALTNEY,
Chester,
CH4 8RJ

Date: 12 February 2016
Test Report Ref: STR 447282

Order No: AUTH-ON14007
Page 1 of 2

Contract: PN153428 - Stockport Bus Staion

LABORATORY TEST REPORT

TEST REQUIREMENTS: To determine the Uniaxial Compressive Strength in accordance with
ISRM Guidelines

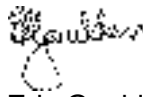
SAMPLE DETAILS:

Certificate of sampling received:	No
Laboratory Ref. No:	S56524
Client Ref. :	BH105 - 13-13.34
Date and Time of Sampling:	Unknown
Date of Receipt at Lab:	13/01/2016
Date of Start of Test:	10/02/2016
Sampling Location:	13-13.34
Name of Source:	Unknown
Method of Sampling:	Unknown
Sampled By:	Client
Material Description:	Rock Core
Target Specification:	N/A

RESULTS:

See attached

Certificate
Prepared by:- 
Neil Hughes
Job Coordinator

Approved by: - 
Eric Goulden
Technical Manager

BH	Core Diameter (mm)	Height/ Diameter Ratio	Uniaxial compressive strength (MPa)	Mode of Failure	EN ISO 14689-1 Term	Water content (%)
BH105 13.0-13.34	84.5	2:1	12	N	Weak	11.9
BH108 14.35-14.62	85	1.2:1	11	N	Weak	12.7
BH108 17.3-17.58	84	1.1:1	5	N	Weak	14.1
BH108 19.0-19.4	85.7	1.8:1	4	N	Very Weak	12.6
BH109 9.4-9.6	84.9	1.4:1	4	N	Very Weak	14
BH109 12.3-12.65	85	1.1:1	6	N	Weak	16.1
BH109 19.7-19.9	84.7	1.4:1	8	N	Weak	15.6
BH112 6.5-6.8	85	1.12:1	9	N	Weak	11.7
BH112 9.6-9.8	85.2	1.2:1	4	N	Very Weak	12.2

Comments

- 1) The uniaxial compressive strength was carried out in accordance with ISRM guidelines.
- 2) Stress Rate: 0.7Mpa/s.

3)

EN ISO 14689-1 : 2003 Rock Strength Terms	
Compressive Strength mpa	Term
<1.0	Extremely Weak
1 to 5	Very Weak
5 to 25	Weak
25 to 50	Medium Strong
50 to 100	Strong
100 to 250	Very Strong
> 250	Extremely Strong

Geotechnics Limited,
The Geotechnical Centre,
Unit 1 Borders Ind. Est
River Lane, SALTNEY,
Chester,
CH4 8RJ

Date: 16th February 2016
Test Report Ref.: STR: 447280

Page 1 of 2

Order No:

LABORATORY TEST REPORT

TEST REQUIREMENTS: To determine the Point Load Index of Rock in accordance with
ISRM Guidelines

SAMPLE DETAILS:

Certificate of sampling received:	No
Laboratory Ref. No.:	S56524
Client Ref. No.:	BH103 - 13.2-13.39
Date and Time of Sampling:	Unknown
Date of Receipt at Lab.:	13/1/2016
Date of Start of Test.:	13/1/2016
Sampling Location:	BH103 - 13.2-13.39
Name of Source:	Unknown
Method of Sampling:	Unknown
Sampled By:	Client
Material Description:	Rock Core
Target Specification:	N/A

RESULTS:

See Attached

COMMENTS/ DEPARTURE FROM SPECIFIED PROCEDURE

The specimens were perpendicular to the axis of loading with respect to the existing planes of anisotropy.



Nick Dumbarton – Assistant Laboratory Manager

Key :-

D	Always distance between platen contact points	D*D	= $4A/\pi$ for axial (a) and irregular block (b) tests
W	Smallest width perpendicular to loading direction ie core diameter for axial tests. W = (W1 + W2)/2 for irregular blocks.	P	Load failure in KN
A	W*D minimum x-sectional area For axial or irregular block test $0.3W < D < W$	Is	Uncorrected strength index
D*D	= D*D for diametral (d) tests	Is (50)	Point load strength index
		F	Size correction factor
		#	Test perpendicular to fabric
		//	Test parallel to fabric

Sample no	Sample type	Test type	D mm	W mm	P KN	A =W*D	D*D	Is	F	Is (50)	Approx. Compressive Strength (MPa)
*	*	*	*	*	*						
Axial, Block or Lump Tests											
1	Core	a	60	85	0.3	5100	6494	0.05	1.24	0.06	1.4
2											
3											
4											
5											
6											
7											
8											
9											
10											
										Mean	1.4

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Chester,
CH4 8RJ

Date: 16th February 2016
Test Report Ref.: STR: 447281

Page 1 of 2

Order No:

LABORATORY TEST REPORT

TEST REQUIREMENTS: To determine the Point Load Index of Rock in accordance with
ISRM Guidelines

SAMPLE DETAILS:

Certificate of sampling received:	No
Laboratory Ref. No.:	S56524
Client Ref. No.:	BH105 - 7.1-7.29
Date and Time of Sampling:	Unknown
Date of Receipt at Lab.:	13/1/2016
Date of Start of Test.:	13/1/2016
Sampling Location:	BH105 - 7.1-7.29
Name of Source:	Unknown
Method of Sampling:	Unknown
Sampled By:	Client
Material Description:	Rock Core
Target Specification:	N/A

RESULTS:

See Attached

COMMENTS/ DEPARTURE FROM SPECIFIED PROCEDURE

The specimens were perpendicular to the axis of loading with respect to the existing planes of anisotropy.



Nick Dumbarton – Assistant Laboratory Manager

Key :-

D	Always distance between platen contact points	D*D	= $4A/\pi$ for axial (a) and irregular block (b) tests
W	Smallest width perpendicular to loading direction ie core diameter for axial tests.	P	Load failure in KN
	W = $(W1 + W2)/2$ for irregular blocks.	Is	Uncorrected strength index
A	W*D minimum x-sectional area For axial or irregular block test $0.3W < D < W$	Is (50)	Point load strength index
		F	Size correction factor
D*D	= D*D for diametral (d) tests	#	Test perpendicular to fabric
		//	Test parallel to fabric

Sample no *	Sample type *	Test type *	D mm *	W mm *	P KN *	A =W*D	D*D	Is	F	Is (50)	Approx. Compressive Strength (MPa)
Axial, Block or Lump Tests											
1	Core	a	41	85	0.1	3485	4437	0.02	1.14	0.03	0.6
2											
3											
4											
5											
6											
7											
8											
9											
10											
										Mean	0.6

APPENDIX 12

Laboratory Test Results - Contamination



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention : Sarah Burt
Date : 21st December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 1
Location : Stockport Bus Station
Date samples received : 3rd December, 2015
Status : Final report
Issue : 1

Twenty six samples were received for analysis on 3rd December, 2015 of which nine were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66				
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206				
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	30/11/2015	30/11/2015	01/12/2015	30/11/2015	02/12/2015	02/12/2015	02/12/2015	01/12/2015	02/12/2015				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015				
											LOD/LOR	Units	Method No.
Arsenic ^{#M}	1.5	1.9	1.2	NDP	5.3	1.2	NDP	2.5	NDP		<0.5	mg/kg	TM30/PM15
Arsenic	-	-	-	8.7	-	-	13.4	-	9.2		<0.5	mg/kg	TM30/PM62
Cadmium ^{#M}	25.0	4.2	9.6	NDP	0.4	5.7	NDP	0.4	NDP		<0.1	mg/kg	TM30/PM15
Cadmium	-	-	-	1.7	-	-	2.5	-	2.8		<0.1	mg/kg	TM30/PM62
Chromium ^{#M}	11.5	31.8	10.7	NDP	62.0	15.3	NDP	16.9	NDP		<0.5	mg/kg	TM30/PM15
Chromium	-	-	-	11.6	-	-	15.5	-	11.2		<0.5	mg/kg	TM30/PM62
Copper ^{#M}	17	13	13	NDP	15	13	NDP	13	NDP		<1	mg/kg	TM30/PM15
Copper	-	-	-	45	-	-	41	-	61		<1	mg/kg	TM30/PM62
Lead ^{#M}	73	39	40	NDP	28	29	NDP	23	NDP		<5	mg/kg	TM30/PM15
Lead	-	-	-	106	-	-	89	-	128		<5	mg/kg	TM30/PM62
Mercury ^{#M}	<0.1	<0.1	<0.1	NDP	<0.1	<0.1	NDP	<0.1	NDP		<0.1	mg/kg	TM30/PM15
Mercury	-	-	-	0.2	-	-	0.2	-	0.1		<0.1	mg/kg	TM30/PM62
Nickel ^{#M}	4.8	10.9	5.1	NDP	15.9	5.7	NDP	6.6	NDP		<0.7	mg/kg	TM30/PM15
Nickel	-	-	-	15.0	-	-	17.0	-	20.7		<0.7	mg/kg	TM30/PM62
Selenium ^{#M}	<1	<1	<1	NDP	<1	<1	NDP	<1	NDP		<1	mg/kg	TM30/PM15
Selenium	-	-	-	<1	-	-	<1	-	<1		<1	mg/kg	TM30/PM62
Vanadium	4	17	3	NDP	16	5	NDP	11	NDP		<1	mg/kg	TM30/PM15
Vanadium	-	-	-	16	-	-	22	-	24		<1	mg/kg	TM30/PM62
Water Soluble Boron ^{#M}	0.2	0.3	0.1	NDP	0.4	0.1	NDP	0.2	NDP		<0.1	mg/kg	TM74/PM32
Water Soluble Boron	-	-	-	0.2	-	-	0.7	-	0.5		<0.1	mg/kg	TM74/PM61
Zinc ^{#M}	50	44	44	NDP	82	26	NDP	35	NDP		<5	mg/kg	TM30/PM15
Zinc	-	-	-	157	-	-	55	-	168		<5	mg/kg	TM30/PM62
PAH MS													
Naphthalene ^{#M}	<0.04	-	<0.04	13.80 _{AA}	11.56 _{AA}	-	-	0.87	-		<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	-	<0.03	8.02 _{AA}	0.57 _{AA}	-	-	0.50	-		<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M}	<0.05	-	<0.05	11.58 _{AA}	11.61 _{AA}	-	-	1.38	-		<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}	<0.04	-	<0.04	10.47 _{AA}	9.05 _{AA}	-	-	1.38	-		<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}	<0.03	-	<0.03	70.79 _{AA}	63.86 _{AA}	-	-	8.30	-		<0.03	mg/kg	TM4/PM8
Anthracene [#]	<0.04	-	<0.04	23.29 _{AA}	14.68 _{AA}	-	-	3.03	-		<0.04	mg/kg	TM4/PM8
Fluoranthene ^{#M}	<0.03	-	<0.03	86.90 _{AA}	56.83 _{AA}	-	-	13.08	-		<0.03	mg/kg	TM4/PM8
Pyrene [#]	<0.03	-	<0.03	76.18 _{AA}	53.50 _{AA}	-	-	12.04	-		<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene [#]	<0.06	-	<0.06	35.32 _{AA}	22.09 _{AA}	-	-	5.66	-		<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}	<0.02	-	<0.02	37.00 _{AA}	23.02 _{AA}	-	-	6.12	-		<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}	<0.07	-	<0.07	53.01 _{AA}	27.17 _{AA}	-	-	8.59	-		<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	<0.04	-	<0.04	37.68 _{AA}	19.40 _{AA}	-	-	5.45	-		<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	<0.04	-	<0.04	21.16 _{AA}	9.29 _{AA}	-	-	3.35	-		<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene [#]	<0.04	-	<0.04	4.90 _{AA}	2.35 _{AA}	-	-	0.77	-		<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	<0.04	-	<0.04	19.26 _{AA}	9.17 _{AA}	-	-	3.12	-		<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6	-	<0.6	509.4 _{AA}	334.2 _{AA}	-	-	73.6	-		<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	-	<0.05	38.17 _{AA}	19.56 _{AA}	-	-	6.18	-		<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	-	<0.02	14.84 _{AA}	7.61 _{AA}	-	-	2.41	-		<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	112	-	114	113 _{AA}	118 _{AA}	-	-	103	-		<0	%	TM4/PM8

Please see attached notes for all abbreviations and acronyms

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66				
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206				
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	30/11/2015	30/11/2015	01/12/2015	30/11/2015	02/12/2015	02/12/2015	02/12/2015	01/12/2015	02/12/2015				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015				
											LOD/LOR	Units	Method No.
Methyl Tertiary Butyl Ether ^{#M}	-	<6	-	-	-	<6	<6	-	<6		<6	ug/kg	TM15/PM10
Benzene ^{#M}	-	<5	-	-	-	<5	<5	-	<5		<5	ug/kg	TM15/PM10
Toluene ^{#M}	-	<3	-	-	-	<3	<3	-	<3		<3	ug/kg	TM15/PM10
Ethylbenzene ^{#M}	-	<3	-	-	-	<3	<3	-	<3		<3	ug/kg	TM15/PM10
p/m-Xylene ^{#M}	-	<4	-	-	-	<4	<4	-	<4		<4	ug/kg	TM15/PM10
o-Xylene ^{#M}	-	<4	-	-	-	<4	<4	-	<4		<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	-	112	-	-	-	115	105	-	97		<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	-	127	-	-	-	136	95	-	97		<0	%	TM15/PM10
TPH CWG													
Aliphatics													
>C5-C6 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	<0.1		<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	<4	<4	<4	<4	<4	<4	6	<4		<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7	<7	<7	10	<7	<7	<7	19	<7		<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	<7	<7	<7	42	<7	<7	<7	105	42		<7	mg/kg	TM5/PM16
>C35-C44	<7	<7	<7	<7	<7	<7	<7	11	<7		<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26	<26	<26	52	<26	<26	<26	141	42		<26	mg/kg	TM5/TM36/PM16
Aromatics													
>C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1		<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	<0.2	3.7	<0.2	<0.2	<0.2	<0.2	0.6		<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4	<4	46	9	<4	6	14	13		<4	mg/kg	TM5/PM16
>EC16-EC21	<7	<7	<7	351	50	<7	35	110	113		<7	mg/kg	TM5/PM16
>EC21-EC35	<7	<7	<7	824	107	31	74	281	340		<7	mg/kg	TM5/PM16
>EC35-EC44	<7	<7	<7	92	11	<7	9	32	34		<7	mg/kg	TM5/PM16
Total aromatics C5-44	<26	<26	<26	1317	177	31	124	437	501		<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	<52	<52	<52	1369	177	<52	124	578	543		<52	mg/kg	TM5/TM36/PM16
MTBE [#]	<5	-	<5	<5	<5	-	-	<5	-		<5	ug/kg	TM31/PM12
Benzene [#]	<5	-	<5	<5	30	-	-	35	-		<5	ug/kg	TM31/PM12
Toluene [#]	<5	-	<5	<5	<5	-	-	42	-		<5	ug/kg	TM31/PM12
Ethylbenzene [#]	<5	-	<5	<5	<5	-	-	22	-		<5	ug/kg	TM31/PM12
m/p-Xylene [#]	<5	-	<5	<5	<5	-	-	93	-		<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	-	<5	<5	<5	-	-	70	-		<5	ug/kg	TM31/PM12
PCB 28 [#]	-	-	-	-	-	-	<5	-	<50 ^{AB}		<5	ug/kg	TM17/PM8
PCB 52 [#]	-	-	-	-	-	-	<5	-	<50 ^{AB}		<5	ug/kg	TM17/PM8
PCB 101 [#]	-	-	-	-	-	-	<5	-	<50 ^{AB}		<5	ug/kg	TM17/PM8
PCB 118 [#]	-	-	-	-	-	-	<5	-	<50 ^{AB}		<5	ug/kg	TM17/PM8
PCB 138 [#]	-	-	-	-	-	-	<5	-	<50 ^{AB}		<5	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66				
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206				
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	30/11/2015	30/11/2015	01/12/2015	30/11/2015	02/12/2015	02/12/2015	02/12/2015	01/12/2015	02/12/2015				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015				
											LOD/LOR	Units	Method No.
PCB 153 #	-	-	-	-	-	-	<5	-	<50 _{AB}		<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	-	-	<5	-	<50 _{AB}		<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	-	-	<35	-	<350 _{AB}		<35	ug/kg	TM17/PM8
2-Chlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Natural Moisture Content	4.3	10.4	2.1	NDP	9.3	2.6	NDP	4.0	NDP		<0.1	%	PM4/PM0
2-Methylphenol	<10	<10	<10	<10	146	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	179	320	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	426	357	-	<10	<10	<10		<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Phenol	<10	<10	<10	<10	198	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10	<10	605	1021	-	<10	<10	<10		<10	ug/kg	TM16/PM8
Total Cyanide #M	<0.5	<0.5	<0.5	1.8	<0.5	-	-	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	<0.02	0.24	0.07	NDP	0.87	-	-	0.78	-		<0.02	%	TM21/PM24
pH #M	9.42	9.38	9.90	8.79	9.77	11.23	8.48	10.50	8.79		<0.01	pH units	TM73/PM11
Sample Type	Clayey Sand	Clayey Sand	Sand	Clayey Sand	Sandy Loam	Sand	Clay	Loam	Loam			None	PM13/PM0
Sample Colour	Red	Medium Brown	Red	Medium Brown	Medium Brown	Light Brown	Dark Brown	Dark Brown	Dark Brown			None	PM13/PM0
Other Items	stones	stones	stones	stones and brick fragments	stones and brick fragments	stones	stones and brick fragments	stones	stones and brick fragments			None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	19-21	52-54	64-66																					
Sample ID	BH102	BH112	WS206																					
Depth	2.00	1.00	0.50																					
COC No / misc																								
Containers	V J T	V J T	V J T																					
Sample Date	30/11/2015	02/12/2015	02/12/2015																					
Sample Type	Soil	Soil	Soil																					
Batch Number	1	1	1																					
Date of Receipt	03/12/2015	03/12/2015	03/12/2015																					
																LOD/LOR	Units	Method No.						
PCB 28	-	<0.1	<0.1																		<0.1	ug/l	TM17/PM30	
PCB 52	-	<0.1	<0.1																			<0.1	ug/l	TM17/PM30
PCB 101	-	<0.1	<0.1																			<0.1	ug/l	TM17/PM30
PCB 118	-	<0.1	<0.1																			<0.1	ug/l	TM17/PM30
PCB 138	-	<0.1	<0.1																			<0.1	ug/l	TM17/PM30
PCB 153	-	<0.1	<0.1																			<0.1	ug/l	TM17/PM30
PCB 180	-	<0.1	<0.1																			<0.1	ug/l	TM17/PM30
Total 7 PCBs	-	<0.7	<0.7																			<0.7	ug/l	TM17/PM30
2-Chlorophenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
Phenol	<0.5	<0.5	<0.5																			<0.5	ug/l	TM16/PM30
Total Speciated Phenols MS	<6	<6	<6																			<6	ug/l	TM16/PM30
Total Cyanide #	<0.01	-	<0.01																			<0.01	mg/l	TM89/PM0
Mass of raw test portion	0.0995	-	-																				kg	NONE/PM17
Leachant Volume	0.89	-	-																				l	NONE/PM17
Dissolved Organic Carbon	3	-	-																			<2	mg/l	TM60/PM0
pH	9.49	8.26	8.59																			<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	19-21	52-54	64-66										
Sample ID	BH102	BH112	WS206										
Depth	2.00	1.00	0.50										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	30/11/2015	02/12/2015	02/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	1	1	1										
Date of Receipt	03/12/2015	03/12/2015	03/12/2015										
										LOD/LOR	Units	Method No.	
SVOC MS													
Phenols													
2-Chlorophenol ^{#M}	<10	<10	<10							<10	ug/kg	TM16/PM8	
2-Methylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
2-Nitrophenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
2,4-Dichlorophenol ^{#M}	<10	<10	<10							<10	ug/kg	TM16/PM8	
2,4-Dimethylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
2,4,5-Trichlorophenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
2,4,6-Trichlorophenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
4-Chloro-3-methylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
4-Methylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
4-Nitrophenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
Pentachlorophenol	<10	<10	<10							<10	ug/kg	TM16/PM8	
Phenol ^{#M}	<10	<10	<10							<10	ug/kg	TM16/PM8	
PAHs													
2-Chloronaphthalene ^{#M}	<10	<10	<10							<10	ug/kg	TM16/PM8	
2-Methylnaphthalene ^{#M}	<10	176	2203							<10	ug/kg	TM16/PM8	
Naphthalene	<10	284	3127							<10	ug/kg	TM16/PM8	
Acenaphthylene	27	134	1644							<10	ug/kg	TM16/PM8	
Acenaphthene	<10	495	2706							<10	ug/kg	TM16/PM8	
Fluorene	<10	378	2715							<10	ug/kg	TM16/PM8	
Phenanthrene ^{#M}	31	2855	16134							<10	ug/kg	TM16/PM8	
Anthracene	13	982	4654							<10	ug/kg	TM16/PM8	
Fluoranthene ^{#M}	40	4987	14340							<10	ug/kg	TM16/PM8	
Pyrene ^{#M}	36	4930	20566							<10	ug/kg	TM16/PM8	
Benzo(a)anthracene	49	2150	12171							<10	ug/kg	TM16/PM8	
Chrysene	24	2446	10683							<10	ug/kg	TM16/PM8	
Benzo(b)fluoranthene	60	3725	17494							<10	ug/kg	TM16/PM8	
Benzo(a)pyrene	21	1942	9613							<10	ug/kg	TM16/PM8	
Indeno(123cd)pyrene	<10	950	4953							<10	ug/kg	TM16/PM8	
Dibenzo(ah)anthracene	<10	496	2124							<10	ug/kg	TM16/PM8	
Benzo(ghi)perylene	16	1090	5790							<10	ug/kg	TM16/PM8	
Benzo(b)fluoranthene	43	2682	12596							<10	ug/kg	TM16/PM8	
Benzo(k)fluoranthene	17	1043	4898							<10	ug/kg	TM16/PM8	
Phthalates													
Bis(2-ethylhexyl) phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8	
Butylbenzyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8	
Di-n-butyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8	
Di-n-Octyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8	
Diethyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8	
Dimethyl phthalate ^{#M}	<100	<100	<100							<100	ug/kg	TM16/PM8	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	19-21	52-54	64-66																			
Sample ID	BH102	BH112	WS206																			
Depth	2.00	1.00	0.50																			
COC No / misc																						
Containers	V J T	V J T	V J T																			
Sample Date	30/11/2015	02/12/2015	02/12/2015																			
Sample Type	Soil	Soil	Soil																			
Batch Number	1	1	1																			
Date of Receipt	03/12/2015	03/12/2015	03/12/2015																			
	LOD/LOR	Units	Method No.																			
SVOC MS																						
Other SVOCs																						
1,2-Dichlorobenzene	<10	<10	<10																			
1,2,4-Trichlorobenzene ^{#M}	<10	<10	<10																			
1,3-Dichlorobenzene	<10	<10	<10																			
1,4-Dichlorobenzene	<10	<10	<10																			
2-Nitroaniline	<10	<10	<10																			
2,4-Dinitrotoluene	<10	<10	<10																			
2,6-Dinitrotoluene	<10	<10	<10																			
3-Nitroaniline	<10	<10	<10																			
4-Bromophenylphenylether ^{#M}	<10	<10	<10																			
4-Chloroaniline	<10	<10	<10																			
4-Chlorophenylphenylether	<10	<10	<10																			
4-Nitroaniline	<10	<10	<10																			
Azobenzene	<10	<10	<10																			
Bis(2-chloroethoxy)methane	<10	<10	<10																			
Bis(2-chloroethyl)ether	<10	<10	<10																			
Carbazole	<10	221	1095																			
Dibenzofuran ^{#M}	<10	272	1770																			
Hexachlorobenzene	<10	<10	<10																			
Hexachlorobutadiene ^{#M}	<10	<10	<10																			
Hexachlorocyclopentadiene	<10	<10	<10																			
Hexachloroethane	<10	<10	<10																			
Isophorone ^{#M}	<10	<10	<10																			
N-nitrosodi-n-propylamine ^{#M}	<10	<10	<10																			
Nitrobenzene ^{#M}	<10	<10	<10																			
Surrogate Recovery 2-Fluorobiphenyl	89	96	105																			
Surrogate Recovery p-Terphenyl-d14	107	112	109																			

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	19-21	52-54	64-66										
Sample ID	BH102	BH112	WS206										
Depth	2.00	1.00	0.50										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	30/11/2015	02/12/2015	02/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	1	1	1										
Date of Receipt	03/12/2015	03/12/2015	03/12/2015										
SVOC MS													
Phenols													
2-Chlorophenol	<1	<1	<1							<1	ug/l	TM16/PM30	
2-Methylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2-Nitrophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2,4-Dichlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2,4-Dimethylphenol	<1	<1	<1							<1	ug/l	TM16/PM30	
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2,4,6-Trichlorophenol	<1	<1	<1							<1	ug/l	TM16/PM30	
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
4-Methylphenol	<1	<1	<1							<1	ug/l	TM16/PM30	
4-Nitrophenol	<10	<10	<10							<10	ug/l	TM16/PM30	
Pentachlorophenol	<1	<1	<1							<1	ug/l	TM16/PM30	
Phenol	<1	<1	<1							<1	ug/l	TM16/PM30	
PAHs													
2-Chloronaphthalene	<1	<1	<1							<1	ug/l	TM16/PM30	
2-Methylnaphthalene	<1	<1	<1							<1	ug/l	TM16/PM30	
Naphthalene	<1	<1	<1							<1	ug/l	TM16/PM30	
Acenaphthylene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Acenaphthene	<1	<1	<1							<1	ug/l	TM16/PM30	
Fluorene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Phenanthrene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Anthracene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Fluoranthene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Pyrene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Benzo(a)anthracene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Chrysene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Benzo(bk)fluoranthene	<1	<1	<1							<1	ug/l	TM16/PM30	
Benzo(a)pyrene	<1	<1	<1							<1	ug/l	TM16/PM30	
Indeno(123cd)pyrene	<1	<1	<1							<1	ug/l	TM16/PM30	
Dibenzo(ah)anthracene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Benzo(ghi)perylene	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Phthalates													
Bis(2-ethylhexyl) phthalate	<5	<5	<5							<5	ug/l	TM16/PM30	
Butylbenzyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30	
Di-n-butyl phthalate	<1.5	<1.5	<1.5							<1.5	ug/l	TM16/PM30	
Di-n-Octyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30	
Diethyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30	
Dimethyl phthalate	<1	<1	<1							<1	ug/l	TM16/PM30	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	19-21	52-54	64-66											
Sample ID	BH102	BH112	WS206											
Depth	2.00	1.00	0.50											
COC No / misc Containers	V J T	V J T	V J T											
Sample Date	30/11/2015	02/12/2015	02/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	1	1	1											
Date of Receipt	03/12/2015	03/12/2015	03/12/2015											
	LOD/LOR	Units	Method No.											
SVOC MS														
Other SVOCs														
1,2-Dichlorobenzene	<1	<1	<1									<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	<1									<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	<1									<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	<1									<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1									<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1									<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1									<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1	<1	<1									<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1									<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1	<1	<1									<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	<1									<1	ug/l	TM16/PM30
Carbazole	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	<1									<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	<1									<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1									<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	<1									<1	ug/l	TM16/PM30
Isophorone	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5	<0.5	<0.5									<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<1	<1									<1	ug/l	TM16/PM30

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	19-21	52-54	64-66											
Sample ID	BH102	BH112	WS206											
Depth	2.00	1.00	0.50											
COC No / misc Containers	V J T	V J T	V J T											
Sample Date	30/11/2015	02/12/2015	02/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	1	1	1											
Date of Receipt	03/12/2015	03/12/2015	03/12/2015											
										LOD/LOR	Units	Method No.		
VOC MS														
Dichlorodifluoromethane	<2	<2	<2									<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1	<1	<1									<1	ug/l	TM15/PM69
Chloromethane	<3	<3	<3									<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1	<0.1	<0.1									<0.1	ug/l	TM15/PM69
Bromomethane	<1	<1	<1									<1	ug/l	TM15/PM69
Chloroethane	<3	<3	<3									<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3	<3	<3									<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3									<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3	<3	<3									<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3	<3	<3									<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3	<3	<3									<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3	<3	<3									<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1	<1	<1									<1	ug/l	TM15/PM69
Bromochloromethane	<2	<2	<2									<2	ug/l	TM15/PM69
Chloroform	<2	<2	<2									<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2	<2	<2									<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3	<3	<3									<3	ug/l	TM15/PM69
Carbon tetrachloride	<2	<2	<2									<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2	<2	<2									<2	ug/l	TM15/PM69
Benzene	<1	<1	<1									<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3	<3	<3									<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2	<2	<2									<2	ug/l	TM15/PM69
Dibromomethane	<3	<3	<3									<3	ug/l	TM15/PM69
Bromodichloromethane	<2	<2	<2									<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2	<2	<2									<2	ug/l	TM15/PM69
Toluene	<2	<2	<2									<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2	<2	<2									<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2	<2	<2									<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3	<3	<3									<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2	<2	<2									<2	ug/l	TM15/PM69
Dibromochloromethane	<2	<2	<2									<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2	<2	<2									<2	ug/l	TM15/PM69
Chlorobenzene	<2	<2	<2									<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<2	<2	<2									<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2									<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3									<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2									<2	ug/l	TM15/PM69
Styrene	<2	<2	<2									<2	ug/l	TM15/PM69
Bromoform	<2	<2	<2									<2	ug/l	TM15/PM69
Isopropylbenzene	<3	<3	<3									<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4	<4	<4									<4	ug/l	TM15/PM69
Bromobenzene	<2	<2	<2									<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3	<3	<3									<3	ug/l	TM15/PM69
Propylbenzene	<3	<3	<3									<3	ug/l	TM15/PM69
2-Chlorotoluene	<3	<3	<3									<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3	<3	<3									<3	ug/l	TM15/PM69
4-Chlorotoluene	<3	<3	<3									<3	ug/l	TM15/PM69
tert-Butylbenzene	<3	<3	<3									<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3	<3	<3									<3	ug/l	TM15/PM69
sec-Butylbenzene	<3	<3	<3									<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3	<3	<3									<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3	<3	<3									<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3	<3	<3									<3	ug/l	TM15/PM69
n-Butylbenzene	<3	<3	<3									<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3	<3	<3									<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2	<2	<2									<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3	<3	<3									<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3	<3	<3									<3	ug/l	TM15/PM69
Naphthalene	<2	<2	<2									<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3	<3	<3									<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	108	108	109									<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	88	90	88									<0	%	TM15/PM69

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	1	BH101	0.50-0.70	5	11/12/2015	Mass of Dry Sample	51.4 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	1	BH102	2.00	20	11/12/2015	Mass of Dry Sample	53.2 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	1	WS201	0.50	32	11/12/2015	Mass of Dry Sample	47.5 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	Fibre Bundles
					15/12/2015	Asbestos Screen	Chrysotile
					15/12/2015	Asbestos Level	Quantifiable
					15/12/2015	Waste Limit	<0.1%
15/17326	1	BH112	1.00	53	11/12/2015	Mass of Dry Sample	48.9 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	Fibre Bundles
					15/12/2015	Asbestos Screen	Chrysotile
					15/12/2015	Asbestos Level	Quantifiable
					15/12/2015	Waste Limit	<0.1%
15/17326	1	WS208	0.50	56	11/12/2015	Mass of Dry Sample	57.3 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Sand/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	1	WS208	0.50	56	15/12/2015	Waste Limit	<0.1%
15/17326	1	WS206	0.50	65	11/12/2015	Mass of Dry Sample	55.1 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	Fibre Bundles
					15/12/2015	Asbestos Screen	Chrysotile
					15/12/2015	Asbestos Level	Quantifiable
					15/12/2015	Waste Limit	<0.1%

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Matrix : Solid

Table with 6 columns: J E Job No., Batch, Sample ID, Depth, J E Sample No., NDP Reason. Contains 3 rows of data related to asbestos detection in samples.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x5 Dilution
AB	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention : Sarah Burt
Date : 21st December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 2
Location : Stockport Bus Station
Date samples received : 4th December, 2015
Status : Final report
Issue : 1

Sixteen samples were received for analysis on 4th December, 2015 of which three were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	106-108	115-117	121-123																						
Sample ID	WS204	WS220	WS220																						
Depth	0.20	0.20	1.00																						
COC No / misc																									
Containers	V J T	V J T	V J T																						
Sample Date	03/12/2015	03/12/2015	03/12/2015																						
Sample Type	Soil	Soil	Soil																						
Batch Number	2	2	2																						
Date of Receipt	04/12/2015	04/12/2015	04/12/2015																						
Arsenic ^{#M}	10.0	6.3	39.2																			<0.5	mg/kg	TM30/PM15	
Cadmium ^{#M}	0.5	0.2	0.1																				<0.1	mg/kg	TM30/PM15
Chromium ^{#M}	36.2	41.8	53.7																				<0.5	mg/kg	TM30/PM15
Copper ^{#M}	125	15	57																				<1	mg/kg	TM30/PM15
Lead ^{#M}	188	68	148																				<5	mg/kg	TM30/PM15
Mercury ^{#M}	<0.1	<0.1	<0.1																				<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	21.9	4.7	20.6																				<0.7	mg/kg	TM30/PM15
Selenium ^{#M}	1	<1	1																				<1	mg/kg	TM30/PM15
Vanadium	23	6	27																				<1	mg/kg	TM30/PM15
Water Soluble Boron ^{#M}	0.2	<0.1	0.8																				<0.1	mg/kg	TM74/PM32
Zinc ^{#M}	147	34	85																				<5	mg/kg	TM30/PM15
PAH MS																									
Naphthalene ^{#M}	0.61 ^{AA}	<0.04	0.09																				<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.53 ^{AA}	<0.03	0.10																				<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M}	<0.50 ^{AA}	<0.05	<0.05																				<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}	<0.40 ^{AA}	<0.04	<0.04																				<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}	2.59 ^{AA}	0.06	0.17																				<0.03	mg/kg	TM4/PM8
Anthracene [#]	0.89 ^{AA}	<0.04	0.10																				<0.04	mg/kg	TM4/PM8
Fluoranthene ^{#M}	6.98 ^{AA}	0.14	0.37																				<0.03	mg/kg	TM4/PM8
Pyrene [#]	6.34 ^{AA}	0.14	0.37																				<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene [#]	3.67 ^{AA}	0.11	0.32																				<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}	4.02 ^{AA}	0.10	0.37																				<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}	5.76 ^{AA}	0.15	0.69																				<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [#]	3.61 ^{AA}	0.10	0.41																				<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	2.73 ^{AA}	0.08	0.47																				<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene [#]	0.69 ^{AA}	<0.04	0.08																				<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [#]	2.13 ^{AA}	0.08	0.41																				<0.04	mg/kg	TM4/PM8
PAH 16 Total	40.6 ^{AA}	1.0	4.0																				<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	4.15 ^{AA}	0.11	0.50																				<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.61 ^{AA}	0.04	0.19																				<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	122 ^{AA}	111	112																				<0	%	TM4/PM8
Methyl Tertiary Butyl Ether ^{#M}	<6	<6	<6																				<6	ug/kg	TM15/PM10
Benzene ^{#M}	<5	<5	<5																				<5	ug/kg	TM15/PM10
Toluene ^{#M}	<3	<3	<3																				<3	ug/kg	TM15/PM10
Ethylbenzene ^{#M}	<3	<3	<3																				<3	ug/kg	TM15/PM10
p/m-Xylene ^{#M}	<4	<4	<4																				<4	ug/kg	TM15/PM10
o-Xylene ^{#M}	<4	<4	<4																				<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	100	107	114																				<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	99	121	111																				<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	106-108	115-117	121-123							Please see attached notes for all abbreviations and acronyms		
										LOD/LOR	Units	Method No.
Sample ID	WS204	WS220	WS220									
Depth	0.20	0.20	1.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015									
4-Nitrophenol	<100 ^{AA}	<10	<10						<10	ug/kg	TM16/PM8	
Pentachlorophenol	<100 ^{AA}	<10	<10						<10	ug/kg	TM16/PM8	
Phenol	<100 ^{AA}	<10	<10						<10	ug/kg	TM16/PM8	
Total Speciated Phenols MS	<100 ^{AA}	<10	<10						<10	ug/kg	TM16/PM8	
Total Organic Carbon #	5.87	0.30	1.40						<0.02	%	TM21/PM24	
pH ^{#M}	8.70	9.10	8.60						<0.01	pH units	TM73/PM11	
Sample Type	Sandy Loam	Sandy Loam	Loam							None	PM13/PM0	
Sample Colour	Medium Brown	Medium Brown	Dark Brown							None	PM13/PM0	
Other Items	stones	stones	stones							None	PM13/PM0	

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	106-108	115-117	121-123							LOD/LOR	Units	Method No.
Sample ID	WS204	WS220	WS220									
Depth	0.20	0.20	1.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015									
Dissolved Arsenic #	7.2	12.4	79.1							<2.5	ug/l	TM30/PM14
Dissolved Boron #	<12	<12	28							<12	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5	<0.5	<0.5							<0.5	ug/l	TM30/PM14
Dissolved Chromium #	<1.5	3.9	11.9							<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7	<7	<7							<7	ug/l	TM30/PM14
Dissolved Lead #	7	<5	<5							<5	ug/l	TM30/PM14
Dissolved Mercury #	<1	<1	<1							<1	ug/l	TM30/PM14
Dissolved Nickel #	<2	<2	<2							<2	ug/l	TM30/PM14
Dissolved Selenium #	<3	<3	<3							<3	ug/l	TM30/PM14
Dissolved Vanadium #	3.7	1.7	9.4							<1.5	ug/l	TM30/PM14
Dissolved Zinc #	6	4	6							<3	ug/l	TM30/PM14
PAH MS												
Naphthalene	<0.1	0.1	<0.1							<0.1	ug/l	TM4/PM30
Acenaphthylene	0.050	0.040	0.030							<0.013	ug/l	TM4/PM30
Acenaphthene	0.020	0.020	0.060							<0.013	ug/l	TM4/PM30
Fluorene	0.020	0.020	0.050							<0.014	ug/l	TM4/PM30
Phenanthrene	0.120	0.070	0.110							<0.011	ug/l	TM4/PM30
Anthracene	0.040	<0.013	0.050							<0.013	ug/l	TM4/PM30
Fluoranthene	0.330	0.040	0.180							<0.012	ug/l	TM4/PM30
Pyrene	0.360	0.040	0.160							<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	0.200	0.020	0.150							<0.015	ug/l	TM4/PM30
Chrysene	0.240	0.020	0.190							<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	0.500	0.020	0.380							<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	0.310	<0.016	0.230							<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.190	<0.011	0.100							<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.01	<0.01	<0.01							<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	0.150	<0.011	0.080							<0.011	ug/l	TM4/PM30
PAH 16 Total	2.530	0.390	1.770							<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.36	0.01	0.27							<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.14	<0.01	0.11							<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	93	78	82							<0	%	TM4/PM30
Methyl Tertiary Butyl Ether	<1	<1	<1							<1	ug/l	TM15/PM69
Benzene	<1	<1	<1							<1	ug/l	TM15/PM69
Toluene	<2	<2	<2							<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2							<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3							<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2							<2	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	91	82	84							<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	103	102	103							<0	%	TM15/PM69

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	106-108	115-117	121-123								Please see attached notes for all abbreviations and acronyms	LOD/LOR	Units	Method No.
	Sample ID	Sample ID	Sample ID											
Sample ID	WS204	WS220	WS220											
Depth	0.20	0.20	1.00											
COC No / misc														
Containers	V J T	V J T	V J T											
Sample Date	03/12/2015	03/12/2015	03/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	2	2	2											
Date of Receipt	04/12/2015	04/12/2015	04/12/2015											
VOC MS														
Dichlorodifluoromethane	<2	<2	<2									<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6									<6	ug/kg	TM15/PM10
Chloromethane #	<3	<3	<3									<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2									<2	ug/kg	TM15/PM10
Bromomethane	<1	<1	<1									<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6									<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6									<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7	<7	<7									<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6									<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7									<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4									<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4									<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5									<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5									<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3									<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4									<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5									<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5									<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	11									<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4									<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4									<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4									<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4									<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3									<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3									<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4									<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3									<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4									<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5									<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3									<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4									<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5									<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3									<3	ug/kg	TM15/PM10
p/m-Xylene #M	<4	<4	<4									<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4									<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3									<3	ug/kg	TM15/PM10
Bromoform	<4	<4	<4									<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3									<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3									<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2									<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4									<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4									<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3									<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3									<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3									<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5									<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6									<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4									<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4									<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4									<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4									<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4									<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4									<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4									<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7									<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4									<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27									<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7									<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	100	107	114									<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	99	121	111									<0	%	TM15/PM10

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	2	WS204	0.20	107	11/12/2015	Mass of Dry Sample	55.2 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	2	WS220	0.20	116	11/12/2015	Mass of Dry Sample	54.8 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	2	WS220	1.00	122	11/12/2015	Mass of Dry Sample	48.2 (g)
					15/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 15/17326						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention : Sarah Burt
Date : 7th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 2 Schedule C
Location : Stockport Bus Station
Date samples received : 4th December, 2015
Status : Final report
Issue : 1

Sixteen samples were received for analysis on 4th December, 2015 of which four were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102	103-105						Please see attached notes for all abbreviations and acronyms		
										LOD/LOR	Units	Method No.
Sample ID	BH111	BH108	BH108	BH108								
Depth	0.20-0.40	1.00	4.00	5.00								
COC No / misc												
Containers	V J T	V J T	V J T	V J T								
Sample Date	03/12/2015	03/12/2015	03/12/2015	03/12/2015								
Sample Type	Soil	Soil	Soil	Soil								
Batch Number	2	2	2	2								
Date of Receipt	04/12/2015	04/12/2015	04/12/2015	04/12/2015								
Arsenic #M	0.8	66.7	44.9	4.3						<0.5	mg/kg	TM30/PM15
Chromium #M	8.0	72.0	66.5	69.5						<0.5	mg/kg	TM30/PM15
Copper #M	4	180	54	6						<1	mg/kg	TM30/PM15
Lead #M	17	947	224	9						<5	mg/kg	TM30/PM15
Mercury #M	<0.1	1.2	0.7	<0.1						<0.1	mg/kg	TM30/PM15
Nickel #M	4.9	39.0	25.4	15.0						<0.7	mg/kg	TM30/PM15
Selenium #M	<1	1	<1	<1						<1	mg/kg	TM30/PM15
Vanadium	2	49	28	15						<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.1	0.6	0.5	0.3						<0.1	mg/kg	TM74/PM32
Zinc #M	34	495	53	23						<5	mg/kg	TM30/PM15
PAH MS												
Naphthalene #M	0.05	2.00	0.23	<0.04						<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.03	0.19	0.07	<0.03						<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	2.79	0.17	<0.05						<0.05	mg/kg	TM4/PM8
Fluorene #M	0.04	1.85	0.21	<0.04						<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.43	16.09	1.83	0.11						<0.03	mg/kg	TM4/PM8
Anthracene #	0.14	3.61	0.45	<0.04						<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.75	15.70	1.29	0.08						<0.03	mg/kg	TM4/PM8
Pyrene #	0.67	13.88	1.36	0.10						<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.30	5.43	0.60	<0.06						<0.06	mg/kg	TM4/PM8
Chrysene #M	0.35	6.34	0.72	0.05						<0.02	mg/kg	TM4/PM8
Benzo(b)fluoranthene #M	0.47	8.95	0.76	<0.07						<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.30	6.33	0.55	0.05						<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.20	3.77	0.25	<0.04						<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.05	0.96	0.08	<0.04						<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.16	3.60	0.24	<0.04						<0.04	mg/kg	TM4/PM8
PAH 16 Total	3.9	91.5	8.8	<0.6						<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.34	6.44	0.55	<0.05						<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.13	2.51	0.21	<0.02						<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	112	129	111	118						<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #M	<6	<6	<6	-						<6	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	-						<5	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	-						<3	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	-						<3	ug/kg	TM15/PM10
p/m-Xylene #M	<4	<4	<4	-						<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	-						<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	111	101	112	-						<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	115	83	123	-						<0	%	TM15/PM10

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102	103-105									Please see attached notes for all abbreviations and acronyms				
	Sample ID	BH111	BH108	BH108												BH108	
Depth	0.20-0.40	1.00	4.00	5.00													
COC No / misc																	
Containers	V J T	V J T	V J T	V J T													
Sample Date	03/12/2015	03/12/2015	03/12/2015	03/12/2015													
Sample Type	Soil	Soil	Soil	Soil													
Batch Number	2	2	2	2													
Date of Receipt	04/12/2015	04/12/2015	04/12/2015	04/12/2015													
TPH CWG																	
Aliphatics																	
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1								<0.1	mg/kg	TM36/PM12			
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1								<0.1	mg/kg	TM36/PM12			
>C8-C10	<0.1	<0.1	<0.1	<0.1								<0.1	mg/kg	TM36/PM12			
>C10-C12 #M	<0.2	<0.2	<0.2	<0.2								<0.2	mg/kg	TM5/PM16			
>C12-C16 #M	<4	<4	<4	<4								<4	mg/kg	TM5/PM16			
>C16-C21 #M	<7	27	<7	<7								<7	mg/kg	TM5/PM16			
>C21-C35 #M	11	360	67	<7								<7	mg/kg	TM5/PM16			
>C35-C44	<7	43	<7	<7								<7	mg/kg	TM5/PM16			
Total aliphatics C5-44	<26	430	67	<26								<26	mg/kg	TM5/TM36/PM16			
Aromatics																	
>C5-EC7	<0.1	<0.1	<0.1	<0.1								<0.1	mg/kg	TM36/PM12			
>EC7-EC8	<0.1	<0.1	<0.1	<0.1								<0.1	mg/kg	TM36/PM12			
>EC8-EC10 #M	<0.1	<0.1	<0.1	<0.1								<0.1	mg/kg	TM36/PM12			
>EC10-EC12	<0.2	1.2	<0.2	<0.2								<0.2	mg/kg	TM5/PM16			
>EC12-EC16	<4	37	6	<4								<4	mg/kg	TM5/PM16			
>EC16-EC21	<7	229	33	<7								<7	mg/kg	TM5/PM16			
>EC21-EC35	<7	543	98	<7								<7	mg/kg	TM5/PM16			
>EC35-EC44	<7	99	10	<7								<7	mg/kg	TM5/PM16			
Total aromatics C5-44	<26	909	147	<26								<26	mg/kg	TM5/TM36/PM16			
Total aliphatics and aromatics(C5-44)	<52	1339	214	<52								<52	mg/kg	TM5/TM36/PM16			
MTBE #	-	-	-	<5								<5	ug/kg	TM31/PM12			
Benzene #	-	-	-	<5								<5	ug/kg	TM31/PM12			
Toluene #	-	-	-	<5								<5	ug/kg	TM31/PM12			
Ethylbenzene #	-	-	-	<5								<5	ug/kg	TM31/PM12			
m/p-Xylene #	-	-	-	<5								<5	ug/kg	TM31/PM12			
o-Xylene #	-	-	-	<5								<5	ug/kg	TM31/PM12			
PCB 28 #	<5	<5	<50 _{AA}	-								<5	ug/kg	TM17/PM8			
PCB 52 #	<5	<5	<50 _{AA}	-								<5	ug/kg	TM17/PM8			
PCB 101 #	<5	<5	<50 _{AA}	-								<5	ug/kg	TM17/PM8			
PCB 118 #	<5	<5	<50 _{AA}	-								<5	ug/kg	TM17/PM8			
PCB 138 #	<5	<5	<50 _{AA}	-								<5	ug/kg	TM17/PM8			
PCB 153 #	<5	<5	<50 _{AA}	-								<5	ug/kg	TM17/PM8			
PCB 180 #	<5	<5	<50 _{AA}	-								<5	ug/kg	TM17/PM8			
Total 7 PCBs #	<35	<35	<350 _{AA}	-								<35	ug/kg	TM17/PM8			
2-Chlorophenol	<10	<100 _{AA}	<10	<10								<10	ug/kg	TM16/PM8			
Natural Moisture Content	0.9	20.2	13.5	19.3								<0.1	%	PM4/PM0			
2-Methylphenol	<10	<100 _{AA}	<10	<10								<10	ug/kg	TM16/PM8			

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102	103-105															LOD/LOR	Units	Method No.
Sample ID	BH111	BH108	BH108	BH108																	
Depth	0.20-0.40	1.00	4.00	5.00																	
COC No / misc																					
Containers	V J T	V J T	V J T	V J T																	
Sample Date	03/12/2015	03/12/2015	03/12/2015	03/12/2015																	
Sample Type	Soil	Soil	Soil	Soil																	
Batch Number	2	2	2	2																	
Date of Receipt	04/12/2015	04/12/2015	04/12/2015	04/12/2015																	
2-Nitrophenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
Phenol	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<100 ^{AA}	<10	<10															<10	ug/kg	TM16/PM8
Hexavalent Chromium [#]	<0.3	<0.3	<0.3	<0.3															<0.3	mg/kg	TM38/PM20
Chromium III	8.0	72.0	66.5	69.5															<0.5	mg/kg	NONE/NONE
Total Cyanide ^{#M}	<0.5	9.6	0.7	<0.5															<0.5	mg/kg	TM89/PM45
Total Organic Carbon [#]	0.08	11.89	1.24	0.14															<0.02	%	TM21/PM24
pH ^{#M}	8.43	8.48	8.82	8.67															<0.01	pH units	TM73/PM11
Sample Type	Clay	Loamy Sand	Sand	Sand																None	PM13/PM0
Sample Colour	Medium Brown	Dark Brown	Medium Brown	Medium Brown																None	PM13/PM0
Other Items	mostly stones	brick	brick, stones	none																None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102									LOD/LOR	Units	Method No.
	Sample ID	BH111	BH108											
Depth	0.20-0.40	1.00	4.00											
COC No / misc														
Containers	V J T	V J T	V J T											
Sample Date	03/12/2015	03/12/2015	03/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	2	2	2											
Date of Receipt	04/12/2015	04/12/2015	04/12/2015											
Please see attached notes for all abbreviations and acronyms														
Dissolved Arsenic #	3.2	24.7	41.5									<2.5	ug/l	TM30/PM14
Dissolved Boron #	<12	13	15									<12	ug/l	TM30/PM14
Dissolved Chromium #	6.0	25.4	7.9									<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7	<7	<7									<7	ug/l	TM30/PM14
Dissolved Lead #	<5	23	<5									<5	ug/l	TM30/PM14
Dissolved Mercury #	<1	<1	<1									<1	ug/l	TM30/PM14
Dissolved Nickel #	4	6	5									<2	ug/l	TM30/PM14
Dissolved Selenium #	<3	<3	<3									<3	ug/l	TM30/PM14
Dissolved Zinc #	6	9	6									<3	ug/l	TM30/PM14
PAH MS														
Naphthalene	<0.1	<0.1	<0.1									<0.1	ug/l	TM4/PM30
Acenaphthylene	0.060	0.050	0.050									<0.013	ug/l	TM4/PM30
Acenaphthene	0.080	0.110	0.070									<0.013	ug/l	TM4/PM30
Fluorene	0.090	0.090	0.050									<0.014	ug/l	TM4/PM30
Phenanthrene	0.120	0.190	0.180									<0.011	ug/l	TM4/PM30
Anthracene	0.050	0.090	0.060									<0.013	ug/l	TM4/PM30
Fluoranthene	0.060	0.210	0.160									<0.012	ug/l	TM4/PM30
Pyrene	0.050	0.200	0.160									<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	0.050	0.110	0.060									<0.015	ug/l	TM4/PM30
Chrysene	0.050	0.130	0.070									<0.011	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.070	0.210	0.050									<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	0.030	0.140	0.020									<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.020	0.080	<0.011									<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	0.02	0.03	<0.01									<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	0.020	0.090	<0.011									<0.011	ug/l	TM4/PM30
PAH 16 Total	0.770	1.730	0.930									<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.05	0.15	0.04									<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.02	0.06	0.01									<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	77	77	74									<0	%	TM4/PM30
Methyl Tertiary Butyl Ether	<1	<1	<1									<1	ug/l	TM15/PM69
Benzene	<1	<1	<1									<1	ug/l	TM15/PM69
Toluene	<2	<2	<2									<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2									<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3									<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2									<2	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	108	107	102									<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	109	107	103									<0	%	TM15/PM69

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102										
Sample ID	BH111	BH108	BH108										
Depth	0.20-0.40	1.00	4.00										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	03/12/2015	03/12/2015	03/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	2	2	2										
Date of Receipt	04/12/2015	04/12/2015	04/12/2015										
										LOD/LOR	Units	Method No.	
TPH CWG													
Aliphatics													
>C5-C6	<5	<5	<5							<5	ug/l	TM36/PM69	
>C6-C8	<5	<5	<5							<5	ug/l	TM36/PM69	
>C8-C10	<5	<5	<5							<5	ug/l	TM36/PM69	
>C10-C12	<5	<5	<5							<5	ug/l	TM5/PM30	
>C12-C16	<10	<10	<10							<10	ug/l	TM5/PM30	
>C16-C21	<10	<10	<10							<10	ug/l	TM5/PM30	
>C21-C35	<10	<10	<10							<10	ug/l	TM5/PM30	
>C35-C44	<10	<10	<10							<10	ug/l	TM5/PM30	
Total aliphatics C5-44	<10	<10	<10							<10	ug/l	TM5/PM30/PM69	
Aromatics													
>C5-EC7	<5	<5	<5							<5	ug/l	TM36/PM69	
>EC7-EC8	<5	<5	<5							<5	ug/l	TM36/PM69	
>EC8-EC10	<5	<5	<5							<5	ug/l	TM36/PM69	
>EC10-EC12	<5	<5	<5							<5	ug/l	TM5/PM30	
>EC12-EC16	<10	<10	<10							<10	ug/l	TM5/PM30	
>EC16-EC21	<10	<10	<10							<10	ug/l	TM5/PM30	
>EC21-EC35	<10	<10	<10							<10	ug/l	TM5/PM30	
>EC35-EC44	<10	<10	<10							<10	ug/l	TM5/PM30	
Total aromatics C5-44	<10	<10	<10							<10	ug/l	TM5/PM30/PM69	
Total aliphatics and aromatics(C5-44)	<10	<10	<10							<10	ug/l	TM5/PM30/PM69	
PCBs													
PCB 28	<0.1	<0.1	<0.1							<0.1	ug/l	TM17/PM30	
PCB 52	<0.1	<0.1	<0.1							<0.1	ug/l	TM17/PM30	
PCB 101	<0.1	<0.1	<0.1							<0.1	ug/l	TM17/PM30	
PCB 118	<0.1	<0.1	<0.1							<0.1	ug/l	TM17/PM30	
PCB 138	<0.1	<0.1	<0.1							<0.1	ug/l	TM17/PM30	
PCB 153	<0.1	<0.1	<0.1							<0.1	ug/l	TM17/PM30	
PCB 180	<0.1	<0.1	<0.1							<0.1	ug/l	TM17/PM30	
Total 7 PCBs	<0.7	<0.7	<0.7							<0.7	ug/l	TM17/PM30	
Phenols													
2-Chlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2-Methylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2-Nitrophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2,4-Dichlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2,4-Dimethylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
2,4,6-Trichlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
4-Methylphenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
4-Nitrophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Pentachlorophenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	
Phenol	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	79-81	91-93	100-102								Please see attached notes for all abbreviations and acronyms			
	Sample ID	BH111	BH108	BH108										
Depth	0.20-0.40	1.00	4.00											
COC No / misc														
Containers	V J T	V J T	V J T											
Sample Date	03/12/2015	03/12/2015	03/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	2	2	2											
Date of Receipt	04/12/2015	04/12/2015	04/12/2015								LOD/LOR	Units	Method No.	
Total Speciated Phenols MS	<6	<6	<6								<6	ug/l	TM16/PM30	
Total Cyanide #	<0.01	0.08	<0.01								<0.01	mg/l	TM89/PM0	
Mass of raw test portion	0.0989	0.111	0.1017									kg	NONE/PM17	
Leachant Volume	0.891	0.879	0.888									l	NONE/PM17	
Dissolved Chromium III	<0.006	<0.006	0.008								<0.006	mg/l	NONE/NONE	
Dissolved Organic Carbon	<2	2	3								<2	mg/l	TM60/PM0	
Hexavalent Chromium	0.006	0.020	<0.006								<0.006	mg/l	TM38/PM0	
pH	7.57	7.94	8.61								<0.01	pH units	TM73/PM0	

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	79-81	91-93	100-102												
Sample ID	BH111	BH108	BH108												
Depth	0.20-0.40	1.00	4.00												
COC No / misc															
Containers	V J T	V J T	V J T												
Sample Date	03/12/2015	03/12/2015	03/12/2015												
Sample Type	Soil	Soil	Soil												
Batch Number	2	2	2												
Date of Receipt	04/12/2015	04/12/2015	04/12/2015												
Please see attached notes for all abbreviations and acronyms															
		LOD/LOR	Units	Method No.											
SVOC MS															
Phenols															
2-Chlorophenol ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2-Methylphenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2-Nitrophenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2,4-Dichlorophenol ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2,4-Dimethylphenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2,4,5-Trichlorophenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2,4,6-Trichlorophenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
4-Chloro-3-methylphenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
4-Methylphenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
4-Nitrophenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Pentachlorophenol	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Phenol ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
PAHs															
2-Chloronaphthalene ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2-Methylnaphthalene ^{#M}	<10	<100 ^{AA}	112	<10	ug/kg	TM16/PM8									
Phthalates															
Bis(2-ethylhexyl) phthalate	<100	<1000 ^{AA}	<100	<100	ug/kg	TM16/PM8									
Butylbenzyl phthalate	<100	<1000 ^{AA}	<100	<100	ug/kg	TM16/PM8									
Di-n-butyl phthalate	<100	<1000 ^{AA}	<100	<100	ug/kg	TM16/PM8									
Di-n-Octyl phthalate	<100	<1000 ^{AA}	<100	<100	ug/kg	TM16/PM8									
Diethyl phthalate	<100	<1000 ^{AA}	<100	<100	ug/kg	TM16/PM8									
Dimethyl phthalate ^{#M}	<100	<1000 ^{AA}	<100	<100	ug/kg	TM16/PM8									
Other SVOCs															
1,2-Dichlorobenzene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
1,2,4-Trichlorobenzene ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
1,3-Dichlorobenzene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
1,4-Dichlorobenzene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2-Nitroaniline	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2,4-Dinitrotoluene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
2,6-Dinitrotoluene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
3-Nitroaniline	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
4-Bromophenylphenylether ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
4-Chloroaniline	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
4-Chlorophenylphenylether	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
4-Nitroaniline	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Azobenzene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Bis(2-chloroethoxy)methane	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Bis(2-chloroethyl)ether	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Carbazole	<10	<100 ^{AA}	184	<10	ug/kg	TM16/PM8									
Dibenzofuran ^{#M}	<10	<100 ^{AA}	97	<10	ug/kg	TM16/PM8									
Hexachlorobenzene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Hexachlorobutadiene ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Hexachlorocyclopentadiene	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Hexachloroethane	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Isophorone ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
N-nitrosodi-n-propylamine ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									
Nitrobenzene ^{#M}	<10	<100 ^{AA}	<10	<10	ug/kg	TM16/PM8									

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	79-81	91-93	100-102							Please see attached notes for all abbreviations and acronyms		
Sample ID	BH111	BH108	BH108							LOD/LOR	Units	Method No.
Depth	0.20-0.40	1.00	4.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015									
VOC MS												
Dichlorodifluoromethane	<2	<2	<2							<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether ^{#M}	<6	<6	<6							<6	ug/kg	TM15/PM10
Chloromethane [#]	<3	<3	<3							<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2							<2	ug/kg	TM15/PM10
Bromomethane	<1	<1	<1							<1	ug/kg	TM15/PM10
Chloroethane ^{#M}	<6	<6	<6							<6	ug/kg	TM15/PM10
Trichlorofluoromethane ^{#M}	<3	<3	<3							<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) ^{#M}	<6	<6	<6							<6	ug/kg	TM15/PM10
Dichloromethane (DCM) [#]	<7	100	32							<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene [#]	<3	<3	<3							<3	ug/kg	TM15/PM10
1,1-Dichloroethane ^{#M}	<6	<6	<6							<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene ^{#M}	<7	<7	<7							<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4							<4	ug/kg	TM15/PM10
Bromochloromethane ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
Chloroform ^{#M}	<5	<5	<5							<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane ^{#M}	<5	<5	<5							<5	ug/kg	TM15/PM10
1,1-Dichloropropene [#]	<3	<3	<3							<3	ug/kg	TM15/PM10
Carbon tetrachloride ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
1,2-Dichloroethane ^{#M}	<5	<5	<5							<5	ug/kg	TM15/PM10
Benzene ^{#M}	<5	<5	<5							<5	ug/kg	TM15/PM10
Trichloroethene (TCE) ^{#M}	<5	<5	<5							<5	ug/kg	TM15/PM10
1,2-Dichloropropane ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
Dibromomethane ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
Bromodichloromethane ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4							<4	ug/kg	TM15/PM10
Toluene ^{#M}	<3	<3	<3							<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3							<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) [#]	<3	<3	<3							<3	ug/kg	TM15/PM10
1,3-Dichloropropane ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
Dibromochloromethane ^{#M}	<5	<5	<5							<5	ug/kg	TM15/PM10
1,2-Dibromoethane [#]	<3	<3	<3							<3	ug/kg	TM15/PM10
Chlorobenzene ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane ^{#M}	<5	<5	<5							<5	ug/kg	TM15/PM10
Ethylbenzene ^{#M}	<3	<3	<3							<3	ug/kg	TM15/PM10
p/m-Xylene ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
o-Xylene ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3							<3	ug/kg	TM15/PM10
Bromoform	<4	<4	<4							<4	ug/kg	TM15/PM10
Isopropylbenzene [#]	<3	<3	<3							<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane ^{#M}	<3	<3	<3							<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2							<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
Propylbenzene [#]	<4	<4	<4							<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3							<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene [#]	<3	<3	<3							<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3							<3	ug/kg	TM15/PM10
tert-Butylbenzene [#]	<5	<5	<5							<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene [#]	<6	<6	<6							<6	ug/kg	TM15/PM10
sec-Butylbenzene [#]	<4	<4	<4							<4	ug/kg	TM15/PM10
4-Isopropyltoluene [#]	<4	<4	<4							<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene [#]	<4	<4	<4							<4	ug/kg	TM15/PM10
n-Butylbenzene [#]	<4	<4	<4							<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene ^{#M}	<4	<4	<4							<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane [#]	<4	<4	<4							<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene [#]	<7	<7	<7							<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4							<4	ug/kg	TM15/PM10
Naphthalene	<27	103	191							<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene [#]	<7	<7	<7							<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	111	101	112							<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	115	83	123							<0	%	TM15/PM10

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	79-81	91-93	100-102									
Sample ID	BH111	BH108	BH108									
Depth	0.20-0.40	1.00	4.00									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	03/12/2015	03/12/2015	03/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	2	2	2									
Date of Receipt	04/12/2015	04/12/2015	04/12/2015									
										LOD/LOR	Units	Method No.
VOC MS												
Dichlorodifluoromethane	<2	<2	<2							<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1	<1	<1							<1	ug/l	TM15/PM69
Chloromethane	<3	<3	<3							<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1	<0.1	<0.1							<0.1	ug/l	TM15/PM69
Bromomethane	<1	<1	<1							<1	ug/l	TM15/PM69
Chloroethane	<3	<3	<3							<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3	<3	<3							<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3							<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3	<3	<3							<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3	<3	<3							<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3	<3	<3							<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3	<3	<3							<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1	<1	<1							<1	ug/l	TM15/PM69
Bromochloromethane	<2	<2	<2							<2	ug/l	TM15/PM69
Chloroform	<2	<2	<2							<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2	<2	<2							<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3	<3	<3							<3	ug/l	TM15/PM69
Carbon tetrachloride	<2	<2	<2							<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2	<2	<2							<2	ug/l	TM15/PM69
Benzene	<1	<1	<1							<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3	<3	<3							<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2	<2	<2							<2	ug/l	TM15/PM69
Dibromomethane	<3	<3	<3							<3	ug/l	TM15/PM69
Bromodichloromethane	<2	<2	<2							<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2	<2	<2							<2	ug/l	TM15/PM69
Toluene	<2	<2	<2							<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2	<2	<2							<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2	<2	<2							<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3	<3	<3							<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2	<2	<2							<2	ug/l	TM15/PM69
Dibromochloromethane	<2	<2	<2							<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2	<2	<2							<2	ug/l	TM15/PM69
Chlorobenzene	<2	<2	<2							<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<2	<2	<2							<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2							<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3							<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2							<2	ug/l	TM15/PM69
Styrene	<2	<2	<2							<2	ug/l	TM15/PM69
Bromoform	<2	<2	<2							<2	ug/l	TM15/PM69
Isopropylbenzene	<3	<3	<3							<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4	<4	<4							<4	ug/l	TM15/PM69
Bromobenzene	<2	<2	<2							<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3	<3	<3							<3	ug/l	TM15/PM69
Propylbenzene	<3	<3	<3							<3	ug/l	TM15/PM69
2-Chlorotoluene	<3	<3	<3							<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3	<3	<3							<3	ug/l	TM15/PM69
4-Chlorotoluene	<3	<3	<3							<3	ug/l	TM15/PM69
tert-Butylbenzene	<3	<3	<3							<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3	<3	<3							<3	ug/l	TM15/PM69
sec-Butylbenzene	<3	<3	<3							<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3	<3	<3							<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3	<3	<3							<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3	<3	<3							<3	ug/l	TM15/PM69
n-Butylbenzene	<3	<3	<3							<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3	<3	<3							<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2	<2	<2							<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3	<3	<3							<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3	<3	<3							<3	ug/l	TM15/PM69
Naphthalene	<2	<2	<2							<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3	<3	<3							<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	108	107	102							<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	109	107	103							<0	%	TM15/PM69

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	2	BH111	0.20-0.40	80	23/12/2015	Mass of Dry Sample	43.2 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone/Brick
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	2	BH108	1.00	92	23/12/2015	Mass of Dry Sample	49.0 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	2	BH108	4.00	101	23/12/2015	Mass of Dry Sample	47.4 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention : Sarah Burt
Date : 21st December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 3
Location : Stockport Bus Station
Date samples received : 7th December, 2015
Status : Final report
Issue : 1

Six samples were received for analysis on 7th December, 2015 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid
Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	130-132	136-138																			
Sample ID	WS203	WS224																			
Depth	0.50	0.20																			
COC No / misc																					
Containers	V J T	V J T																			
Sample Date	04/12/2015	04/12/2015																			
Sample Type	Soil	Soil																			
Batch Number	3	3																			
Date of Receipt	07/12/2015	07/12/2015																			
Arsenic ^{#M}	8.1	13.4																			
Cadmium ^{#M}	1.7	0.8																			
Chromium ^{#M}	49.8	52.6																			
Copper ^{#M}	34	44																			
Lead ^{#M}	89	93																			
Mercury ^{#M}	<0.1	0.2																			
Nickel ^{#M}	12.6	15.3																			
Selenium ^{#M}	<1	<1																			
Vanadium	13	20																			
Water Soluble Boron ^{#M}	0.7	0.3																			
Zinc ^{#M}	197	139																			
PAH MS																					
Naphthalene ^{#M}	3.00	<0.04																			
Acenaphthylene	0.32	<0.03																			
Acenaphthene ^{#M}	0.47	<0.05																			
Fluorene ^{#M}	0.68	<0.04																			
Phenanthrene ^{#M}	3.98	0.41																			
Anthracene [#]	0.88	0.10																			
Fluoranthene ^{#M}	3.73	0.76																			
Pyrene [#]	3.26	0.67																			
Benzo(a)anthracene [#]	1.42	0.35																			
Chrysene ^{#M}	1.66	0.42																			
Benzo(bk)fluoranthene ^{#M}	2.16	0.53																			
Benzo(a)pyrene [#]	1.49	0.32																			
Indeno(123cd)pyrene ^{#M}	0.82	0.20																			
Dibenzo(ah)anthracene [#]	0.22	0.07																			
Benzo(ghi)perylene [#]	0.72	0.18																			
PAH 16 Total	24.8	4.0																			
Benzo(b)fluoranthene	1.56	0.38																			
Benzo(k)fluoranthene	0.60	0.15																			
PAH Surrogate % Recovery	118	118																			

Please see attached notes for all abbreviations and acronyms

LOD/LOR	Units	Method No.
<0.5	mg/kg	TM30/PM15
<0.1	mg/kg	TM30/PM15
<0.5	mg/kg	TM30/PM15
<1	mg/kg	TM30/PM15
<5	mg/kg	TM30/PM15
<0.1	mg/kg	TM30/PM15
<0.7	mg/kg	TM30/PM15
<1	mg/kg	TM30/PM15
<1	mg/kg	TM30/PM15
<0.1	mg/kg	TM74/PM32
<5	mg/kg	TM30/PM15
<0.04	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.05	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.03	mg/kg	TM4/PM8
<0.06	mg/kg	TM4/PM8
<0.02	mg/kg	TM4/PM8
<0.07	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.04	mg/kg	TM4/PM8
<0.6	mg/kg	TM4/PM8
<0.05	mg/kg	TM4/PM8
<0.02	mg/kg	TM4/PM8
<0	%	TM4/PM8

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

J E Sample No.	130-132	136-138									LOD/LOR	Units	Method No.
Sample ID	WS203	WS224											
Depth	0.50	0.20											
COC No / misc													
Containers	V J T	V J T											
Sample Date	04/12/2015	04/12/2015											
Sample Type	Soil	Soil											
Batch Number	3	3											
Date of Receipt	07/12/2015	07/12/2015											
TPH CWG													
Aliphatics													
>C5-C6 ^{#M}	<0.1	<0.1									<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1									<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1									<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2									<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	<4									<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7	<7									<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	<7	<7									<7	mg/kg	TM5/PM16
>C35-C44	<7	<7									<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26	<26									<26	mg/kg	TM5/TM36/PM16
Aromatics													
>C5-EC7	<0.1	<0.1									<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1									<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1									<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2									<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4									<4	mg/kg	TM5/PM16
>EC16-EC21	<7	<7									<7	mg/kg	TM5/PM16
>EC21-EC35	<7	<7									<7	mg/kg	TM5/PM16
>EC35-EC44	<7	<7									<7	mg/kg	TM5/PM16
Total aromatics C5-44	<26	<26									<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	<52	<52									<52	mg/kg	TM5/TM36/PM16
MTBE [#]	<5	<5									<5	ug/kg	TM31/PM12
Benzene [#]	<5	<5									<5	ug/kg	TM31/PM12
Toluene [#]	<5	<5									<5	ug/kg	TM31/PM12
Ethylbenzene [#]	<5	<5									<5	ug/kg	TM31/PM12
m/p-Xylene [#]	<5	<5									<5	ug/kg	TM31/PM12
o-Xylene [#]	<5	<5									<5	ug/kg	TM31/PM12
2-Chlorophenol	<10	<10									<10	ug/kg	TM16/PM8
Natural Moisture Content	6.8	10.1									<0.1	%	PM4/PM0
2-Methylphenol	<10	<10									<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10									<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10									<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10									<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10									<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10									<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10									<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10									<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10									<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10									<10	ug/kg	TM16/PM8

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	130-132	136-138																		
Sample ID	WS203	WS224																		
Depth	0.50	0.20																		
COC No / misc																				
Containers	V J T	V J T																		
Sample Date	04/12/2015	04/12/2015																		
Sample Type	Soil	Soil																		
Batch Number	3	3																		
Date of Receipt	07/12/2015	07/12/2015																		
												LOD/LOR	Units	Method No.						
Phenol	<10	<10										<10	ug/kg	TM16/PM8						
Total Speciated Phenols MS	<10	<10										<10	ug/kg	TM16/PM8						
Total Organic Carbon #	0.50	1.01										<0.02	%	TM21/PM24						
pH #M	8.95	7.89										<0.01	pH units	TM73/PM11						
Sample Type	Sand	Clayey Loam											None	PM13/PM0						
Sample Colour	Red	Dark Brown											None	PM13/PM0						
Other Items	stones	stones, brick fragments and vegetation											None	PM13/PM0						

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	3	WS203	0.50	131	11/12/2015	Mass of Dry Sample	50.8 (g)
					15/12/2015	General Description (Bulk Analysis)	soil/stones
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%
15/17326	3	WS224	0.20	137	11/12/2015	Mass of Dry Sample	46.8 (g)
					15/12/2015	General Description (Bulk Analysis)	soil/stones
					15/12/2015	Asbestos Containing Material	None
					15/12/2015	Asbestos Containing Material (2)	None
					15/12/2015	Asbestos Screen	NAD
					15/12/2015	Asbestos Screen (2)	NAD
					15/12/2015	Asbestos Level	NAD
					15/12/2015	Waste Limit	<0.1%

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 15/17326						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

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Zone 3
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Attention : Sarah Burt
Date : 22nd December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 4
Location : Stockport Bus Station
Date samples received : 8th December, 2015
Status : Final report
Issue : 1

Four samples were received for analysis on 8th December, 2015 of which one were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	148-150												
Sample ID	WS212												
Depth	1.00												
COC No / misc													
Containers	V J T												
Sample Date	07/12/2015												
Sample Type	Soil												
Batch Number	4												
Date of Receipt	08/12/2015												
											LOD/LOR	Units	Method No.
Please see attached notes for all abbreviations and acronyms													
MTBE #	<5										<5	ug/kg	TM31/PM12
Benzene #	12										<5	ug/kg	TM31/PM12
Toluene #	30										<5	ug/kg	TM31/PM12
Ethylbenzene #	24										<5	ug/kg	TM31/PM12
m/p-Xylene #	61										<5	ug/kg	TM31/PM12
o-Xylene #	47										<5	ug/kg	TM31/PM12
PCB 28 #	<50AA										<5	ug/kg	TM17/PM8
PCB 52 #	<50AA										<5	ug/kg	TM17/PM8
PCB 101 #	<50AA										<5	ug/kg	TM17/PM8
PCB 118 #	<50AA										<5	ug/kg	TM17/PM8
PCB 138 #	<50AA										<5	ug/kg	TM17/PM8
PCB 153 #	<50AA										<5	ug/kg	TM17/PM8
PCB 180 #	<50AA										<5	ug/kg	TM17/PM8
Total 7 PCBs #	<350AA										<35	ug/kg	TM17/PM8
2-Chlorophenol	<10										<10	ug/kg	TM16/PM8
Natural Moisture Content	7.2										<0.1	%	PM4/PM0
2-Methylphenol	<10										<10	ug/kg	TM16/PM8
2-Nitrophenol	<10										<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10										<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10										<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10										<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10										<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10										<10	ug/kg	TM16/PM8
4-Methylphenol	<10										<10	ug/kg	TM16/PM8
4-Nitrophenol	<10										<10	ug/kg	TM16/PM8
Pentachlorophenol	<10										<10	ug/kg	TM16/PM8
Phenol	<10										<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10										<10	ug/kg	TM16/PM8
Total Organic Carbon #	7.74										<0.02	%	TM21/PM24
pH #M	11.39										<0.01	pH units	TM73/PM11
Sample Type	Sand											None	PM13/PM0
Sample Colour	Green											None	PM13/PM0
Other Items	stones and brick fragments											None	PM13/PM0

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

										Please see attached notes for all abbreviations and acronyms			
J E Sample No.	148-150										LOD/LOR	Units	Method No.
Sample ID	WS212												
Depth	1.00												
COC No / misc													
Containers	V J T												
Sample Date	07/12/2015												
Sample Type	Soil												
Batch Number	4												
Date of Receipt	08/12/2015												
PCB 28	<0.1										<0.1	ug/l	TM17/PM30
PCB 52	<0.1										<0.1	ug/l	TM17/PM30
PCB 101	<0.1										<0.1	ug/l	TM17/PM30
PCB 118	<0.1										<0.1	ug/l	TM17/PM30
PCB 138	<0.1										<0.1	ug/l	TM17/PM30
PCB 153	<0.1										<0.1	ug/l	TM17/PM30
PCB 180	<0.1										<0.1	ug/l	TM17/PM30
Total 7 PCBs	<0.7										<0.7	ug/l	TM17/PM30
2-Chlorophenol	<0.5										<0.5	ug/l	TM16/PM30
2-Methylphenol	<0.5										<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5										<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5										<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<0.5										<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5										<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5										<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5										<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5										<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5										<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5										<0.5	ug/l	TM16/PM30
Phenol	<0.5										<0.5	ug/l	TM16/PM30
Total Speciated Phenols MS	<6										<6	ug/l	TM16/PM30
Mass of raw test portion	0.0972											kg	NONE/PM17
Leachant Volume	0.892											l	NONE/PM17
Dissolved Organic Carbon	6										<2	mg/l	TM60/PM0
pH	11.55										<0.01	pH units	TM73/PM0

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	148-150													
Sample ID	WS212													
Depth	1.00													
COC No / misc Containers	V J T													
Sample Date	07/12/2015													
Sample Type	Soil													
Batch Number	4													
Date of Receipt	08/12/2015													
Please see attached notes for all abbreviations and acronyms														
											LOD/LOR	Units	Method No.	
SVOC MS														
Phenols														
2-Chlorophenol ^{#M}	<10											<10	ug/kg	TM16/PM8
2-Methylphenol	<10											<10	ug/kg	TM16/PM8
2-Nitrophenol	<10											<10	ug/kg	TM16/PM8
2,4-Dichlorophenol ^{#M}	<10											<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10											<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10											<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10											<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10											<10	ug/kg	TM16/PM8
4-Methylphenol	<10											<10	ug/kg	TM16/PM8
4-Nitrophenol	<10											<10	ug/kg	TM16/PM8
Pentachlorophenol	<10											<10	ug/kg	TM16/PM8
Phenol ^{#M}	<10											<10	ug/kg	TM16/PM8
PAHs														
2-Chloronaphthalene ^{#M}	<10											<10	ug/kg	TM16/PM8
2-Methylnaphthalene ^{#M}	22027 ^{AA}											<10	ug/kg	TM16/PM8
Naphthalene	48270 ^{AA}											<10	ug/kg	TM16/PM8
Acenaphthylene	1602											<10	ug/kg	TM16/PM8
Acenaphthene	21107											<10	ug/kg	TM16/PM8
Fluorene	12684											<10	ug/kg	TM16/PM8
Phenanthrene ^{#M}	118064 ^{AA}											<10	ug/kg	TM16/PM8
Anthracene	31551 ^{AA}											<10	ug/kg	TM16/PM8
Fluoranthene ^{#M}	122155 ^{AA}											<10	ug/kg	TM16/PM8
Pyrene ^{#M}	106556 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(a)anthracene	35629 ^{AA}											<10	ug/kg	TM16/PM8
Chrysene	49125 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(bk)fluoranthene	70633 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(a)pyrene	37328 ^{AA}											<10	ug/kg	TM16/PM8
Indeno(123cd)pyrene	19577											<10	ug/kg	TM16/PM8
Dibenzo(ah)anthracene	10099											<10	ug/kg	TM16/PM8
Benzo(ghi)perylene	22950 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(b)fluoranthene	50856 ^{AA}											<10	ug/kg	TM16/PM8
Benzo(k)fluoranthene	19777 ^{AA}											<10	ug/kg	TM16/PM8
Phthalates														
Bis(2-ethylhexyl) phthalate	<100											<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100											<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100											<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100											<100	ug/kg	TM16/PM8
Diethyl phthalate	<100											<100	ug/kg	TM16/PM8
Dimethyl phthalate ^{#M}	<100											<100	ug/kg	TM16/PM8

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	148-150										LOD/LOR	Units	Method No.
Sample ID	WS212												
Depth	1.00												
COC No / misc Containers	V J T												
Sample Date	07/12/2015												
Sample Type	Soil												
Batch Number	4												
Date of Receipt	08/12/2015												
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene ^{#M}	<10										<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
2-Nitroaniline	<10										<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10										<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10										<10	ug/kg	TM16/PM8
3-Nitroaniline	<10										<10	ug/kg	TM16/PM8
4-Bromophenylphenylether ^{#M}	<10										<10	ug/kg	TM16/PM8
4-Chloroaniline	<10										<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10										<10	ug/kg	TM16/PM8
4-Nitroaniline	<10										<10	ug/kg	TM16/PM8
Azobenzene	<10										<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10										<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10										<10	ug/kg	TM16/PM8
Carbazole	10140										<10	ug/kg	TM16/PM8
Dibenzofuran ^{#M}	20120										<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10										<10	ug/kg	TM16/PM8
Hexachlorobutadiene ^{#M}	<10										<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10										<10	ug/kg	TM16/PM8
Hexachloroethane	<10										<10	ug/kg	TM16/PM8
Isophorone ^{#M}	<10										<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine ^{#M}	<10										<10	ug/kg	TM16/PM8
Nitrobenzene ^{#M}	<10										<10	ug/kg	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	148-150																				
Sample ID	WS212																				
Depth	1.00																				
COC No / misc Containers	V J T																				
Sample Date	07/12/2015																				
Sample Type	Soil																				
Batch Number	4																				
Date of Receipt	08/12/2015																				
											LOD/LOR	Units	Method No.								
SVOC MS																					
Phenols																					
2-Chlorophenol		<1																			
2-Methylphenol		<0.5																			
2-Nitrophenol		<0.5																			
2,4-Dichlorophenol		<0.5																			
2,4-Dimethylphenol		<1																			
2,4,5-Trichlorophenol		<0.5																			
2,4,6-Trichlorophenol		<1																			
4-Chloro-3-methylphenol		<0.5																			
4-Methylphenol		<1																			
4-Nitrophenol		<10																			
Pentachlorophenol		<1																			
Phenol		<1																			
PAHs																					
2-Chloronaphthalene		<1																			
2-Methylnaphthalene		4																			
Naphthalene		44																			
Acenaphthylene		<0.5																			
Acenaphthene		3																			
Fluorene		1.1																			
Phenanthrene		4.1																			
Anthracene		<0.5																			
Fluoranthene		1.2																			
Pyrene		<0.5																			
Benzo(a)anthracene		<0.5																			
Chrysene		<0.5																			
Benzo(bk)fluoranthene		<1																			
Benzo(a)pyrene		<1																			
Indeno(123cd)pyrene		<1																			
Dibenzo(ah)anthracene		<0.5																			
Benzo(ghi)perylene		<0.5																			
Phthalates																					
Bis(2-ethylhexyl) phthalate		<5																			
Butylbenzyl phthalate		<1																			
Di-n-butyl phthalate		<1.5																			
Di-n-Octyl phthalate		<1																			
Diethyl phthalate		<1																			
Dimethyl phthalate		<1																			

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	148-150												
Sample ID	WS212												
Depth	1.00												
COC No / misc Containers	V J T												
Sample Date	07/12/2015												
Sample Type	Soil												
Batch Number	4												
Date of Receipt	08/12/2015												
Please see attached notes for all abbreviations and acronyms													
											LOD/LOR	Units	Method No.
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<1										<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1										<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1										<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1										<1	ug/l	TM16/PM30
2-Nitroaniline	<1										<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5										<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1										<1	ug/l	TM16/PM30
3-Nitroaniline	<1										<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1										<1	ug/l	TM16/PM30
4-Chloroaniline	<1										<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1										<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5										<0.5	ug/l	TM16/PM30
Azobenzene	<0.5										<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5										<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1										<1	ug/l	TM16/PM30
Carbazole	8.0										<0.5	ug/l	TM16/PM30
Dibenzofuran	1.8										<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1										<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1										<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1										<1	ug/l	TM16/PM30
Hexachloroethane	<1										<1	ug/l	TM16/PM30
Isophorone	<0.5										<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5										<0.5	ug/l	TM16/PM30
Nitrobenzene	<1										<1	ug/l	TM16/PM30

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	148-150											
Sample ID	WS212											
Depth	1.00											
COC No / misc												
Containers	V J T											
Sample Date	07/12/2015											
Sample Type	Soil											
Batch Number	4											
Date of Receipt	08/12/2015											
										LOD/LOR	Units	Method No.
VOC MS												
Dichlorodifluoromethane	<2									<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6									<6	ug/kg	TM15/PM10
Chloromethane #	<3									<3	ug/kg	TM15/PM10
Vinyl Chloride	<2									<2	ug/kg	TM15/PM10
Bromomethane	<1									<1	ug/kg	TM15/PM10
Chloroethane #M	<6									<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6									<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7									<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6									<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7									<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4									<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4									<4	ug/kg	TM15/PM10
Chloroform #M	<5									<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5									<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3									<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4									<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5									<5	ug/kg	TM15/PM10
Benzene #M	6									<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5									<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10
Dibromomethane #M	<4									<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4									<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4									<4	ug/kg	TM15/PM10
Toluene #M	21									<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3									<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4									<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3									<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5									<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3									<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4									<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5									<5	ug/kg	TM15/PM10
Ethylbenzene #M	14									<3	ug/kg	TM15/PM10
p/m-Xylene #M	36									<4	ug/kg	TM15/PM10
o-Xylene #M	20									<4	ug/kg	TM15/PM10
Styrene	<3									<3	ug/kg	TM15/PM10
Bromoform	<4									<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3									<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3									<3	ug/kg	TM15/PM10
Bromobenzene	<2									<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4									<4	ug/kg	TM15/PM10
Propylbenzene #	<4									<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3									<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	21									<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3									<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5									<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	54									<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4									<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4									<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4									<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4									<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4									<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4									<4	ug/kg	TM15/PM10
Naphthalene	16882 ⁺⁺									<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	104									<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	104									<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	148-150											
Sample ID	WS212											
Depth	1.00											
COC No / misc Containers	V J T											
Sample Date	07/12/2015											
Sample Type	Soil											
Batch Number	4											
Date of Receipt	08/12/2015											
Please see attached notes for all abbreviations and acronyms												
										LOD/LOR	Units	Method No.
VOC MS												
Dichlorodifluoromethane	<2									<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1									<1	ug/l	TM15/PM69
Chloromethane	<3									<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1									<0.1	ug/l	TM15/PM69
Bromomethane	<1									<1	ug/l	TM15/PM69
Chloroethane	<3									<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3									<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3									<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3									<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3									<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3									<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3									<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1									<1	ug/l	TM15/PM69
Bromochloromethane	<2									<2	ug/l	TM15/PM69
Chloroform	<2									<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2									<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3									<3	ug/l	TM15/PM69
Carbon tetrachloride	<2									<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2									<2	ug/l	TM15/PM69
Benzene	<1									<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3									<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2									<2	ug/l	TM15/PM69
Dibromomethane	<3									<3	ug/l	TM15/PM69
Bromodichloromethane	<2									<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2									<2	ug/l	TM15/PM69
Toluene	<2									<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2									<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2									<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3									<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2									<2	ug/l	TM15/PM69
Dibromochloromethane	<2									<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2									<2	ug/l	TM15/PM69
Chlorobenzene	<2									<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<2									<2	ug/l	TM15/PM69
Ethylbenzene	<2									<2	ug/l	TM15/PM69
p/m-Xylene	<3									<3	ug/l	TM15/PM69
o-Xylene	<2									<2	ug/l	TM15/PM69
Styrene	<2									<2	ug/l	TM15/PM69
Bromoform	<2									<2	ug/l	TM15/PM69
Isopropylbenzene	<3									<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4									<4	ug/l	TM15/PM69
Bromobenzene	<2									<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3									<3	ug/l	TM15/PM69
Propylbenzene	<3									<3	ug/l	TM15/PM69
2-Chlorotoluene	<3									<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3									<3	ug/l	TM15/PM69
4-Chlorotoluene	<3									<3	ug/l	TM15/PM69
tert-Butylbenzene	<3									<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3									<3	ug/l	TM15/PM69
sec-Butylbenzene	<3									<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3									<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3									<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3									<3	ug/l	TM15/PM69
n-Butylbenzene	<3									<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3									<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2									<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3									<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3									<3	ug/l	TM15/PM69
Naphthalene	42									<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3									<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	91									<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	111									<0	%	TM15/PM69

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex. PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention : Sarah Burt
Date : 21st December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 5
Location : Stockport Bus Station
Date samples received : 9th December, 2015
Status : Final report
Issue : 1

Twelve samples were received for analysis on 9th December, 2015 of which three were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	169-171	175-177	181-183								Please see attached notes for all abbreviations and acronyms			
Sample ID	WS214	WS211	WS211											
Depth	0.50	0.20	1.00											
COC No / misc														
Containers	V J T	V J T	V J T											
Sample Date	08/12/2015	08/12/2015	08/12/2015											
Sample Type	Soil	Soil	Soil											
Batch Number	5	5	5											
Date of Receipt	09/12/2015	09/12/2015	09/12/2015											
											LOD/LOR	Units	Method No.	
Arsenic ^{#M}	21.5	13.5	8.7								<0.5	mg/kg	TM30/PM15	
Cadmium ^{#M}	0.3	0.2	<0.1								<0.1	mg/kg	TM30/PM15	
Chromium ^{#M}	39.4	39.1	40.5								<0.5	mg/kg	TM30/PM15	
Copper ^{#M}	79	114	37								<1	mg/kg	TM30/PM15	
Lead ^{#M}	131	42	81								<5	mg/kg	TM30/PM15	
Mercury ^{#M}	0.2	0.2	0.2								<0.1	mg/kg	TM30/PM15	
Nickel ^{#M}	35.5	44.5	20.9								<0.7	mg/kg	TM30/PM15	
Selenium ^{#M}	1	2	<1								<1	mg/kg	TM30/PM15	
Vanadium	53	60	28								<1	mg/kg	TM30/PM15	
Water Soluble Boron ^{#M}	0.8	0.9	0.9								<0.1	mg/kg	TM74/PM32	
Zinc ^{#M}	131	104	32								<5	mg/kg	TM30/PM15	
PAH MS														
Naphthalene ^{#M}	-	-	0.32								<0.04	mg/kg	TM4/PM8	
Acenaphthylene	-	-	0.11								<0.03	mg/kg	TM4/PM8	
Acenaphthene ^{#M}	-	-	0.35								<0.05	mg/kg	TM4/PM8	
Fluorene ^{#M}	-	-	0.34								<0.04	mg/kg	TM4/PM8	
Phenanthrene ^{#M}	-	-	2.55								<0.03	mg/kg	TM4/PM8	
Anthracene [#]	-	-	0.64								<0.04	mg/kg	TM4/PM8	
Fluoranthene ^{#M}	-	-	2.99								<0.03	mg/kg	TM4/PM8	
Pyrene [#]	-	-	2.83								<0.03	mg/kg	TM4/PM8	
Benzo(a)anthracene [#]	-	-	1.38								<0.06	mg/kg	TM4/PM8	
Chrysene ^{#M}	-	-	1.62								<0.02	mg/kg	TM4/PM8	
Benzo(bk)fluoranthene ^{#M}	-	-	2.35								<0.07	mg/kg	TM4/PM8	
Benzo(a)pyrene [#]	-	-	1.73								<0.04	mg/kg	TM4/PM8	
Indeno(123cd)pyrene ^{#M}	-	-	1.20								<0.04	mg/kg	TM4/PM8	
Dibenzo(ah)anthracene [#]	-	-	0.31								<0.04	mg/kg	TM4/PM8	
Benzo(ghi)perylene [#]	-	-	0.84								<0.04	mg/kg	TM4/PM8	
PAH 16 Total	-	-	19.6								<0.6	mg/kg	TM4/PM8	
Benzo(b)fluoranthene	-	-	1.69								<0.05	mg/kg	TM4/PM8	
Benzo(k)fluoranthene	-	-	0.66								<0.02	mg/kg	TM4/PM8	
PAH Surrogate % Recovery	-	-	114								<0	%	TM4/PM8	
Methyl Tertiary Butyl Ether ^{#M}	<6	<6	-								<6	ug/kg	TM15/PM10	
Benzene ^{#M}	<5	<5	-								<5	ug/kg	TM15/PM10	
Toluene ^{#M}	<3	15	-								<3	ug/kg	TM15/PM10	
Ethylbenzene ^{#M}	15	42	-								<3	ug/kg	TM15/PM10	
p/m-Xylene ^{#M}	14	37	-								<4	ug/kg	TM15/PM10	
o-Xylene ^{#M}	7	19	-								<4	ug/kg	TM15/PM10	
Surrogate Recovery Toluene D8	109	95	-								<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	87	81	-								<0	%	TM15/PM10	

Please include all sections of this report if it is reproduced

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	169-171	175-177	181-183								Please see attached notes for all abbreviations and acronyms		
Sample ID	WS214	WS211	WS211								LOD/LOR	Units	Method No.
Depth	0.50	0.20	1.00										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	08/12/2015	08/12/2015	08/12/2015										
Sample Type	Soil	Soil	Soil										
Batch Number	5	5	5										
Date of Receipt	09/12/2015	09/12/2015	09/12/2015										
2-Nitrophenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
4-Methylphenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
4-Nitrophenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
Pentachlorophenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
Phenol	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<50 ^{AA}	<100 ^{AB}	<10								<10	ug/kg	TM16/PM8
pH ^{#M}	8.92	8.60	8.78								<0.01	pH units	TM73/PM11
Sample Type	Loam	Loam	Sand									None	PM13/PM0
Sample Colour	Dark Brown	Black	Medium Brown									None	PM13/PM0
Other Items	stones and brick fragments	stones and brick fragments	stones and clinker									None	PM13/PM0

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	169-171	175-177																				
Sample ID	WS214	WS211																				
Depth	0.50	0.20																				
COC No / misc																						
Containers	V J T	V J T																				
Sample Date	08/12/2015	08/12/2015																				
Sample Type	Soil	Soil																				
Batch Number	5	5																				
Date of Receipt	09/12/2015	09/12/2015																				
Dissolved Arsenic #	3.9	3.5												<2.5	ug/l	TM30/PM14	Please see attached notes for all abbreviations and acronyms					
Dissolved Boron #	<12	12												<12	ug/l	TM30/PM14						
Dissolved Cadmium #	<0.5	<0.5												<0.5	ug/l	TM30/PM14						
Dissolved Chromium #	<1.5	<1.5												<1.5	ug/l	TM30/PM14						
Dissolved Copper #	<7	<7												<7	ug/l	TM30/PM14						
Dissolved Lead #	<5	<5												<5	ug/l	TM30/PM14						
Dissolved Mercury #	<1	<1												<1	ug/l	TM30/PM14						
Dissolved Nickel #	<2	<2												<2	ug/l	TM30/PM14						
Dissolved Selenium #	<3	<3												<3	ug/l	TM30/PM14						
Dissolved Vanadium #	5.2	3.5												<1.5	ug/l	TM30/PM14						
Dissolved Zinc #	5	4												<3	ug/l	TM30/PM14						
Methyl Tertiary Butyl Ether	<1	<1												<1	ug/l	TM15/PM69						
Benzene	<1	<1												<1	ug/l	TM15/PM69						
Toluene	<2	<2												<2	ug/l	TM15/PM69						
Ethylbenzene	<2	<2												<2	ug/l	TM15/PM69						
p/m-Xylene	<3	<3												<3	ug/l	TM15/PM69						
o-Xylene	<2	<2												<2	ug/l	TM15/PM69						
Surrogate Recovery Toluene D8	89	90												<0	%	TM15/PM69						
Surrogate Recovery 4-Bromofluorobenzene	111	111												<0	%	TM15/PM69						
TPH CWG																						
Aliphatics																						
>C5-C6	<5	<5												<5	ug/l	TM36/PM69						
>C6-C8	<5	<5												<5	ug/l	TM36/PM69						
>C8-C10	<5	<5												<5	ug/l	TM36/PM69						
>C10-C12	<5	<5												<5	ug/l	TM5/PM30						
>C12-C16	<10	<10												<10	ug/l	TM5/PM30						
>C16-C21	<10	<10												<10	ug/l	TM5/PM30						
>C21-C35	<10	<10												<10	ug/l	TM5/PM30						
>C35-C44	<10	<10												<10	ug/l	TM5/PM30						
Total aliphatics C5-44	<10	<10												<10	ug/l	TM5/PM30/PM69						
Aromatics																						
>C5-EC7	<5	<5												<5	ug/l	TM36/PM69						
>EC7-EC8	<5	<5												<5	ug/l	TM36/PM69						
>EC8-EC10	<5	<5												<5	ug/l	TM36/PM69						
>EC10-EC12	<5	<5												<5	ug/l	TM5/PM30						
>EC12-EC16	<10	<10												<10	ug/l	TM5/PM30						
>EC16-EC21	<10	<10												<10	ug/l	TM5/PM30						
>EC21-EC35	<10	<10												<10	ug/l	TM5/PM30						
>EC35-EC44	<10	<10												<10	ug/l	TM5/PM30						
Total aromatics C5-44	<10	<10												<10	ug/l	TM5/PM30/PM69						
Total aliphatics and aromatics(C5-44)	<10	<10												<10	ug/l	TM5/PM30/PM69						

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	169-171	175-177											Please see attached notes for all abbreviations and acronyms					
Sample ID	WS214	WS211																
Depth	0.50	0.20																
COC No / misc Containers	V J T	V J T																
Sample Date	08/12/2015	08/12/2015																
Sample Type	Soil	Soil																
Batch Number	5	5																
Date of Receipt	09/12/2015	09/12/2015																
															LOD/LOR	Units	Method No.	
SVOC MS																		
Phenols																		
2-Chlorophenol #M	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
2-Methylphenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
2-Nitrophenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
2,4-Dichlorophenol #M	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
2,4-Dimethylphenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
2,4,5-Trichlorophenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
2,4,6-Trichlorophenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
4-Chloro-3-methylphenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
4-Methylphenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
4-Nitrophenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
Pentachlorophenol	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
Phenol #M	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
PAHs																		
2-Chloronaphthalene #M	<50 ^{AA}	<100 ^{AB}													<10	ug/kg	TM16/PM8	
2-Methylnaphthalene #M	3980 ^{AA}	10161 ^{AB}													<10	ug/kg	TM16/PM8	
Naphthalene	5203 ^{AA}	10622 ^{AB}													<10	ug/kg	TM16/PM8	
Acenaphthylene	1741 ^{AA}	1247 ^{AB}													<10	ug/kg	TM16/PM8	
Acenaphthene	9362 ^{AA}	29474 ^{AB}													<10	ug/kg	TM16/PM8	
Fluorene	6617 ^{AA}	19594 ^{AB}													<10	ug/kg	TM16/PM8	
Phenanthrene #M	47351 ^{AA}	113512 ^{AB}													<10	ug/kg	TM16/PM8	
Anthracene	16806 ^{AA}	45769 ^{AB}													<10	ug/kg	TM16/PM8	
Fluoranthene #M	67768 ^{AA}	150983 ^{AB}													<10	ug/kg	TM16/PM8	
Pyrene #M	72016 ^{AA}	162309 ^{AB}													<10	ug/kg	TM16/PM8	
Benzo(a)anthracene	24742 ^{AA}	66628 ^{AB}													<10	ug/kg	TM16/PM8	
Chrysene	23796 ^{AA}	73334 ^{AB}													<10	ug/kg	TM16/PM8	
Benzo(bk)fluoranthene	49549 ^{AA}	115256 ^{AB}													<10	ug/kg	TM16/PM8	
Benzo(a)pyrene	28052 ^{AA}	66178 ^{AB}													<10	ug/kg	TM16/PM8	
Indeno(123cd)pyrene	13125 ^{AA}	30102 ^{AB}													<10	ug/kg	TM16/PM8	
Dibenzo(ah)anthracene	6540 ^{AA}	8891 ^{AB}													<10	ug/kg	TM16/PM8	
Benzo(ghi)perylene	15607 ^{AA}	32523 ^{AB}													<10	ug/kg	TM16/PM8	
Benzo(b)fluoranthene	35675 ^{AA}	82984 ^{AB}													<10	ug/kg	TM16/PM8	
Benzo(k)fluoranthene	13874 ^{AA}	32272 ^{AB}													<10	ug/kg	TM16/PM8	
Phthalates																		
Bis(2-ethylhexyl) phthalate	<500 ^{AA}	<1000 ^{AB}													<100	ug/kg	TM16/PM8	
Butylbenzyl phthalate	<500 ^{AA}	<1000 ^{AB}													<100	ug/kg	TM16/PM8	
Di-n-butyl phthalate	<500 ^{AA}	<1000 ^{AB}													<100	ug/kg	TM16/PM8	
Di-n-Octyl phthalate	<500 ^{AA}	<1000 ^{AB}													<100	ug/kg	TM16/PM8	
Diethyl phthalate	<500 ^{AA}	<1000 ^{AB}													<100	ug/kg	TM16/PM8	
Dimethyl phthalate #M	<500 ^{AA}	<1000 ^{AB}													<100	ug/kg	TM16/PM8	

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	169-171	175-177													
Sample ID	WS214	WS211													
Depth	0.50	0.20													
COC No / misc															
Containers	V J T	V J T													
Sample Date	08/12/2015	08/12/2015													
Sample Type	Soil	Soil													
Batch Number	5	5													
Date of Receipt	09/12/2015	09/12/2015													
Please see attached notes for all abbreviations and acronyms															
SVOC MS															
Other SVOCs															
1,2-Dichlorobenzene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
1,2,4-Trichlorobenzene ^{#M}	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
1,3-Dichlorobenzene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
1,4-Dichlorobenzene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
2-Nitroaniline	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
2,4-Dinitrotoluene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
2,6-Dinitrotoluene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
3-Nitroaniline	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
4-Bromophenylphenylether ^{#M}	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
4-Chloroaniline	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
4-Chlorophenylphenylether	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
4-Nitroaniline	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Azobenzene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Bis(2-chloroethoxy)methane	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Bis(2-chloroethyl)ether	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Carbazole	3472 ^{AA}	6378 ^{AB}										<10	ug/kg	TM16/PM8	
Dibenzofuran ^{#M}	4577 ^{AA}	13379 ^{AB}										<10	ug/kg	TM16/PM8	
Hexachlorobenzene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Hexachlorobutadiene ^{#M}	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Hexachlorocyclopentadiene	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Hexachloroethane	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Isophorone ^{#M}	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
N-nitrosodi-n-propylamine ^{#M}	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Nitrobenzene ^{#M}	<50 ^{AA}	<100 ^{AB}										<10	ug/kg	TM16/PM8	
Surrogate Recovery 2-Fluorobiphenyl	105 ^{AA}	85 ^{AB}										<0	%	TM16/PM8	
Surrogate Recovery p-Terphenyl-d14	116 ^{AA}	103 ^{AB}										<0	%	TM16/PM8	

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	169-171	175-177										
Sample ID	WS214	WS211										
Depth	0.50	0.20										
COC No / misc												
Containers	V J T	V J T										
Sample Date	08/12/2015	08/12/2015										
Sample Type	Soil	Soil										
Batch Number	5	5										
Date of Receipt	09/12/2015	09/12/2015										
SVOC MS												
Phenols												
2-Chlorophenol	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
2-Methylphenol	<0.5	<10.0 _{AC}							<0.5	ug/l	TM16/PM30	
2-Nitrophenol	<0.5	<10.0 _{AC}							<0.5	ug/l	TM16/PM30	
2,4-Dichlorophenol	<0.5	<10.0 _{AC}							<0.5	ug/l	TM16/PM30	
2,4-Dimethylphenol	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
2,4,5-Trichlorophenol	<0.5	<10.0 _{AC}							<0.5	ug/l	TM16/PM30	
2,4,6-Trichlorophenol	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
4-Chloro-3-methylphenol	<0.5	<10.0 _{AC}							<0.5	ug/l	TM16/PM30	
4-Methylphenol	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
4-Nitrophenol	<10	<200 _{AC}							<10	ug/l	TM16/PM30	
Pentachlorophenol	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
Phenol	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
PAHs												
2-Chloronaphthalene	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
2-Methylnaphthalene	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
Naphthalene	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
Acenaphthylene	<0.5	<10.0 _{AC}							<0.5	ug/l	TM16/PM30	
Acenaphthene	<1	23 _{AC}							<1	ug/l	TM16/PM30	
Fluorene	<0.5	11.2 _{AC}							<0.5	ug/l	TM16/PM30	
Phenanthrene	<0.5	47.7 _{AC}							<0.5	ug/l	TM16/PM30	
Anthracene	<0.5	13.5 _{AC}							<0.5	ug/l	TM16/PM30	
Fluoranthene	1.1	54.9 _{AC}							<0.5	ug/l	TM16/PM30	
Pyrene	1.3	62.3 _{AC}							<0.5	ug/l	TM16/PM30	
Benzo(a)anthracene	<0.5	24.7 _{AC}							<0.5	ug/l	TM16/PM30	
Chrysene	<0.5	27.8 _{AC}							<0.5	ug/l	TM16/PM30	
Benzo(bk)fluoranthene	<1	57 _{AC}							<1	ug/l	TM16/PM30	
Benzo(a)pyrene	1	38 _{AC}							<1	ug/l	TM16/PM30	
Indeno(123cd)pyrene	<1	20 _{AC}							<1	ug/l	TM16/PM30	
Dibenzo(ah)anthracene	<0.5	<10.0 _{AC}							<0.5	ug/l	TM16/PM30	
Benzo(ghi)perylene	<0.5	25.4 _{AC}							<0.5	ug/l	TM16/PM30	
Phthalates												
Bis(2-ethylhexyl) phthalate	<5	<100 _{AC}							<5	ug/l	TM16/PM30	
Butylbenzyl phthalate	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
Di-n-butyl phthalate	<1.5	<30.0 _{AC}							<1.5	ug/l	TM16/PM30	
Di-n-Octyl phthalate	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
Diethyl phthalate	<1	<20 _{AC}							<1	ug/l	TM16/PM30	
Dimethyl phthalate	<1	<20 _{AC}							<1	ug/l	TM16/PM30	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	5	WS214	0.50	170	11/12/2015	Mass of Dry Sample	48.3 (g)
					14/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					14/12/2015	Asbestos Containing Material	None
					14/12/2015	Asbestos Containing Material (2)	None
					14/12/2015	Asbestos Screen	NAD
					14/12/2015	Asbestos Screen (2)	NAD
					14/12/2015	Asbestos Level	NAD
					14/12/2015	Waste Limit	<0.1%
15/17326	5	WS211	0.20	176	11/12/2015	Mass of Dry Sample	50.2 (g)
					14/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					14/12/2015	Asbestos Containing Material	None
					14/12/2015	Asbestos Containing Material (2)	None
					14/12/2015	Asbestos Screen	NAD
					14/12/2015	Asbestos Screen (2)	NAD
					14/12/2015	Asbestos Level	NAD
					14/12/2015	Waste Limit	<0.1%
15/17326	5	WS211	1.00	182	11/12/2015	Mass of Dry Sample	50.3 (g)
					14/12/2015	General Description (Bulk Analysis)	Soil-Silt/Clay/Brick/Stone
					14/12/2015	Asbestos Containing Material	None
					14/12/2015	Asbestos Containing Material (2)	None
					14/12/2015	Asbestos Screen	NAD
					14/12/2015	Asbestos Screen (2)	NAD
					14/12/2015	Asbestos Level	NAD
					14/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x5 Dilution
AB	x10 Dilution
AC	x20 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex.PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention : Sarah Burt
Date : 4th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 5 Schedule B
Location : Stockport Bus Station
Date samples received : 9th December, 2015
Status : Final report
Issue : 1

Twelve samples were received for analysis on 9th December, 2015 of which one were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	184-186									Please see attached notes for all abbreviations and acronyms		
Sample ID	BH103											
Depth	0.35-0.55											
COC No / misc												
Containers	V J T											
Sample Date	08/12/2015											
Sample Type	Soil											
Batch Number	5											
Date of Receipt	09/12/2015									LOD/LOR	Units	Method No.
Arsenic ^{#M}	1.4									<0.5	mg/kg	TM30/PM15
Chromium ^{#M}	13.4									<0.5	mg/kg	TM30/PM15
Copper ^{#M}	4									<1	mg/kg	TM30/PM15
Lead ^{#M}	9									<5	mg/kg	TM30/PM15
Mercury ^{#M}	<0.1									<0.1	mg/kg	TM30/PM15
Nickel ^{#M}	6.4									<0.7	mg/kg	TM30/PM15
Selenium ^{#M}	<1									<1	mg/kg	TM30/PM15
Vanadium	5									<1	mg/kg	TM30/PM15
Water Soluble Boron ^{#M}	<0.1									<0.1	mg/kg	TM74/PM32
Zinc ^{#M}	41									<5	mg/kg	TM30/PM15
PAH MS												
Naphthalene ^{#M}	<0.04									<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03									<0.03	mg/kg	TM4/PM8
Acenaphthene ^{#M}	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene ^{#M}	<0.04									<0.04	mg/kg	TM4/PM8
Phenanthrene ^{#M}	<0.03									<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene ^{#M}	<0.03									<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene ^{#M}	<0.02									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene ^{#M}	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene ^{#M}	<0.04									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04									<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6									<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	117									<0	%	TM4/PM8
TPH CWG												
Aliphatics												
>C5-C6 ^{#M}	<0.1									<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1									<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1									<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2									<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4									<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7									<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	<7									<7	mg/kg	TM5/PM16
>C35-C44	<7									<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26									<26	mg/kg	TM5/TM36/PM16

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	184-186											
Sample ID	BH103											
Depth	0.35-0.55											
COC No / misc												
Containers	V J T											
Sample Date	08/12/2015											
Sample Type	Soil											
Batch Number	5											
Date of Receipt	09/12/2015											
									LOD/LOR	Units	Method No.	
TPH CWG												
Aromatics												
>C5-EC7	<0.1								<0.1	mg/kg	TM36/PM12	
>EC7-EC8	<0.1								<0.1	mg/kg	TM36/PM12	
>EC8-EC10 ^{#M}	<0.1								<0.1	mg/kg	TM36/PM12	
>EC10-EC12	<0.2								<0.2	mg/kg	TM5/PM16	
>EC12-EC16	<4								<4	mg/kg	TM5/PM16	
>EC16-EC21	<7								<7	mg/kg	TM5/PM16	
>EC21-EC35	<7								<7	mg/kg	TM5/PM16	
>EC35-EC44	<7								<7	mg/kg	TM5/PM16	
Total aromatics C5-44	<26								<26	mg/kg	TM5/TM36/PM16	
Total aliphatics and aromatics(C5-44)	<52								<52	mg/kg	TM5/TM36/PM16	
MTBE [#]	<5								<5	ug/kg	TM31/PM12	
Benzene [#]	<5								<5	ug/kg	TM31/PM12	
Toluene [#]	<5								<5	ug/kg	TM31/PM12	
Ethylbenzene [#]	<5								<5	ug/kg	TM31/PM12	
m/p-Xylene [#]	<5								<5	ug/kg	TM31/PM12	
o-Xylene [#]	<5								<5	ug/kg	TM31/PM12	
2-Chlorophenol	<10								<10	ug/kg	TM16/PM8	
Natural Moisture Content	2.9								<0.1	%	PM4/PM0	
2-Methylphenol	<10								<10	ug/kg	TM16/PM8	
2-Nitrophenol	<10								<10	ug/kg	TM16/PM8	
2,4-Dichlorophenol	<10								<10	ug/kg	TM16/PM8	
2,4-Dimethylphenol	<10								<10	ug/kg	TM16/PM8	
2,4,5-Trichlorophenol	<10								<10	ug/kg	TM16/PM8	
2,4,6-Trichlorophenol	<10								<10	ug/kg	TM16/PM8	
4-Chloro-3-methylphenol	<10								<10	ug/kg	TM16/PM8	
4-Methylphenol	<10								<10	ug/kg	TM16/PM8	
4-Nitrophenol	<10								<10	ug/kg	TM16/PM8	
Pentachlorophenol	<10								<10	ug/kg	TM16/PM8	
Phenol	<10								<10	ug/kg	TM16/PM8	
Total Speciated Phenols MS	<10								<10	ug/kg	TM16/PM8	
Hexavalent Chromium [#]	<0.3								<0.3	mg/kg	TM38/PM20	
Chromium III	13.4								<0.5	mg/kg	NONE/NONE	
Total Cyanide ^{#M}	<0.5								<0.5	mg/kg	TM89/PM45	
Total Organic Carbon [#]	0.10								<0.02	%	TM21/PM24	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	184-186										Please see attached notes for all abbreviations and acronyms		
Sample ID	BH103												
Depth	0.35-0.55												
COC No / misc													
Containers	V J T												
Sample Date	08/12/2015												
Sample Type	Soil												
Batch Number	5												
Date of Receipt	09/12/2015										LOD/LOR		
pH #M	8.92										<0.01	pH units	TM73/PM11
Sample Type	Sand											None	PM13/PM0
Sample Colour	Light Grey											None	PM13/PM0
Other Items	stones											None	PM13/PM0

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AR	Yes



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
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Geotechnics
Unit 1B
Borders Industrial Park
River Lane
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Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention : Sarah Burt
Date : 30th December, 2015
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 6
Location : Stockport Bus Station
Date samples received : 11th December, 2015
Status : Final report
Issue : 1

Four samples were received for analysis on 11th December, 2015 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	6	BH105	1.00	200	17/12/2015	Mass of Dry Sample	51.3 (g)
					17/12/2015	General Description (Bulk Analysis)	Soil/Stones
					17/12/2015	Asbestos Containing Material	None
					17/12/2015	Asbestos Containing Material (2)	None
					17/12/2015	Asbestos Screen	NAD
					17/12/2015	Asbestos Screen (2)	NAD
					17/12/2015	Asbestos Level	NAD
					17/12/2015	Waste Limit	<0.1%

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Analysis	Reason
No deviating sample report results for job 15/17326						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

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It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

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Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

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As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

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Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

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ABBREVIATIONS and ACRONYMS USED

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M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methyltertbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
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Tel: +44 (0) 1244 833780
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Attention : Sarah Burt
Date : 7th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 7
Location : Stockport Bus Station
Date samples received : 12th December, 2015
Status : Final report
Issue : 1

Seven samples were received for analysis on 12th December, 2015 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : Solid
 Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	208-210	214-216								Please see attached notes for all abbreviations and acronyms		
Sample ID	WS205	WS205										
Depth	0.50	1.50										
COC No / misc												
Containers	V J T	V J T										
Sample Date	11/12/2015	11/12/2015										
Sample Type	Soil	Soil										
Batch Number	7	7										
Date of Receipt	12/12/2015	12/12/2015								LOD/LOR	Units	Method No.
Arsenic #M	1.0	2.3								<0.5	mg/kg	TM30/PM15
Cadmium #M	0.4	-								<0.1	mg/kg	TM30/PM15
Chromium #M	11.2	85.5								<0.5	mg/kg	TM30/PM15
Copper #M	3	10								<1	mg/kg	TM30/PM15
Lead #M	6	7								<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1								<0.1	mg/kg	TM30/PM15
Nickel #M	5.3	21.2								<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1								<1	mg/kg	TM30/PM15
Vanadium	4	26								<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.2	<0.1								<0.1	mg/kg	TM74/PM32
Zinc #M	19	46								<5	mg/kg	TM30/PM15
PAH MS												
Naphthalene #M	<0.04	<0.04								<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03								<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05								<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04								<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.06	<0.03								<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04								<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.08	<0.03								<0.03	mg/kg	TM4/PM8
Pyrene #	0.08	<0.03								<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.06	<0.06								<0.06	mg/kg	TM4/PM8
Chrysene #M	0.06	<0.02								<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.09	<0.07								<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.05	<0.04								<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	<0.04	<0.04								<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04								<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.04	<0.04								<0.04	mg/kg	TM4/PM8
PAH 16 Total	<0.6	<0.6								<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.06	<0.05								<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.03	<0.02								<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	115	112								<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #M	<6	-								<6	ug/kg	TM15/PM10
Benzene #M	<5	-								<5	ug/kg	TM15/PM10
Toluene #M	<3	-								<3	ug/kg	TM15/PM10
Ethylbenzene #M	<3	-								<3	ug/kg	TM15/PM10
p/m-Xylene #M	<4	-								<4	ug/kg	TM15/PM10
o-Xylene #M	<4	-								<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	114	-								<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	139	-								<0	%	TM15/PM10

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	208-210	214-216										
Sample ID	WS205	WS205										
Depth	0.50	1.50										
COC No / misc												
Containers	V J T	V J T										
Sample Date	11/12/2015	11/12/2015										
Sample Type	Soil	Soil										
Batch Number	7	7										
Date of Receipt	12/12/2015	12/12/2015										
										LOD/LOR	Units	Method No.
Please see attached notes for all abbreviations and acronyms												
TPH CWG												
Aliphatics												
>C5-C6 ^{#M}	<0.1	<0.1								<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1								<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1								<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2								<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	<4								<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7	<7								<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	<7	<7								<7	mg/kg	TM5/PM16
>C35-C44	<7	<7								<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26	<26								<26	mg/kg	TM5/TM36/PM16
Aromatics												
>C5-EC7	<0.1	<0.1								<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1								<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1								<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2								<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4								<4	mg/kg	TM5/PM16
>EC16-EC21	<7	<7								<7	mg/kg	TM5/PM16
>EC21-EC35	<7	<7								<7	mg/kg	TM5/PM16
>EC35-EC44	<7	<7								<7	mg/kg	TM5/PM16
Total aromatics C5-44	<26	<26								<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	<52	<52								<52	mg/kg	TM5/TM36/PM16
MTBE [#]												
	-	<5								<5	ug/kg	TM31/PM12
Benzene [#]												
	-	<5								<5	ug/kg	TM31/PM12
Toluene [#]												
	-	<5								<5	ug/kg	TM31/PM12
Ethylbenzene [#]												
	-	<5								<5	ug/kg	TM31/PM12
m/p-Xylene [#]												
	-	<5								<5	ug/kg	TM31/PM12
o-Xylene [#]												
	-	<5								<5	ug/kg	TM31/PM12
PCB 28 [#]												
	<5	-								<5	ug/kg	TM17/PM8
PCB 52 [#]												
	<5	-								<5	ug/kg	TM17/PM8
PCB 101 [#]												
	<5	-								<5	ug/kg	TM17/PM8
PCB 118 [#]												
	<5	-								<5	ug/kg	TM17/PM8
PCB 138 [#]												
	<5	-								<5	ug/kg	TM17/PM8
PCB 153 [#]												
	<5	-								<5	ug/kg	TM17/PM8
PCB 180 [#]												
	<5	-								<5	ug/kg	TM17/PM8
Total 7 PCBs [#]	<35	-								<35	ug/kg	TM17/PM8
2-Chlorophenol												
	<10	<10								<10	ug/kg	TM16/PM8
Natural Moisture Content												
	3.0	7.5								<0.1	%	PM4/PM0
2-Methylphenol												
	<10	<10								<10	ug/kg	TM16/PM8

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	208-210	214-216										
Sample ID	WS205	WS205										
Depth	0.50	1.50										
COC No / misc												
Containers	V J T	V J T										
Sample Date	11/12/2015	11/12/2015										
Sample Type	Soil	Soil										
Batch Number	7	7										
Date of Receipt	12/12/2015	12/12/2015										
										LOD/LOR	Units	Method No.
2-Nitrophenol	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10								<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10								<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10								<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10								<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10								<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10								<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10								<10	ug/kg	TM16/PM8
Phenol	<10	<10								<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10								<10	ug/kg	TM16/PM8
Hexavalent Chromium #	-	<0.3								<0.3	mg/kg	TM38/PM20
Chromium III	-	85.5								<0.5	mg/kg	NONE/NONE
Total Cyanide #M	<0.5	<0.5								<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	<0.02	0.15								<0.02	%	TM21/PM24
pH #M	10.43	9.14								<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand									None	PM13/PM0
Sample Colour	Light Grey	Medium Brown									None	PM13/PM0
Other Items	stones	stones									None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	208-210								Please see attached notes for all abbreviations and acronyms			
Sample ID	WS205								LOD/LOR	Units	Method No.	
Depth	0.50											
COC No / misc												
Containers	V J T											
Sample Date	11/12/2015											
Sample Type	Soil											
Batch Number	7											
Date of Receipt	12/12/2015											
Dissolved Arsenic #	<2.5									<2.5	ug/l	TM30/PM14
Dissolved Boron #	<12									<12	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5									<0.5	ug/l	TM30/PM14
Dissolved Chromium #	13.9									<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7									<7	ug/l	TM30/PM14
Dissolved Lead #	8									<5	ug/l	TM30/PM14
Dissolved Mercury #	<1									<1	ug/l	TM30/PM14
Dissolved Nickel #	4									<2	ug/l	TM30/PM14
Dissolved Selenium #	<3									<3	ug/l	TM30/PM14
Dissolved Vanadium #	5.3									<1.5	ug/l	TM30/PM14
Dissolved Zinc #	5									<3	ug/l	TM30/PM14
PAH MS												
Naphthalene	<0.1									<0.1	ug/l	TM4/PM30
Acenaphthylene	0.050									<0.013	ug/l	TM4/PM30
Acenaphthene	0.050									<0.013	ug/l	TM4/PM30
Fluorene	0.050									<0.014	ug/l	TM4/PM30
Phenanthrene	0.120									<0.011	ug/l	TM4/PM30
Anthracene	0.030									<0.013	ug/l	TM4/PM30
Fluoranthene	0.060									<0.012	ug/l	TM4/PM30
Pyrene	0.050									<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	0.040									<0.015	ug/l	TM4/PM30
Chrysene	0.040									<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	0.060									<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	0.030									<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.030									<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.01									<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	0.020									<0.011	ug/l	TM4/PM30
PAH 16 Total	0.630									<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.04									<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.02									<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	87									<0	%	TM4/PM30
Methyl Tertiary Butyl Ether	<1									<1	ug/l	TM15/PM69
Benzene	<1									<1	ug/l	TM15/PM69
Toluene	<2									<2	ug/l	TM15/PM69
Ethylbenzene	<2									<2	ug/l	TM15/PM69
p/m-Xylene	<3									<3	ug/l	TM15/PM69
o-Xylene	<2									<2	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	103									<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	107									<0	%	TM15/PM69

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No. 208-210									Please see attached notes for all abbreviations and acronyms		
Sample ID	WS205										
Depth	0.50										
COC No / misc											
Containers	V J T										
Sample Date	11/12/2015										
Sample Type	Soil										
Batch Number	7										
Date of Receipt	12/12/2015								LOD/LOR	Units	Method No.
TPH CWG											
Aliphatics											
>C5-C6	<5							<5	ug/l	TM36/PM69	
>C6-C8	<5							<5	ug/l	TM36/PM69	
>C8-C10	<5							<5	ug/l	TM36/PM69	
>C10-C12	<5							<5	ug/l	TM5/PM30	
>C12-C16	<10							<10	ug/l	TM5/PM30	
>C16-C21	<10							<10	ug/l	TM5/PM30	
>C21-C35	<10							<10	ug/l	TM5/PM30	
>C35-C44	<10							<10	ug/l	TM5/PM30	
Total aliphatics C5-44	<10							<10	ug/l	TM5/PM30/PM69	
Aromatics											
>C5-EC7	<5							<5	ug/l	TM36/PM69	
>EC7-EC8	<5							<5	ug/l	TM36/PM69	
>EC8-EC10	<5							<5	ug/l	TM36/PM69	
>EC10-EC12	<5							<5	ug/l	TM5/PM30	
>EC12-EC16	<10							<10	ug/l	TM5/PM30	
>EC16-EC21	<10							<10	ug/l	TM5/PM30	
>EC21-EC35	<10							<10	ug/l	TM5/PM30	
>EC35-EC44	<10							<10	ug/l	TM5/PM30	
Total aromatics C5-44	<10							<10	ug/l	TM5/PM30/PM69	
Total aliphatics and aromatics(C5-44)	<10							<10	ug/l	TM5/PM30/PM69	
PCB 28	<0.1							<0.1	ug/l	TM17/PM30	
PCB 52	<0.1							<0.1	ug/l	TM17/PM30	
PCB 101	<0.1							<0.1	ug/l	TM17/PM30	
PCB 118	<0.1							<0.1	ug/l	TM17/PM30	
PCB 138	<0.1							<0.1	ug/l	TM17/PM30	
PCB 153	<0.1							<0.1	ug/l	TM17/PM30	
PCB 180	<0.1							<0.1	ug/l	TM17/PM30	
Total 7 PCBs	<0.7							<0.7	ug/l	TM17/PM30	
2-Chlorophenol	<0.5							<0.5	ug/l	TM16/PM30	
2-Methylphenol	<0.5							<0.5	ug/l	TM16/PM30	
2-Nitrophenol	<0.5							<0.5	ug/l	TM16/PM30	
2,4-Dichlorophenol	<0.5							<0.5	ug/l	TM16/PM30	
2,4-Dimethylphenol	<0.5							<0.5	ug/l	TM16/PM30	
2,4,5-Trichlorophenol	<0.5							<0.5	ug/l	TM16/PM30	
2,4,6-Trichlorophenol	<0.5							<0.5	ug/l	TM16/PM30	
4-Chloro-3-methylphenol	<0.5							<0.5	ug/l	TM16/PM30	
4-Methylphenol	<0.5							<0.5	ug/l	TM16/PM30	
4-Nitrophenol	<0.5							<0.5	ug/l	TM16/PM30	
Pentachlorophenol	<0.5							<0.5	ug/l	TM16/PM30	
Phenol	<0.5							<0.5	ug/l	TM16/PM30	

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.		208-210									Please see attached notes for all abbreviations and acronyms		
Sample ID	WS205										LOD/LOR	Units	Method No.
Depth	0.50												
COC No / misc													
Containers	V J T												
Sample Date	11/12/2015												
Sample Type	Soil												
Batch Number	7												
Date of Receipt	12/12/2015												
Total Speciated Phenols MS	<6										<6	ug/l	TM16/PM30
Total Cyanide #	<0.01										<0.01	mg/l	TM89/PM0
Mass of raw test portion	0.094											kg	NONE/PM17
Leachant Volume	0.896											l	NONE/PM17
Dissolved Organic Carbon	3										<2	mg/l	TM60/PM0
pH	10.99										<0.01	pH units	TM73/PM0

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex. PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Attention : Sarah Burt
Date : 7th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 8
Location : Stockport Bus Station
Date samples received : 12th December, 2015
Status : Final report
Issue : 1

Seventeen samples were received for analysis on 12th December, 2015 of which six were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Table with columns for J E Sample No., Sample ID, Depth, COC No / misc, Containers, Sample Date, Sample Type, Batch Number, Date of Receipt, and various chemical concentrations (e.g., Dissolved Arsenic, PAH MS, Methyl Tertiary Butyl Ether). Includes LOD/LOR, Units, and Method No. columns.

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	226-228	235-237	250-252	271-273																
Sample ID	HP02	HP01	WS210	WS223																
Depth	0.20	0.20	1.00	1.00																
COC No / misc																				
Containers	V J T	V J T	V J T	V J T																
Sample Date	09/12/2015	09/12/2015	09/12/2015	10/12/2015																
Sample Type	Soil	Soil	Soil	Soil																
Batch Number	8	8	8	8																
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015																
TPH CWG												LOD/LOR	Units	Method No.						
Please see attached notes for all abbreviations and acronyms																				
Aliphatics																				
>C5-C6	<5	<5	<5	<5														<5	ug/l	TM36/PM69
>C6-C8	<5	<5	<5	<5														<5	ug/l	TM36/PM69
>C8-C10	<5	<5	<5	<5														<5	ug/l	TM36/PM69
>C10-C12	<5	<5	<5	<5														<5	ug/l	TM5/PM30
>C12-C16	<10	<10	<10	<10														<10	ug/l	TM5/PM30
>C16-C21	<10	<10	<10	<10														<10	ug/l	TM5/PM30
>C21-C35	<10	<10	<10	<10														<10	ug/l	TM5/PM30
>C35-C44	<10	<10	<10	<10														<10	ug/l	TM5/PM30
Total aliphatics C5-44	<10	<10	<10	<10														<10	ug/l	TM5/PM30/PM69
Aromatics																				
>C5-EC7	<5	<5	<5	<5														<5	ug/l	TM36/PM69
>EC7-EC8	<5	<5	<5	<5														<5	ug/l	TM36/PM69
>EC8-EC10	<5	<5	<5	<5														<5	ug/l	TM36/PM69
>EC10-EC12	<5	<5	<5	<5														<5	ug/l	TM5/PM30
>EC12-EC16	<10	<10	<10	<10														<10	ug/l	TM5/PM30
>EC16-EC21	<10	<10	<10	<10														<10	ug/l	TM5/PM30
>EC21-EC35	<10	<10	<10	<10														<10	ug/l	TM5/PM30
>EC35-EC44	<10	<10	<10	<10														<10	ug/l	TM5/PM30
Total aromatics C5-44	<10	<10	<10	<10														<10	ug/l	TM5/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10	<10	<10	<10														<10	ug/l	TM5/PM30/PM69
PCB 28	<0.1	<0.1	<0.1	<0.1														<0.1	ug/l	TM17/PM30
PCB 52	<0.1	<0.1	<0.1	<0.1														<0.1	ug/l	TM17/PM30
PCB 101	<0.1	<0.1	<0.1	<0.1														<0.1	ug/l	TM17/PM30
PCB 118	<0.1	<0.1	<0.1	<0.1														<0.1	ug/l	TM17/PM30
PCB 138	<0.1	<0.1	<0.1	<0.1														<0.1	ug/l	TM17/PM30
PCB 153	<0.1	<0.1	<0.1	<0.1														<0.1	ug/l	TM17/PM30
PCB 180	<0.1	<0.1	<0.1	<0.1														<0.1	ug/l	TM17/PM30
Total 7 PCBs	<0.7	<0.7	<0.7	<0.7														<0.7	ug/l	TM17/PM30
2-Chlorophenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30
Phenol	<0.5	<0.5	<0.5	<0.5														<0.5	ug/l	TM16/PM30

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	226-228	235-237	250-252	271-273											
Sample ID	HP02	HP01	WS210	WS223											
Depth	0.20	0.20	1.00	1.00											
COC No / misc															
Containers	V J T	V J T	V J T	V J T											
Sample Date	09/12/2015	09/12/2015	09/12/2015	10/12/2015											
Sample Type	Soil	Soil	Soil	Soil											
Batch Number	8	8	8	8											
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015											
Total Speciated Phenols MS	<6	<6	<6	<6							<6	ug/l	TM16/PM30		
Total Cyanide #	<0.01	<0.01	<0.01	<0.01							<0.01	mg/l	TM89/PM0		
Mass of raw test portion	0.0982	0.1056	0.11	0.0933								kg	NONE/PM17		
Leachant Volume	0.891	0.884	0.88	0.897								l	NONE/PM17		
Dissolved Chromium III	0.007	0.006	<0.006	0.013							<0.006	mg/l	NONE/NONE		
Dissolved Organic Carbon	7	13	3	5							<2	mg/l	TM60/PM0		
Hexavalent Chromium	<0.006	<0.006	<0.006	<0.006							<0.006	mg/l	TM38/PM0		
pH	8.62	9.70	7.90	11.71							<0.01	pH units	TM73/PM0		

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	226-228	229-231	235-237	244-246	250-252	271-273											
Sample ID	HP02	HP02	HP01	WS210	WS210	WS223											
Depth	0.20	0.50	0.20	0.20	1.00	1.00											
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T											
Sample Date	09/12/2015	09/12/2015	09/12/2015	09/12/2015	09/12/2015	10/12/2015											
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil											
Batch Number	8	8	8	8	8	8											
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015											
													LOD/LOR	Units	Method No.		
SVOC MS																	
Phenols																	
2-Chlorophenol #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2-Methylphenol	<50AA	<10	<50AA	<100AB	159	<10							<10	ug/kg	TM16/PM8		
2-Nitrophenol	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2,4-Dichlorophenol #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2,4-Dimethylphenol	<50AA	<10	<50AA	3030AB	309	<10							<10	ug/kg	TM16/PM8		
2,4,5-Trichlorophenol	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2,4,6-Trichlorophenol	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
4-Chloro-3-methylphenol	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
4-Methylphenol	<50AA	<10	<50AA	2907AB	488	<10							<10	ug/kg	TM16/PM8		
4-Nitrophenol	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Pentachlorophenol	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Phenol #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
PAHs																	
2-Chloronaphthalene #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2-Methylnaphthalene #M	3271AA	<10	411AA	121597AB	1828	<10							<10	ug/kg	TM16/PM8		
Phthalates																	
Bis(2-ethylhexyl) phthalate	<500AA	<100	<500AA	<1000AB	<100	<100							<100	ug/kg	TM16/PM8		
Butylbenzyl phthalate	<500AA	<100	<500AA	<1000AB	<100	<100							<100	ug/kg	TM16/PM8		
Di-n-butyl phthalate	<500AA	<100	<500AA	<1000AB	<100	<100							<100	ug/kg	TM16/PM8		
Di-n-Octyl phthalate	<500AA	<100	<500AA	<1000AB	<100	<100							<100	ug/kg	TM16/PM8		
Diethyl phthalate	<500AA	<100	<500AA	<1000AB	<100	<100							<100	ug/kg	TM16/PM8		
Dimethyl phthalate #M	<500AA	<100	<500AA	<1000AB	<100	<100							<100	ug/kg	TM16/PM8		
Other SVOCs																	
1,2-Dichlorobenzene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
1,2,4-Trichlorobenzene #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
1,3-Dichlorobenzene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
1,4-Dichlorobenzene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2-Nitroaniline	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2,4-Dinitrotoluene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
2,6-Dinitrotoluene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
3-Nitroaniline	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
4-Bromophenylphenylether #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
4-Chloroaniline	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
4-Chlorophenylphenylether	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
4-Nitroaniline	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Azobenzene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Bis(2-chloroethoxy)methane	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Bis(2-chloroethyl)ether	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Carbazole	5747AA	<10	<50AA	50353AB	1366	<10							<10	ug/kg	TM16/PM8		
Dibenzofuran #M	2429AA	<10	490AA	72535AB	1188	<10							<10	ug/kg	TM16/PM8		
Hexachlorobenzene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Hexachlorobutadiene #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Hexachlorocyclopentadiene	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Hexachloroethane	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Isophorone #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
N-nitrosodi-n-propylamine #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		
Nitrobenzene #M	<50AA	<10	<50AA	<100AB	<10	<10							<10	ug/kg	TM16/PM8		

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

SVOC Report : CEN 10:1 1 Batch

J E Sample No.	226-228	235-237	250-252	271-273									
Sample ID	HP02	HP01	WS210	WS223									
Depth	0.20	0.20	1.00	1.00									
COC No / misc Containers	V J T	V J T	V J T	V J T									
Sample Date	09/12/2015	09/12/2015	09/12/2015	10/12/2015									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	8	8	8	8									
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015									
Please see attached notes for all abbreviations and acronyms													
	LOD/LOR	Units	Method No.										
SVOC MS													
Phenols													
2-Chlorophenol	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Methylphenol	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Nitrophenol	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dichlorophenol	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dimethylphenol	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4,5-Trichlorophenol	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-Trichlorophenol	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Methylphenol	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Nitrophenol	<10	ug/l	TM16/PM30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenol	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PAHs													
2-Chloronaphthalene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Methylnaphthalene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phthalates													
Bis(2-ethylhexyl) phthalate	<5	ug/l	TM16/PM30	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Butylbenzyl phthalate	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Di-n-butyl phthalate	<1.5	ug/l	TM16/PM30	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Di-n-Octyl phthalate	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Diethyl phthalate	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dimethyl phthalate	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other SVOCs													
1,2-Dichlorobenzene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Nitroaniline	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-Dinitrotoluene	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dinitrotoluene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-Nitroaniline	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Bromophenyphenylether	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chloroaniline	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Chlorophenyphenylether	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Nitroaniline	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Azobenzene	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethoxy)methane	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl)ether	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbazole	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenzofuran	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobenzene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorobutadiene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorocyclopentadiene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachloroethane	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isophorone	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitrosodi-n-propylamine	<0.5	ug/l	TM16/PM30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	<1	ug/l	TM16/PM30	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	226-228	229-231	235-237	244-246	250-252	271-273						
Sample ID	HP02	HP02	HP01	WS210	WS210	WS223						
Depth	0.20	0.50	0.20	0.20	1.00	1.00						
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	09/12/2015	09/12/2015	09/12/2015	09/12/2015	09/12/2015	10/12/2015						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil						
Batch Number	8	8	8	8	8	8						
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015						
	LOD/LOR	Units	Method No.	Please see attached notes for all abbreviations and acronyms								
VOC MS												
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10			
Methyl Tertiary Butyl Ether ^{#M}	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10			
Chloromethane [#]	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10			
Bromomethane	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10			
Chloroethane ^{#M}	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10			
Trichlorofluoromethane ^{#M}	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
1,1-Dichloroethene (1,1 DCE) ^{#M}	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10			
Dichloromethane (DCM) [#]	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10			
trans-1-2-Dichloroethene [#]	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
1,1-Dichloroethane ^{#M}	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10			
cis-1-2-Dichloroethene ^{#M}	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10			
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Bromochloromethane ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Chloroform ^{#M}	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
1,1,1-Trichloroethane ^{#M}	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
1,1-Dichloropropene [#]	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
Carbon tetrachloride ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
1,2-Dichloroethane ^{#M}	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
Benzene ^{#M}	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
Trichloroethene (TCE) ^{#M}	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
1,2-Dichloropropane ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Dibromomethane ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Bromodichloromethane ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Toluene ^{#M}	<3	<3	5	24	13	<3	<3	ug/kg	TM15/PM10			
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
1,1,2-Trichloroethane ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Tetrachloroethene (PCE) [#]	26	<3	113	22	157	<3	<3	ug/kg	TM15/PM10			
1,3-Dichloropropane ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Dibromochloromethane ^{#M}	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
1,2-Dibromoethane [#]	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
Chlorobenzene ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
1,1,1,2-Tetrachloroethane ^{#M}	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
Ethylbenzene ^{#M}	<3	<3	<3	62	<3	<3	<3	ug/kg	TM15/PM10			
p/m-Xylene ^{#M}	<4	<4	<4	69	13	<4	<4	ug/kg	TM15/PM10			
o-Xylene ^{#M}	<4	<4	<4	27	9	<4	<4	ug/kg	TM15/PM10			
Styrene	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
Bromofrom	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Isopropylbenzene [#]	<3	<3	<3	16	<3	<3	<3	ug/kg	TM15/PM10			
1,1,2,2-Tetrachloroethane ^{#M}	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10			
1,2,3-Trichloropropane ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Propylbenzene [#]	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
1,3,5-Trimethylbenzene [#]	<3	<3	<3	31	<3	<3	<3	ug/kg	TM15/PM10			
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10			
tert-Butylbenzene [#]	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10			
1,2,4-Trimethylbenzene [#]	<6	<6	<6	38	11	<6	<6	ug/kg	TM15/PM10			
sec-Butylbenzene [#]	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
4-Isopropyltoluene [#]	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
1,3-Dichlorobenzene ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
1,4-Dichlorobenzene [#]	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
n-Butylbenzene [#]	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
1,2-Dichlorobenzene ^{#M}	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
1,2-Dibromo-3-chloropropane [#]	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
1,2,4-Trichlorobenzene [#]	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10			
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10			
Naphthalene	<27	<27	<27	6844	951	<27	<27	ug/kg	TM15/PM10			
1,2,3-Trichlorobenzene [#]	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10			
Surrogate Recovery Toluene D8	112	111	103	83	101	113	<0	%	TM15/PM10			
Surrogate Recovery 4-Bromofluorobenzene	111	130	74	70	81	131	<0	%	TM15/PM10			

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

VOC Report : CEN 10:1 1 Batch

J E Sample No.	226-228	235-237	250-252	271-273																	
Sample ID	HP02	HP01	WS210	WS223																	
Depth	0.20	0.20	1.00	1.00																	
COC No / misc Containers	V J T	V J T	V J T	V J T																	
Sample Date	09/12/2015	09/12/2015	09/12/2015	10/12/2015																	
Sample Type	Soil	Soil	Soil	Soil																	
Batch Number	8	8	8	8																	
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015																	
														LOD/LOR	Units	Method No.	Please see attached notes for all abbreviations and acronyms				
VOC MS																					
Dichlorodifluoromethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Methyl Tertiary Butyl Ether	<1	<1	<1	<1										<1	ug/l	TM15/PM69					
Chloromethane	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Vinyl Chloride	<0.1	<0.1	<0.1	<0.1										<0.1	ug/l	TM15/PM69					
Bromomethane	<1	<1	<1	<1										<1	ug/l	TM15/PM69					
Chloroethane	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Trichlorofluoromethane	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Dichloromethane (DCM)	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
trans-1-2-Dichloroethene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,1-Dichloroethane	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
cis-1-2-Dichloroethene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
2,2-Dichloropropane	<1	<1	<1	<1										<1	ug/l	TM15/PM69					
Bromochloromethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Chloroform	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,1,1-Trichloroethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,1-Dichloropropene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Carbon tetrachloride	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,2-Dichloroethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Benzene	<1	<1	<1	<1										<1	ug/l	TM15/PM69					
Trichloroethene (TCE)	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,2-Dichloropropane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Dibromomethane	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Bromodichloromethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
cis-1-3-Dichloropropene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Toluene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
trans-1-3-Dichloropropene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,1,2-Trichloroethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Tetrachloroethene (PCE)	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,3-Dichloropropane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Dibromochloromethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,2-Dibromoethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Chlorobenzene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,1,1,2-Tetrachloroethane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Ethylbenzene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
p/m-Xylene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
o-Xylene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Styrene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Bromoform	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
Isopropylbenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,1,2,2-Tetrachloroethane	<4	<4	<4	<4										<4	ug/l	TM15/PM69					
Bromobenzene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,2,3-Trichloropropane	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Propylbenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
2-Chlorotoluene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,3,5-Trimethylbenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
4-Chlorotoluene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
tert-Butylbenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,2,4-Trimethylbenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
sec-Butylbenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
4-Isopropyltoluene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,3-Dichlorobenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,4-Dichlorobenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
n-Butylbenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,2-Dichlorobenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,2,4-Trichlorobenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Hexachlorobutadiene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Naphthalene	<2	<2	<2	<2										<2	ug/l	TM15/PM69					
1,2,3-Trichlorobenzene	<3	<3	<3	<3										<3	ug/l	TM15/PM69					
Surrogate Recovery Toluene D8	107	107	106	56										<0	%	TM15/PM69					
Surrogate Recovery 4-Bromofluorobenzene	108	109	107	56										<0	%	TM15/PM69					

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	8	HP02	0.20	227	23/12/2015	Mass of Dry Sample	51.2 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	HP02	0.50	230	23/12/2015	Mass of Dry Sample	48.7 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	HP01	0.20	236	23/12/2015	Mass of Dry Sample	51.2 (g)
					23/12/2015	General Description (Bulk Analysis)	soil/stones
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	WS210	0.20	245	23/12/2015	Mass of Dry Sample	51.4 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone/Silt
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	WS210	1.00	251	23/12/2015	Mass of Dry Sample	48.3 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone/Silt
					23/12/2015	Asbestos Containing Material	None

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	8	WS210	1.00	251	23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%
15/17326	8	WS223	1.00	272	23/12/2015	Mass of Dry Sample	53.3 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x5 Dilution
AB	x10 Dilution
AC	x50 Dilution

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30/PM69	PM030: Eluate samples are extracted with solvent using a magnetic stirrer to create a vortex. PM069: One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes		AR	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM69	Modified BS EN 12457 method. One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.			AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes		AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method EN12457-2 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.			AR	



Jones Environmental Laboratory

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Unit 3 Deeside Point
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Attention : Sarah Burt
Date : 4th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 9
Location : Stockport Bus Station
Date samples received : 15th December, 2015
Status : Final report
Issue : 1

Fourteen samples were received for analysis on 15th December, 2015 of which three were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Paul Lee-Boden BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	289-291	292-294	313-315								Please see attached notes for all abbreviations and acronyms				
	Sample ID	WS217	WS217	BH106											
Depth	1.00	1.30	1.10-1.20												
COC No / misc															
Containers	V J	V J	V J												
Sample Date	14/12/2015	14/12/2015	14/12/2015												
Sample Type	Soil	Soil	Soil												
Batch Number	9	9	9												
Date of Receipt	15/12/2015	15/12/2015	15/12/2015								LOD/LOR	Units	Method No.		
Arsenic ^{#M}	1.1	8.6	3.0								<0.5	mg/kg	TM30/PM15		
Cadmium ^{#M}	0.4	0.2	<0.1								<0.1	mg/kg	TM30/PM15		
Chromium ^{#M}	13.5	75.7	93.0								<0.5	mg/kg	TM30/PM15		
Copper ^{#M}	7	10	19								<1	mg/kg	TM30/PM15		
Lead ^{#M}	9	21	13								<5	mg/kg	TM30/PM15		
Mercury ^{#M}	<0.1	<0.1	<0.1								<0.1	mg/kg	TM30/PM15		
Nickel ^{#M}	6.9	19.9	11.6								<0.7	mg/kg	TM30/PM15		
Selenium ^{#M}	<1	<1	<1								<1	mg/kg	TM30/PM15		
Vanadium	4	30	15								<1	mg/kg	TM30/PM15		
Water Soluble Boron ^{#M}	0.2	0.1	<0.1								<0.1	mg/kg	TM74/PM32		
Zinc ^{#M}	17	207	22								<5	mg/kg	TM30/PM15		
PAH MS															
Naphthalene ^{#M}	<0.04	<0.04	<0.04								<0.04	mg/kg	TM4/PM8		
Acenaphthylene	<0.03	<0.03	0.03								<0.03	mg/kg	TM4/PM8		
Acenaphthene ^{#M}	<0.05	<0.05	0.07								<0.05	mg/kg	TM4/PM8		
Fluorene ^{#M}	<0.04	<0.04	0.05								<0.04	mg/kg	TM4/PM8		
Phenanthrene ^{#M}	0.03	<0.03	0.66								<0.03	mg/kg	TM4/PM8		
Anthracene [#]	<0.04	<0.04	0.20								<0.04	mg/kg	TM4/PM8		
Fluoranthene ^{#M}	0.05	<0.03	0.87								<0.03	mg/kg	TM4/PM8		
Pyrene [#]	0.06	<0.03	0.76								<0.03	mg/kg	TM4/PM8		
Benzo(a)anthracene [#]	<0.06	<0.06	0.38								<0.06	mg/kg	TM4/PM8		
Chrysene ^{#M}	0.03	<0.02	0.45								<0.02	mg/kg	TM4/PM8		
Benzo(bk)fluoranthene ^{#M}	<0.07	<0.07	0.57								<0.07	mg/kg	TM4/PM8		
Benzo(a)pyrene [#]	<0.04	<0.04	0.43								<0.04	mg/kg	TM4/PM8		
Indeno(123cd)pyrene ^{#M}	<0.04	<0.04	0.22								<0.04	mg/kg	TM4/PM8		
Dibenzo(ah)anthracene [#]	<0.04	<0.04	0.04								<0.04	mg/kg	TM4/PM8		
Benzo(ghi)perylene [#]	<0.04	<0.04	0.20								<0.04	mg/kg	TM4/PM8		
PAH 16 Total	<0.6	<0.6	4.9								<0.6	mg/kg	TM4/PM8		
Benzo(b)fluoranthene	<0.05	<0.05	0.41								<0.05	mg/kg	TM4/PM8		
Benzo(k)fluoranthene	<0.02	<0.02	0.16								<0.02	mg/kg	TM4/PM8		
PAH Surrogate % Recovery	119	124	130								<0	%	TM4/PM8		

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	289-291	292-294	313-315							Please see attached notes for all abbreviations and acronyms		
										LOD/LOR	Units	Method No.
Sample ID	WS217	WS217	BH106									
Depth	1.00	1.30	1.10-1.20									
COC No / misc												
Containers	V J	V J	V J									
Sample Date	14/12/2015	14/12/2015	14/12/2015									
Sample Type	Soil	Soil	Soil									
Batch Number	9	9	9									
Date of Receipt	15/12/2015	15/12/2015	15/12/2015									
TPH CWG												
Aliphatics												
>C5-C6 #M	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12	
>C6-C8 #M	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12	
>C8-C10	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12	
>C10-C12 #M	<0.2	<0.2	<0.2						<0.2	mg/kg	TM5/PM16	
>C12-C16 #M	<4	<4	<4						<4	mg/kg	TM5/PM16	
>C16-C21 #M	<7	<7	<7						<7	mg/kg	TM5/PM16	
>C21-C35 #M	122	<7	<7						<7	mg/kg	TM5/PM16	
>C35-C44	10	<7	<7						<7	mg/kg	TM5/PM16	
Total aliphatics C5-44	132	<26	<26						<26	mg/kg	TM5/TM36/PM16	
Aromatics												
>C5-EC7	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12	
>EC7-EC8	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12	
>EC8-EC10 #M	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12	
>EC10-EC12	<0.2	<0.2	<0.2						<0.2	mg/kg	TM5/PM16	
>EC12-EC16	<4	<4	<4						<4	mg/kg	TM5/PM16	
>EC16-EC21	<7	<7	<7						<7	mg/kg	TM5/PM16	
>EC21-EC35	86	<7	<7						<7	mg/kg	TM5/PM16	
>EC35-EC44	<7	<7	<7						<7	mg/kg	TM5/PM16	
Total aromatics C5-44	86	<26	<26						<26	mg/kg	TM5/TM36/PM16	
Total aliphatics and aromatics(C5-44)	218	<52	<52						<52	mg/kg	TM5/TM36/PM16	
MTBE #	<5	<5	<5						<5	ug/kg	TM31/PM12	
Benzene #	<5	<5	<5						<5	ug/kg	TM31/PM12	
Toluene #	<5	<5	<5						<5	ug/kg	TM31/PM12	
Ethylbenzene #	<5	<5	<5						<5	ug/kg	TM31/PM12	
m/p-Xylene #	<5	<5	<5						<5	ug/kg	TM31/PM12	
o-Xylene #	<5	<5	<5						<5	ug/kg	TM31/PM12	
2-Chlorophenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
Natural Moisture Content	2.9	5.3	9.9						<0.1	%	PM4/PM0	
2-Methylphenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
2-Nitrophenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
2,4-Dichlorophenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
2,4-Dimethylphenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
2,4,5-Trichlorophenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
2,4,6-Trichlorophenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
4-Chloro-3-methylphenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
4-Methylphenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
4-Nitrophenol	<10	<10	<10						<10	ug/kg	TM16/PM8	
Pentachlorophenol	<10	<10	<10						<10	ug/kg	TM16/PM8	

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Table with 12 columns: J E Sample No., Sample ID, Depth, COC No / misc, Containers, Sample Date, Sample Type, Batch Number, Date of Receipt, LOD/LOR, Units, Method No. Data includes parameters like Phenol, Total Speciated Phenols MS, Total Cyanide, Total Organic Carbon, pH, Sample Type, Sample Colour, and Other Items.

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Any questionable sample will automatically be assumed to have breached the Waste Limit and further testing may be required.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	9	WS217	1.00	290	23/12/2015	Mass of Dry Sample	55.8 (g)
					23/12/2015	General Description (Bulk Analysis)	Soil/Stone
					23/12/2015	Asbestos Containing Material	None
					23/12/2015	Asbestos Containing Material (2)	None
					23/12/2015	Asbestos Screen	NAD
					23/12/2015	Asbestos Screen (2)	NAD
					23/12/2015	Asbestos Level	NAD
					23/12/2015	Waste Limit	<0.1%

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes



Jones Environmental Laboratory

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Attention : Sarah Burt
Date : 6th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 10
Location : Stockport Bus Station
Date samples received : 17th December, 2015
Status : Final report
Issue : 1

Eight samples were received for analysis on 17th December, 2015 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Jones Environmental Laboratory

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	334-336	340-342																			
Sample ID	BH109	BH109																			
Depth	1.00-1.20	3.00-3.20																			
COC No / misc																					
Containers	V J	V J																			
Sample Date	15/12/2015	15/12/2015																			
Sample Type	Soil	Soil																			
Batch Number	10	10																			
Date of Receipt	17/12/2015	17/12/2015																			
Arsenic ^{#M}	6.9	5.3																			
Cadmium ^{#M}	0.1	<0.1																			
Chromium ^{#M}	58.4	68.2																			
Copper ^{#M}	22	7																			
Lead ^{#M}	91	10																			
Mercury ^{#M}	0.1	<0.1																			
Nickel ^{#M}	12.4	20.8																			
Selenium ^{#M}	<1	<1																			
Vanadium	21	22																			
Water Soluble Boron ^{#M}	0.4	0.5																			
Zinc ^{#M}	25	82																			
PAH MS																					
Naphthalene ^{#M}	<0.04	<0.04																			
Acenaphthylene	0.03	<0.03																			
Acenaphthene ^{#M}	<0.05	<0.05																			
Fluorene ^{#M}	<0.04	<0.04																			
Phenanthrene ^{#M}	0.20	<0.03																			
Anthracene #	0.08	<0.04																			
Fluoranthene ^{#M}	0.64	0.04																			
Pyrene #	0.60	<0.03																			
Benzo(a)anthracene #	0.41	<0.06																			
Chrysene ^{#M}	0.42	0.05																			
Benzo(bk)fluoranthene ^{#M}	0.89	<0.07																			
Benzo(a)pyrene #	0.60	0.06																			
Indeno(123cd)pyrene ^{#M}	0.30	<0.04																			
Dibenzo(ah)anthracene #	0.06	<0.04																			
Benzo(ghi)perylene #	0.32	<0.04																			
PAH 16 Total	4.6	<0.6																			
Benzo(b)fluoranthene	0.64	<0.05																			
Benzo(k)fluoranthene	0.25	<0.02																			
PAH Surrogate % Recovery	99	110																			
Methyl Tertiary Butyl Ether ^{#M}	<6	-																			
Benzene ^{#M}	<5	-																			
Toluene ^{#M}	<3	-																			
Ethylbenzene ^{#M}	<3	-																			
p/m-Xylene ^{#M}	<4	-																			
o-Xylene ^{#M}	<4	-																			
Surrogate Recovery Toluene D8	114	-																			
Surrogate Recovery 4-Bromofluorobenzene	117	-																			

Please see attached notes for all abbreviations and acronyms

LOD/LOR Units Method No.

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	334-336	340-342												LOD/LOR	Units	Method No.
Sample ID	BH109	BH109														
Depth	1.00-1.20	3.00-3.20														
COC No / misc																
Containers	V J	V J														
Sample Date	15/12/2015	15/12/2015														
Sample Type	Soil	Soil														
Batch Number	10	10														
Date of Receipt	17/12/2015	17/12/2015														
Please see attached notes for all abbreviations and acronyms																
TPH CWG																
Aliphatics																
>C5-C6 ^{#M}	<0.1	<0.1												<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1												<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1												<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2												<0.2	mg/kg	TM5/PM16
>C12-C16 ^{#M}	<4	<4												<4	mg/kg	TM5/PM16
>C16-C21 ^{#M}	<7	<7												<7	mg/kg	TM5/PM16
>C21-C35 ^{#M}	23	30												<7	mg/kg	TM5/PM16
>C35-C44	<7	<7												<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26	30												<26	mg/kg	TM5/7/PM36/PM16
Aromatics																
>C5-EC7	<0.1	<0.1												<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1	<0.1												<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1												<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2												<0.2	mg/kg	TM5/PM16
>EC12-EC16	<4	<4												<4	mg/kg	TM5/PM16
>EC16-EC21	8	<7												<7	mg/kg	TM5/PM16
>EC21-EC35	162	38												<7	mg/kg	TM5/PM16
>EC35-EC44	48	11												<7	mg/kg	TM5/PM16
Total aromatics C5-44	218	49												<26	mg/kg	TM5/7/PM36/PM16
Total aliphatics and aromatics(C5-44)	218	79												<52	mg/kg	TM5/7/PM36/PM16
MTBE [#]	-	<5												<5	ug/kg	TM31/PM12
Benzene [#]	-	<5												<5	ug/kg	TM31/PM12
Toluene [#]	-	<5												<5	ug/kg	TM31/PM12
Ethylbenzene [#]	-	<5												<5	ug/kg	TM31/PM12
m/p-Xylene [#]	-	<5												<5	ug/kg	TM31/PM12
o-Xylene [#]	-	<5												<5	ug/kg	TM31/PM12
PCB 28 [#]	<5	-												<5	ug/kg	TM17/PM8
PCB 52 [#]	<5	-												<5	ug/kg	TM17/PM8
PCB 101 [#]	<5	-												<5	ug/kg	TM17/PM8
PCB 118 [#]	<5	-												<5	ug/kg	TM17/PM8
PCB 138 [#]	<5	-												<5	ug/kg	TM17/PM8
PCB 153 [#]	<5	-												<5	ug/kg	TM17/PM8
PCB 180 [#]	<5	-												<5	ug/kg	TM17/PM8
Total 7 PCBs [#]	<35	-												<35	ug/kg	TM17/PM8
2-Chlorophenol	<10	<10												<10	ug/kg	TM16/PM8
Natural Moisture Content	15.8	21.4												<0.1	%	PM4/PM0
2-Methylphenol	<10	<10												<10	ug/kg	TM16/PM8

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

J E Sample No.	334-336	340-342										Please see attached notes for all abbreviations and acronyms			
												LOD/LOR	Units	Method No.	
Sample ID	BH109	BH109													
Depth	1.00-1.20	3.00-3.20													
COC No / misc															
Containers	V J	V J													
Sample Date	15/12/2015	15/12/2015													
Sample Type	Soil	Soil													
Batch Number	10	10													
Date of Receipt	17/12/2015	17/12/2015													
2-Nitrophenol	<10	<10								<10	ug/kg	TM16/PM8			
2,4-Dichlorophenol	<10	<10								<10	ug/kg	TM16/PM8			
2,4-Dimethylphenol	<10	<10								<10	ug/kg	TM16/PM8			
2,4,5-Trichlorophenol	<10	<10								<10	ug/kg	TM16/PM8			
2,4,6-Trichlorophenol	<10	<10								<10	ug/kg	TM16/PM8			
4-Chloro-3-methylphenol	<10	<10								<10	ug/kg	TM16/PM8			
4-Methylphenol	<10	<10								<10	ug/kg	TM16/PM8			
4-Nitrophenol	<10	<10								<10	ug/kg	TM16/PM8			
Pentachlorophenol	<10	<10								<10	ug/kg	TM16/PM8			
Phenol	<10	<10								<10	ug/kg	TM16/PM8			
Total Speciated Phenols MS	<10	<10								<10	ug/kg	TM16/PM8			
Total Cyanide ^{#M}	<0.5	<0.5								<0.5	mg/kg	TM89/PM45			
Total Organic Carbon [#]	0.32	0.15								<0.02	%	TM21/PM24			
pH ^{#M}	8.36	8.36								<0.01	pH units	TM73/PM11			
Sample Type	Sand	Sand									None	PM13/PM0			
Sample Colour	Red	Medium Brown									None	PM13/PM0			
Other Items	stones	mostly stones									None	PM13/PM0			

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

SVOC Report : Solid

J E Sample No.	334-336																						
Sample ID	BH109																						
Depth	1.00-1.20																						
COC No / misc Containers	V J																						
Sample Date	15/12/2015																						
Sample Type	Soil																						
Batch Number	10																						
Date of Receipt	17/12/2015																						
											LOD/LOR	Units	Method No.										
SVOC MS																							
Phenols																							
2-Chlorophenol ^{#M}	<10																			<10	ug/kg	TM16/PM8	
2-Methylphenol	<10																				<10	ug/kg	TM16/PM8
2-Nitrophenol	<10																				<10	ug/kg	TM16/PM8
2,4-Dichlorophenol ^{#M}	<10																				<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10																				<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10																				<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10																				<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10																				<10	ug/kg	TM16/PM8
4-Methylphenol	<10																				<10	ug/kg	TM16/PM8
4-Nitrophenol	<10																				<10	ug/kg	TM16/PM8
Pentachlorophenol	<10																				<10	ug/kg	TM16/PM8
Phenol ^{#M}	<10																				<10	ug/kg	TM16/PM8
PAHs																							
2-Chloronaphthalene ^{#M}	<10																				<10	ug/kg	TM16/PM8
2-Methylnaphthalene ^{#M}	22																				<10	ug/kg	TM16/PM8
Phthalates																							
Bis(2-ethylhexyl) phthalate	201																				<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100																				<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100																				<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100																				<100	ug/kg	TM16/PM8
Diethyl phthalate	<100																				<100	ug/kg	TM16/PM8
Dimethyl phthalate ^{#M}	<100																				<100	ug/kg	TM16/PM8
Other SVOCs																							
1,2-Dichlorobenzene	<10																				<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene ^{#M}	<10																				<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10																				<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10																				<10	ug/kg	TM16/PM8
2-Nitroaniline	<10																				<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10																				<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10																				<10	ug/kg	TM16/PM8
3-Nitroaniline	<10																				<10	ug/kg	TM16/PM8
4-Bromophenylphenylether ^{#M}	<10																				<10	ug/kg	TM16/PM8
4-Chloroaniline	<10																				<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10																				<10	ug/kg	TM16/PM8
4-Nitroaniline	<10																				<10	ug/kg	TM16/PM8
Azobenzene	<10																				<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10																				<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10																				<10	ug/kg	TM16/PM8
Carbazole	28																				<10	ug/kg	TM16/PM8
Dibenzofuran ^{#M}	31																				<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10																				<10	ug/kg	TM16/PM8
Hexachlorobutadiene ^{#M}	<10																				<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10																				<10	ug/kg	TM16/PM8
Hexachloroethane	<10																				<10	ug/kg	TM16/PM8
Isophorone ^{#M}	<10																				<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine ^{#M}	<10																				<10	ug/kg	TM16/PM8
Nitrobenzene ^{#M}	<10																				<10	ug/kg	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
 Reference: PN153428
 Location: Stockport Bus Station
 Contact: Sarah Burt
 JE Job No.: 15/17326

VOC Report : Solid

J E Sample No.	334-336												
Sample ID	BH109												
Depth	1.00-1.20												
COC No / misc Containers	V J												
Sample Date	15/12/2015												
Sample Type	Soil												
Batch Number	10												
Date of Receipt	17/12/2015												
										LOD/LOR	Units	Method No.	
VOC MS													
Dichlorodifluoromethane	<2									<2	ug/kg	TM15/PM10	
Methyl Tertiary Butyl Ether #M	<6									<6	ug/kg	TM15/PM10	
Chloromethane #	<3									<3	ug/kg	TM15/PM10	
Vinyl Chloride	<2									<2	ug/kg	TM15/PM10	
Bromomethane	<1									<1	ug/kg	TM15/PM10	
Chloroethane #M	<6									<6	ug/kg	TM15/PM10	
Trichlorofluoromethane #M	<3									<3	ug/kg	TM15/PM10	
1,1-Dichloroethene (1,1 DCE) #M	<6									<6	ug/kg	TM15/PM10	
Dichloromethane (DCM) #	<7									<7	ug/kg	TM15/PM10	
trans-1-2-Dichloroethene #	<3									<3	ug/kg	TM15/PM10	
1,1-Dichloroethane #M	<6									<6	ug/kg	TM15/PM10	
cis-1-2-Dichloroethene #M	<7									<7	ug/kg	TM15/PM10	
2,2-Dichloropropane	<4									<4	ug/kg	TM15/PM10	
Bromochloromethane #M	<4									<4	ug/kg	TM15/PM10	
Chloroform #M	<5									<5	ug/kg	TM15/PM10	
1,1,1-Trichloroethane #M	<5									<5	ug/kg	TM15/PM10	
1,1-Dichloropropene #	<3									<3	ug/kg	TM15/PM10	
Carbon tetrachloride #M	<4									<4	ug/kg	TM15/PM10	
1,2-Dichloroethane #M	<5									<5	ug/kg	TM15/PM10	
Benzene #M	<5									<5	ug/kg	TM15/PM10	
Trichloroethene (TCE) #M	<5									<5	ug/kg	TM15/PM10	
1,2-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Dibromomethane #M	<4									<4	ug/kg	TM15/PM10	
Bromodichloromethane #M	<4									<4	ug/kg	TM15/PM10	
cis-1-3-Dichloropropene	<4									<4	ug/kg	TM15/PM10	
Toluene #M	<3									<3	ug/kg	TM15/PM10	
trans-1-3-Dichloropropene	<3									<3	ug/kg	TM15/PM10	
1,1,2-Trichloroethane #M	<4									<4	ug/kg	TM15/PM10	
Tetrachloroethene (PCE) #	<3									<3	ug/kg	TM15/PM10	
1,3-Dichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Dibromochloromethane #M	<5									<5	ug/kg	TM15/PM10	
1,2-Dibromoethane #	<3									<3	ug/kg	TM15/PM10	
Chlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,1,1,2-Tetrachloroethane #M	<5									<5	ug/kg	TM15/PM10	
Ethylbenzene #M	<3									<3	ug/kg	TM15/PM10	
p/m-Xylene #M	<4									<4	ug/kg	TM15/PM10	
o-Xylene #M	<4									<4	ug/kg	TM15/PM10	
Styrene	<3									<3	ug/kg	TM15/PM10	
Bromofom	<4									<4	ug/kg	TM15/PM10	
Isopropylbenzene #	<3									<3	ug/kg	TM15/PM10	
1,1,2,2-Tetrachloroethane #M	<3									<3	ug/kg	TM15/PM10	
Bromobenzene	<2									<2	ug/kg	TM15/PM10	
1,2,3-Trichloropropane #M	<4									<4	ug/kg	TM15/PM10	
Propylbenzene #	<4									<4	ug/kg	TM15/PM10	
2-Chlorotoluene	<3									<3	ug/kg	TM15/PM10	
1,3,5-Trimethylbenzene #	<3									<3	ug/kg	TM15/PM10	
4-Chlorotoluene	<3									<3	ug/kg	TM15/PM10	
tert-Butylbenzene #	<5									<5	ug/kg	TM15/PM10	
1,2,4-Trimethylbenzene #	<6									<6	ug/kg	TM15/PM10	
sec-Butylbenzene #	<4									<4	ug/kg	TM15/PM10	
4-Isopropyltoluene #	<4									<4	ug/kg	TM15/PM10	
1,3-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,4-Dichlorobenzene #	<4									<4	ug/kg	TM15/PM10	
n-Butylbenzene #	<4									<4	ug/kg	TM15/PM10	
1,2-Dichlorobenzene #M	<4									<4	ug/kg	TM15/PM10	
1,2-Dibromo-3-chloropropane #	<4									<4	ug/kg	TM15/PM10	
1,2,4-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10	
Hexachlorobutadiene	<4									<4	ug/kg	TM15/PM10	
Naphthalene	<27									<27	ug/kg	TM15/PM10	
1,2,3-Trichlorobenzene #	<7									<7	ug/kg	TM15/PM10	
Surrogate Recovery Toluene D8	114									<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	117									<0	%	TM15/PM10	

Please see attached notes for all abbreviations and acronyms

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes



Jones Environmental Laboratory

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CH4 8RJ

Tel: +44 (0) 1244 833780
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Attention : Sarah Burt
Date : 6th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 11
Location : Stockport Bus Station
Date samples received : 18th December, 2015
Status : Final report
Issue : 1

Five samples were received for analysis on 18th December, 2015 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.				
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM31	Modified USEPA 8015B. Determination of Methylterbutylether, Benzene, Toluene, Ethylbenzene and Xylene by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes

JE Job No: 15/17326

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TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
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TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes



Jones Environmental Laboratory

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Cheshire
CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781



Attention : Sarah Burt
Date : 8th January, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 12
Location : Stockport Bus Station
Date samples received : 4th January, 2016
Status : Final report
Issue : 1

One sample were received for analysis on 4th January, 2016 of which one were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
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Compiled By:

Simon Gomery BSc
Project Manager

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

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DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

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DILUTIONS

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NOTE

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ABBREVIATIONS and ACRONYMS USED

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NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
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ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
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PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified USEPA 415.1. Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
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TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM20	Extraction of dried and ground samples with deionised water in a 2:1 water to solid ratio for anions. Extraction of as received samples with deionised water in a 2:1 water to solid ratio for ammoniacal nitrogen. Samples are extracted using an orbital shaker.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes

JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AR	Yes



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
Zone 3
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Geotechnics
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Attention : Jon Hutchinson
Date : 5th February, 2016
Your reference : PN153428
Our reference : Test Report 16/3162 Batch 3
Location : Stockport Bus Station
Date samples received : 26th January, 2016
Status : Final report
Issue : 1

Eight samples were received for analysis on 26th January, 2016 of which eight were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Jon Hutchinson
JE Job No.: 16/3162

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75						
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112						
Depth														
COC No / misc														
Containers	V P G	V P G	V P G	V P G	V P G	V P G	V P G	V P G						
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016						
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water						
Batch Number	3	3	3	3	3	3	3	3						
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016						
											LOD/LOR	Units	Method No.	
Dissolved Arsenic #	<2.5	3.2	3.0	4.1	<2.5	3.2	<2.5	<2.5			<2.5	ug/l	TM30/PM14	
Dissolved Boron	73	57	146	61	62	16	19	40			<12	ug/l	TM30/PM14	
Dissolved Cadmium #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM30/PM14	
Total Dissolved Chromium #	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM30/PM14	
Dissolved Copper #	<7	<7	<7	<7	<7	<7	<7	<7			<7	ug/l	TM30/PM14	
Dissolved Lead #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM30/PM14	
Dissolved Mercury #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM30/PM14	
Dissolved Nickel #	8	<2	8	6	<2	<2	4	<2			<2	ug/l	TM30/PM14	
Dissolved Selenium #	<3	14	<3	<3	<3	<3	<3	<3			<3	ug/l	TM30/PM14	
Dissolved Vanadium #	1.8	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM30/PM14	
Dissolved Zinc #	5	15	<3	<3	<3	<3	<3	<3			<3	ug/l	TM30/PM14	
PAH MS														
Naphthalene #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1			<0.1	ug/l	TM4/PM30	
Acenaphthylene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013			<0.013	ug/l	TM4/PM30	
Acenaphthene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013			<0.013	ug/l	TM4/PM30	
Fluorene #	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014			<0.014	ug/l	TM4/PM30	
Phenanthrene #	0.020	0.020	<0.011	<0.011	<0.011	<0.011	0.020	<0.011			<0.011	ug/l	TM4/PM30	
Anthracene #	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013			<0.013	ug/l	TM4/PM30	
Fluoranthene #	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012			<0.012	ug/l	TM4/PM30	
Pyrene #	<0.013	0.040	<0.013	<0.013	<0.013	<0.013	0.040	<0.013			<0.013	ug/l	TM4/PM30	
Benzo(a)anthracene #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015			<0.015	ug/l	TM4/PM30	
Chrysene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011			<0.011	ug/l	TM4/PM30	
Benzo(b)fluoranthene #	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018			<0.018	ug/l	TM4/PM30	
Benzo(a)pyrene #	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016			<0.016	ug/l	TM4/PM30	
Indeno(123cd)pyrene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011			<0.011	ug/l	TM4/PM30	
Dibenzo(ah)anthracene #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	ug/l	TM4/PM30	
Benzo(ghi)perylene #	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011			<0.011	ug/l	TM4/PM30	
PAH 16 Total #	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195			<0.195	ug/l	TM4/PM30	
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	ug/l	TM4/PM30	
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	ug/l	TM4/PM30	
PAH Surrogate % Recovery	86	85	90	90	89	86	83	88			<0	%	TM4/PM30	
Methyl Tertiary Butyl Ether #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	ug/l	TM15/PM10	
Benzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10	
Toluene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<0.5			<0.5	ug/l	TM15/PM10	
Ethylbenzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10	
p/m-Xylene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM15/PM10	
o-Xylene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10	
Surrogate Recovery Toluene D8	97	96	97	97	96	97	95	98			<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	114	114	115	115	115	113	111	101			<0	%	TM15/PM10	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Jon Hutchinson
JE Job No.: 16/3162

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75						
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112						
Depth														
COC No / misc														
Containers	V P G	V P G	V P G	V P G	V P G	V P G	V P G	V P G						
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016						
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water						
Batch Number	3	3	3	3	3	3	3	3						
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016						
											LOD/LOR	Units	Method No.	
TPH CWG														
Aliphatics														
>C5-C6 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>C6-C8 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>C8-C10 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>C10-C12 #	<5	<5	<5	<5	<5	<5	9	<5	<5	<5	<5	ug/l	TM5/PM30	
>C12-C16 #	<10	<10	<10	<10	<10	<10	1280	<10	<10	<10	<10	ug/l	TM5/PM30	
>C16-C21 #	<10	<10	<10	<10	<10	<10	10	<10	<10	<10	<10	ug/l	TM5/PM30	
>C21-C35 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM30	
Total aliphatics C5-35 #	<10	<10	<10	<10	<10	<10	1299	<10	<10	<10	<10	ug/l	TM5/TM36/PM30	
Aromatics														
>C5-EC7 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>EC7-EC8 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>EC8-EC10 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM36/PM12	
>EC10-EC12 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM5/PM30	
>EC12-EC16 #	<10	<10	<10	<10	<10	<10	80	<10	<10	<10	<10	ug/l	TM5/PM30	
>EC16-EC21 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM30	
>EC21-EC35 #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM5/PM30	
Total aromatics C5-35 #	<10	<10	<10	<10	<10	<10	80	<10	<10	<10	<10	ug/l	TM5/PM30	
Total aliphatics and aromatics(C5-35) #	<10	<10	<10	<10	<10	<10	1379	<10	<10	<10	<10	ug/l	TM5/TM36/PM30	
PCBs														
PCB 28	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 52	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 101	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 118	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 138	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 153	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
PCB 180	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM17/PM30	
Total 7 PCBs	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	ug/l	TM17/PM30	
Phenols														
Resorcinol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Catechol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Phenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
m/p-cresol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
o-cresol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Total cresols	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Xylenols														
1-naphthol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
2,3,5-trimethyl phenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
2-isopropylphenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0	
Total Speciated Phenols HPLC	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM26/PM0	
Sulphate														
Sulphate #	92.76	71.35	169.71	62.72	38.55	25.69	31.61	33.03			<0.05	mg/l	TM38/PM0	
Nitrate as NO3 #	4.9	2.5	1.9	7.4	10.7	0.8	0.6	1.7			<0.2	mg/l	TM38/PM0	

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Jon Hutchinson
JE Job No.: 16/3162

SVOC Report : Liquid

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75					
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112					
Depth													
COC No / misc Containers	VPG	VPG	VPG	VPG	VPG	VPG	VPG	VPG					
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016					
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016					
											LOD/LOR	Units	Method No.
SVOC MS													
Phenols													
2-Chlorophenol #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2-Methylphenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10			<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Phenol	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
PAHs													
2-Chloronaphthalene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2-Methylnaphthalene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Phthalates													
Bis(2-ethylhexyl) phthalate	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Di-n-butyl phthalate #	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Diethyl phthalate #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Other SVOCs													
1,2-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
1,3-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
1,4-Dichlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
2,4-Dinitrotoluene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Bromophenylphenylether #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Chlorophenylphenylether #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Azobenzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Carbazole #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Dibenzofuran #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Hexachlorobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Hexachlorobutadiene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Hexachloroethane #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30
Isophorone #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM16/PM30
Nitrobenzene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM16/PM30

Please see attached notes for all abbreviations and acronyms

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Jon Hutchinson
JE Job No.: 16/3162

VOC Report : Liquid

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75					
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112					
Depth													
COC No / misc													
Containers	V P G	V P G	V P G	V P G	V P G	V P G	V P G	V P G					
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016					
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016					
											LOD/LOR	Units	Method No.
Please see attached notes for all abbreviations and acronyms													
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	ug/l	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Vinyl Chloride #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			<0.1	ug/l	TM15/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM15/PM10
Chloroethane #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Trichlorofluoromethane #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Dichloromethane (DCM) #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM15/PM10
Bromochloromethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Chloroform #	<2	<2	<2	<2	<2	<2	<2	5			<2	ug/l	TM15/PM10
1,1,1-Trichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Carbon tetrachloride #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,2-Dichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Benzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,2-Dichloropropane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Bromodichloromethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Toluene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<0.5			<0.5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,1,2-Trichloroethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,3-Dichloropropane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Dibromochloromethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,2-Dibromoethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Chlorobenzene #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Ethylbenzene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10
p/m-Xylene #	<1	<1	<1	<1	<1	<1	<1	<1			<1	ug/l	TM15/PM10
o-Xylene #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM15/PM10
Styrene	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Bromoform #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4	<4	<4	<4	<4	<4	<4	<4			<4	ug/l	TM15/PM10
Bromobenzene #	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,2,3-Trichloropropane #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Propylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
2-Chlorotoluene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
4-Chlorotoluene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
tert-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
sec-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
4-Isopropyltoluene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,3-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,4-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
n-Butylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,2-Dichlorobenzene #	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Hexachlorobutadiene	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Naphthalene	<2	<2	<2	<2	<2	<2	<2	<2			<2	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3			<3	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	97	96	97	97	96	97	95	98			<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	114	114	115	115	115	113	111	101			<0	%	TM15/PM10

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5	Modified USEPA 8015B method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) with carbon banding within the range C8-C40 GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5/TM36	TM005: Modified USEPA 8015B. Determination of solvent Extractable Petroleum Hydrocarbons (EPH) including column fractionation in the carbon range of C10-35 into aliphatic and aromatic fractions by GC-FID. TM036: Modified USEPA 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C5-10 by headspace GC-FID.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.				
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.				

JE Job No: 16/3162

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.				
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes			
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.	Yes			
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.	Yes			
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes			
TM106	Determination of Sulphide by Skalar Continuous Flow Analyser	PM0	No preparation is required.				
NONE	No Method Code	NONE	No Method Code				



Jones Environmental Laboratory

Registered Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

Unit 3 Deeside Point
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CH4 8RJ

Tel: +44 (0) 1244 833780
Fax: +44 (0) 1244 833781

Attention : Sarah Burt
Date : 26th February, 2016
Your reference : PN153428
Our reference : Test Report 15/17326 Batch 1 Schedule B
Location : Stockport Bus Station
Date samples received : 3rd December, 2015
Status : Final report
Issue : 1

Twenty six samples were received for analysis on 3rd December, 2015 of which three were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied. All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

A handwritten signature in blue ink, appearing to read 'Paul Lee-Boden'.

Paul Lee-Boden BSc
Project Manager

Client Name: Geotechnics
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

Note:

Analysis was carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Jones Environmental Laboratory consultant, Jones Environmental Laboratory cannot be responsible for inaccurate or unrepresentative sampling.

Signed on behalf of Jones Environmental Laboratory:

Ryan Butterworth
 Asbestos Team Leader

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	Date Of Analysis	Analysis	Result
15/17326	1	WS201	0.50	32	26/02/2016	Asbestos PCOM Quantification (Fibres)	<0.001 (mass %)
					26/02/2016	Asbestos Gravimetric & PCOM Total	<0.001 (mass %)
15/17326	1	BH112	1.00	53	26/02/2016	Asbestos PCOM Quantification (Fibres)	<0.001 (mass %)
					26/02/2016	Asbestos Gravimetric & PCOM Total	<0.001 (mass %)
15/17326	1	WS206	0.50	65	26/02/2016	Asbestos PCOM Quantification (Fibres)	<0.001 (mass %)
					26/02/2016	Asbestos Gravimetric & PCOM Total	<0.001 (mass %)

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 15/17326

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All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

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Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 (UKAS) accreditation applies to surface water and groundwater and one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

Samples must be received in a condition appropriate to the requested analyses. All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. If this is not the case you will be informed and any test results that may be compromised highlighted on your deviating samples report.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

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ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

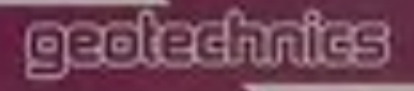
JE Job No: 15/17326

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	

APPENDIX 13
Exploratory Hole Location Plan

- Key**
- Borehole
 - CT
 - Dynamic Probe
 - Trial Pit
 - Hand Pit
 - Dynamic Sample Borehole

Hole ID	Easting (m)	Northing (mN)	Level (mOD)
BH101	389283.299	390265.094	45.218
BH102	389276.751	390259.978	43.345
BH103	389205.655	390216.422	42.422
BH104	389178.078	390228.877	42.473
BH105	389234.786	390221.942	42.624
BH106	389248.707	390249.657	42.445
BH107	389205.789	390252.392	42.265
BH108	389157.818	390267.979	42.717
BH109	389154.490	390216.960	42.360
BH111	389253.456	390080.226	50.919
BH112	389295.702	390239.877	43.703
CT1	389186.670	390309.530	42.240
CT1A	389139.000	390309.600	42.150
CT3	389139.940	390305.200	42.110
CT4	389146.580	390314.810	42.070
CT5	389154.697	390268.627	42.732
CT6	389161.890	390271.340	42.600
CT6A	389162.230	390271.690	42.590
CT8	389163.474	390271.412	42.662
CT7	389156.186	390263.329	42.754
CT8	389163.796	390266.428	42.721
DP1	389135.620	390312.530	42.300
DP2	389141.140	390310.370	42.130
DP3	389138.080	390305.580	42.130
DP4	389142.570	390304.560	42.070
DP5	389149.490	390269.830	42.730
DP6	389156.840	390270.940	42.620
DP7	389161.680	390271.310	42.590
DP8	389152.880	390259.980	42.850
DP9	389159.150	390263.750	42.710
DP10	389164.140	390266.860	42.650
HP101	389288.636	390260.602	48.577
HP102	389310.624	390281.273	52.835
TP1	389129.760	390307.010	42.250
TP2	389138.240	390302.500	42.090
TP3	389145.520	390305.290	42.070
TP4	389151.170	390306.650	42.120
TP5	389148.570	390317.490	42.160
TP6A/TP6B	389154.855	390259.244	42.863
TP7A/TP7B	389151.875	390270.319	42.705
TP8	389165.304	390276.628	42.802
TP9	389152.081	390264.391	42.789
WS201	389210.666	390145.901	45.614
WS203	389159.132	390201.040	43.011
WS204	389161.807	390212.000	42.851
WS205	389162.101	390221.783	42.391
WS206	389278.750	390194.812	48.125
WS208	389241.331	390271.366	42.350
WS209	389242.280	390284.319	42.673
WS210	389155.993	390273.770	44.431
WS211	389332.987	390302.677	44.884
WS212	389284.728	390377.074	45.736
WS214	389280.915	390351.942	46.345
WS217	389229.781	390254.966	42.295
WS218	389254.700	390238.100	42.750
WS218A	389253.900	390239.000	42.710
WS219	389259.609	390175.323	45.127
WS220	389143.232	390224.649	44.686
WS221	389275.017	390086.165	51.031
WS223	389227.657	390204.856	43.392
WS224	389229.663	390206.414	53.306



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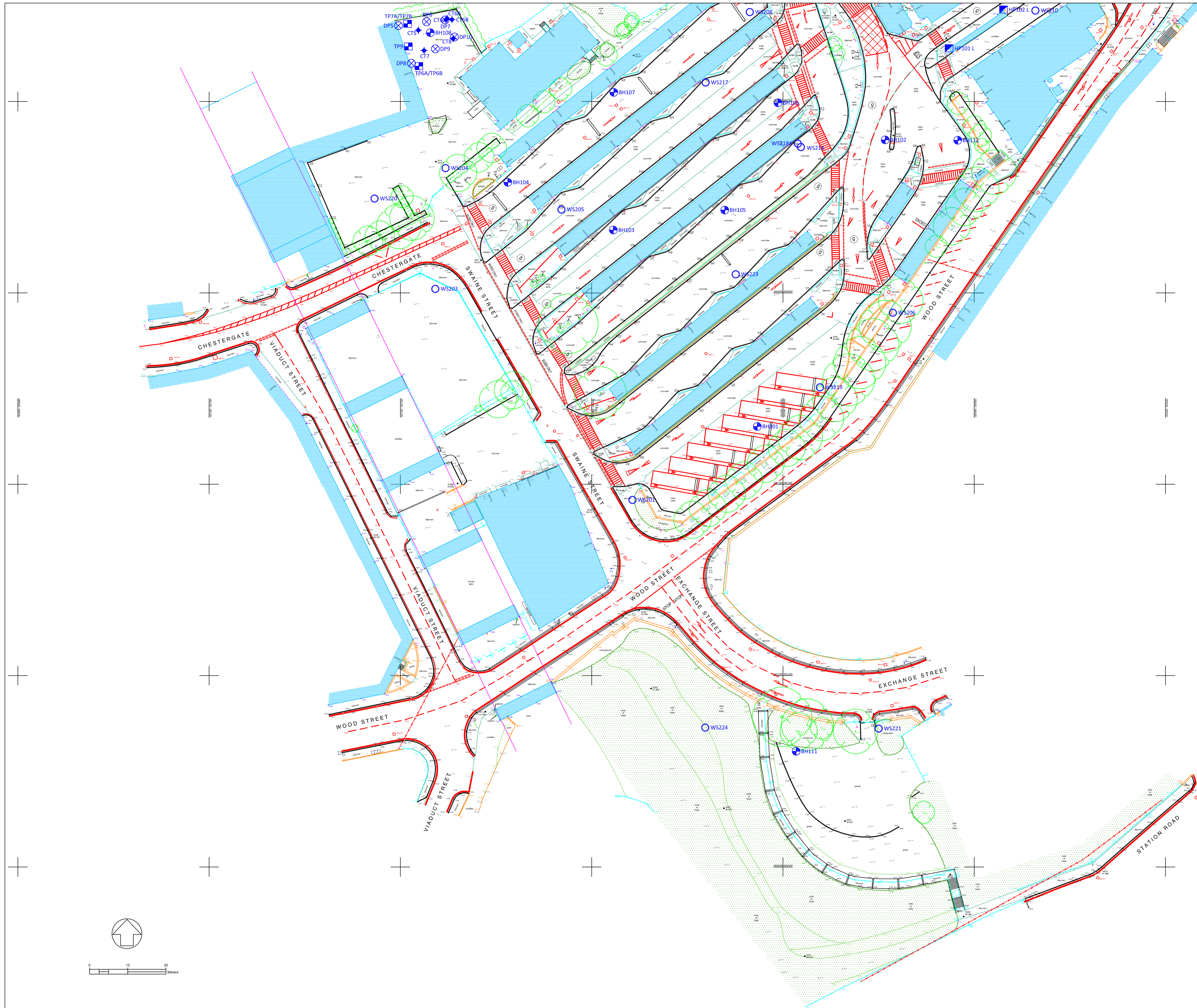
Project:
Stockport Bus Station

Drawing Title:
Exploratory Hole Location Plan

Drawing 1 of 2

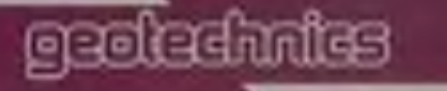
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Date: February 2016

Project No: PN153428
File Name: Geo-PN153428-001(1)



- Key**
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 - ⊗ Dynamic Probe
 - Trial Pit
 - Hand Pit
 - Dynamic Sample Borehole

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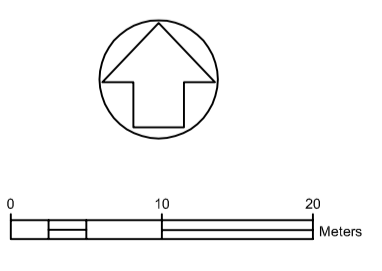
Project:
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Drawing Title:
Exploratory Hole Location Plan

Drawing 2 of 2

Scale: 1:500@A1 | **Date:** February 2016

Project No: PN153428 | **File Name:** Geo-PN153428-001(2)



APPENDIX 14

Investigation Techniques and General Notes

INTRODUCTION

The following brief review of Ground Investigation techniques, generally used as part of most Site Investigations in the UK, summarises their methodology, advantages and limitations. Detailed descriptions of the techniques are available and can be provided on request. This review should be read in conjunction with the accompanying General Notes.

TRIAL PITS

The trial pit is amongst the most simple yet effective means of identifying shallow ground conditions on a site. Its advantages include simplicity, speed, potential accuracy and cost-effectiveness. The trial pit is most commonly formed using a back-acting excavator which can typically determine ground conditions to some 4 metres below ground level. Hand excavation is often used to locate, expose and detail existing foundations, features or services. In general, it is difficult to extend pits significantly below the water table in predominantly granular soils, where flows can cause instability. Unless otherwise stated, the trial pits will not have been provided with temporary side support during their construction. Under such circumstances ground conditions to some 1.20 metres can be closely inspected, subject to stability assessment, but below this depth, entrance into the pit is not permitted in the absence of shoring and hence observations will have been made from ground surface and samples taken from the excavator bucket.

Trends in strata type, level and thickness can be determined, shear surfaces identified and the behaviour of plant, excavation sides and excavated materials can be related to the construction process. They are particularly valuable in land slip investigations. Some types of in situ test can be undertaken in such pits and large disturbed or block samples obtained.

CABLE PERCUSSION BORING

The light Cable Percussion technique of soft ground boring, typically at a diameter of 150mm, is a well-established simple and flexible method of boring vertical holes and generally allows data to be obtained in respect of strata conditions other than rock. A tubular cutter (for cohesive soils) or shell with a flap valve (for granular soils) is repeatedly lifted and dropped using a winch and rope operating from an "A" frame. Soil which enters these tools is regularly removed and either sampled for subsequent examination or test, or laid to one side for backfilling. Steel casing will have been used to prevent collapse of the borehole sides where necessary. A degree of disturbance of soil and mixing of layers is inevitable and the presence of very thin layers of different soils within a particular stratum may not be identified. Changes in strata type can only be detected on recognition of a change in soil samples at surface, after the interface has been passed. For the foregoing reasons, depth measurements should not be considered to be more accurate than 0.10 metre.

In cohesive soils cylindrical samples are retrieved by driving or pushing in 100mm nominal diameter tubes. In soft soils, piston sampling or vane testing may be undertaken. In granular soils and often in cohesive materials, insitu Standard Penetration Tests (SPT's) are performed. The SPT records the number of standard blows required to drive a 50mm diameter open or cone ended probe for 300mm after an initial 150mm penetration. A modified method of recording is used in more dense strata. Small disturbed samples are obtained throughout.

The technique can determine ground conditions to depths in excess of 30 metres under suitable circumstances and usually causes less surface disturbance than trial pitting.

ROTARY DRILLING

Rotary Drilling to produce cores by rotating an annular diamond-impregnated tube or barrel into the ground is the technique most appropriate to the forming of site investigation boreholes through rock or other hard strata. It has the advantage of being able to be used vertically or at an angle. Core diameters of less than 100mm are most common for site investigation purposes. Core is normally retrieved in plastic lining tubes. A flushing fluid such as air, water or foam is used to cool the bit and carry cuttings to the surface.

Examination of cores allows detailed rock description and generally enables angled discontinuity surfaces to be observed. However, vertical holes do not necessarily reveal the presence of vertical or near-vertical fissures or joint discontinuities. The core type and/or techniques used. Where open hole rotary drilling is employed, descriptions of strata result from examination at surface of small particles ejected from the borehole in the flushing medium. In consequence, no indication of fissuring, bedding, consistency or degree of weathering can be obtained. Small scale plant can be used for auger drilling to limited depths where access is constrained.

Depths in excess of 60 metres can be achieved under suitable circumstances using rotary techniques, with minimal surface disturbance.

WINDOW SAMPLING

This technique involves the driving of an open-ended tube into the ground and retrieval of the soil which enters the tube. The term "window sample" arose from the original device which had a "window" or slot cut into the side of the tube through which samples were taken. This has now been superseded by the use of a thin-walled plastic liner within a sampler which has a solid wall. Diameters range from 36 to 86mm. Such samples can be used for qualitative logging, selection of samples for classification and chemical analysis and for obtaining a rudimentary assessment of strength.

Driving devices can be hand-held or machine mounted and the drive tubes are typically in 1m lengths. The hole formed is not cased, however, and hence the success of this technique is limited when soils and groundwater conditions are such that the sides of the hole collapse on withdrawal of the sampler. Obstructions within the ground, the density of the material or its strength can also limit the depth and rate of penetration of this light-weight investigation technique. Nevertheless, it is a valuable tool where access is constrained such as within buildings or on embankments. Depths of up to 8m can be achieved in suitable circumstances but depths of 4m to 6m are more common.

EXPLORATORY HOLE RECORDS

The data obtained by these techniques are generally presented on Trial Pit, Borehole, Drillhole or Window Sample Records. The descriptions of strata result from information gathered from a number of sources which may include published geological data, preliminary field observations and descriptions, in situ test results, laboratory test results and specimen descriptions. A key to the symbols and abbreviations used accompanies the records. The descriptions on the exploratory hole records accommodate but may not necessarily be identical to those on any preliminary records or the laboratory summaries.

The records show ground conditions at the exploratory hole locations. The degree to which they can be used to represent conditions between or beyond such holes, however, is a matter for geological interpretation rather than factual reporting and the associated uncertainties must be recognised.

DYNAMIC PROBING

This technique typically measures the number of blows of a standard weight falling over a standard height to advance a cone-ended rod over sequential standard distances (typically 100mm). Some devices measure the penetration of the probe per standard blow. It is essentially a profiling tool and is best used in conjunction with other investigation techniques where site-specific correlation can be used to delineate the distribution of soft or loose soils or the upper horizon of a dense or strong layer such as rock.

Both machine-driven and hand-driven equipment is available, the selection depending upon access restrictions and the depth of penetration required. It is particularly useful where access for larger equipment is not available, disturbance is to be minimised or where there are cost constraints. No samples are recovered and some techniques leave a sacrificial cone head in the ground. As with other lightweight techniques, progress is limited in strong or dense soils. The results are presented both numerically and graphically. Depths of up to 10m are commonly achieved in suitable circumstances.

The hand-driven DCP probing device has been calibrated by the TRL to provide a profile of CBR values over a range of depths of up to 1.50m.

INSTRUMENTATION

The most common form of instrument used in site investigation is either the standpipe or else the standpipe piezometer which can be installed in investigation holes. They are used to facilitate monitoring of groundwater levels and water sampling over a period of time following site work. Normally a standpipe would be formed using rigid plastic tubing which has been perforated or slotted over much of its length whilst a standpipe piezometer would have a filter tip which would be placed at a selected level and the hole sealed above and sometimes below to isolate the zone of interest. Groundwater levels are determined using an electronic "dipmeter" to measure the depth to the water surface from ground level. Piezometers can also be used to measure permeability. They are simple and inexpensive instruments for long term monitoring but response times can limit their use in tidal areas and access to the ground surface at each instrument is necessary. Remote reading requires more sophisticated hydraulic, electronic or pneumatic equipment.

Settlement can be monitored using surface or buried target plates whilst lateral movement over a range of depths is monitored using slip indicator or inclinometer equipment.

1. The report is prepared for the exclusive use of the Client named in the document and copyright subsists with Geotechnics Limited. Prior written permission must be obtained to reproduce all or part of the report. It is prepared on the understanding that its contents are only disclosed to parties directly involved in the current investigation, preparation and development of the site.
2. Further copies may be obtained with the Client's written permission, from Geotechnics Limited with whom the master copy of the document will be retained.
3. The report and/or opinion is prepared for the specific purpose stated in the document and in relation to the nature and extent of proposals made available to Geotechnics Limited at that time. Re-consideration will be necessary should those details change. The recommendations should not be used for other schemes on or adjacent to the site without further reference to Geotechnics Limited.
4. The assessment of the significance of the factual data, where called for, is provided to assist the Client and his Engineer and/or Advisers in the preparation of their designs.
5. The report is based on the ground conditions encountered in the exploratory holes together with the results of field and laboratory testing in the context of the proposed development. The data from any commissioned desk study and site reconnaissance are also drawn upon. There may be special conditions appertaining to the site, however, which are not revealed by the investigation and which may not be taken into account in the report.
6. Methods of construction and/or design other than those proposed by the designers or referred to in the report may require consideration during the evolution of the proposals and further assessment of the geotechnical and any geoenvironmental data would be required to provide discussion and evaluations appropriate to these methods.
7. The accuracy of results reported depends upon the technique of measurement, investigation and test used and these values should not be regarded necessarily as characteristics of the strata as a whole (see accompanying notes on Investigation Techniques). Where such measurements are critical, the technique of investigation will need to be reviewed and supplementary investigation undertaken in accordance with the advice of the Company where necessary.
8. The samples selected for laboratory test are prepared and tested in accordance with the relevant Clauses of BS 1377 Parts 1 to 8, where appropriate, in Geotechnics Limited's UKAS accredited Laboratory, where possible. A list of tests is given.
9. Tests requiring the use of another laboratory having UKAS accreditation where possible are identified.
10. Any unavoidable variations from specified procedures are identified in the report.
11. Specimens are cut vertically, where this is relevant and can be identified, unless otherwise stated.
12. All the data required by the test procedures are recorded on individual test sheets but the results in the report are presented in summary form to aid understanding and assimilation for design purposes. Where all details are required, these can be made available.
13. Whilst the report may express an opinion on possible configurations of strata between or beyond exploratory holes, or on the possible presence of features based on either visual, verbal, written, cartographical, photographic or published evidence, this is for guidance only and no liability can be accepted for its accuracy.
14. Classification of materials as Made Ground is based on the inspection of retrieved samples or exposed excavations. Where it is obvious that foreign matter such as paper, plastic or metal is present, classification is clear. Frequently, however, for fill materials that arise from the adjacent ground or from the backfilling of excavations, their visual characteristics can closely resemble those of undisturbed ground. Other evidence such as site history, exploratory hole location or other tests may need to be drawn upon to provide clarification. For these reasons, classification of soils on the exploratory hole records as either Made Ground or naturally occurring strata, the boundary between them and any interpretation that this gives rise to should be regarded as provisional and subject to re-evaluation in the light of further data.
15. The classification of materials as Topsoil is generally based on visual description and should not be interpreted to mean that the material so described complies with the criteria for Topsoil used in BS 3882 (2007). Specific testing would be necessary where such definition is a requirement.
16. Ground conditions should be monitored during the construction of the works and the report should be re-evaluated in the light of these data by the supervising geotechnical engineers.
17. Any comments on groundwater conditions are based on observations made at the time of the investigation, unless specifically stated otherwise. It should be noted, however, that the observations are subject to the method and speed of boring, drilling or excavation and that groundwater levels will vary due to seasonal or other effects.
18. Any bearing capacities for conventional spread foundations which are given in the report and interpreted from the investigation are for bases at a minimum depth of 1m below finished ground level in naturally occurring strata and at broadly similar levels throughout individual structures, unless otherwise stated. The foundations should be designed in accordance with the good practice embodied in BS 8004:1986 - Foundations, supplemented for housing by NHBC Standards. Foundation design is an iterative process and bearing pressures may need adjustment or other measures may need to be taken in the context of final layouts and levels prior to finalisation of proposals.
19. Unless specifically stated, the investigation does not take account of the possible effects of mineral extraction or of gases from fill or natural sources within, below or outside the site.
20. The costs or economic viability of the proposals referred to in the report, or of the solutions put forward to any problems encountered, will depend on very many factors in addition to geotechnical or geoenvironmental considerations and hence their evaluation is outside the scope of the report.

Appendix D – Soils Screening Assessment

Appendix E – Controlled Waters Screening Assessment

Appendix F – Groundwater Screening Assessment

Exploratory Hole	Depth	Target	BH101 - BH112									
			5.00-7.00	8.00-10.00	11.00-14.00	9.50-12.00	5.00-7.00	18.00 - 21.00	18.00-20.00	12.80 - 14.80		
		LOD	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	Chester Pebble Beds	
2-Nitrophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4-Chloroaniline	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Nitrobenzene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Isophorone	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Hexachlorobutadiene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Hexachloroethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Butylbenzyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Diethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dimethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
4-Bromophenylphenylether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,3-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Bis(2-chloroethoxy)methane	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
4-Chlorophenylphenylether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
VOCs												
Vinyl Chloride	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Trichloroethene (TCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Carbon tetrachloride	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Chlorobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Chloroform	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,1,2-Tetrachloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,1-Trichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,3-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,4-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Tetrachloroethene (PCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,1,2-Trichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,1-Dichloroethene (1,1 DCE)	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1-Dichloropropane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,3-Trichloropropane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,4-Trimethylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dibromoethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,2-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,2-Dichloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,3,5-Trimethylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,3-Dichloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
2,2-Dichloropropane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
2-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
4-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Bromobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Bromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Bromodichloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Bromoform	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
cis-1,2-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
cis-1,3-Dichloropropene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Dibromomethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
4-Isopropyltoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Styrene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
trans-1,3-Dichloropropene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,2,2-Tetrachloroethane	ug/l	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	
Bromomethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Chloromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Isopropylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Dichlorodifluoromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
sec-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
tert-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
trans-1,2-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Dichloromethane (DCM)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Trichlorofluoromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,3-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2,4-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dibromo-3-chloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
n-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Dibromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Propylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,2-Dibromo-3-chloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Others												
1-naphthol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
2-isopropylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Catechol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Resorcinol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Xylenols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
m/p-cresol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
o-cresol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Total cresols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
2,3,5-trimethyl phenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

Determinant	Unit	Minimum	Maximum	Count	Source	AGAC	Exceedances of AECOM GACs
2-Nitrophenol	ug/l	<LOD	<LOD	9	LOD	LOD	
4-Chloroaniline	ug/l	<LOD	<LOD	9	LOD	LOD	
Nitrobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	30 ug/l	
Isophorone	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	78 ug/l	
Hexachlorobutadiene	ug/l	<LOD	<LOD	9	WHO DWG 2011	0.6 ug/l	
Hexachloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.33 ug/l	
Butylbenzyl phthalate	ug/l	<LOD	<LOD	9	WFD England/Wales, 2015 - Freshwater	7.5 ug/l	
Diethyl phthalate	ug/l	<LOD	<LOD	9	SEPA WAT-SG-53 Fresh EOS - AA - 201	200 ug/l	
Dimethyl phthalate	ug/l	<LOD	<LOD	9	LOD	LOD	
4-Bromophenylphenylether	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	13 ug/l	
1,2,4-Trichlorobenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	1.1 ug/l	
1,3-Dichlorobenzene	ug/l	<LOD	<LOD	9	LOD	LOD	
Bis(2-chloroethoxy)methane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	59 ug/l	
4-Chlorophenylphenylether	ug/l	<LOD	<LOD	9	AGAC	LOD	
VOCs							
Vinyl Chloride	ug/l	<LOD	<LOD	9	LOD	LOD	
Trichloroethene (TCE)	ug/l	<LOD	<LOD	9	LOD	LOD	
Carbon tetrachloride	ug/l	<LOD	<LOD	9	WS Regs 2010 (Eng/Wal)	3 ug/l	
Chlorobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	300 ug/l	
Chloroform	ug/l	<LOD	<LOD	5	WFD England/Wales, 2015 - AA-EQS Inl	2.5 ug/l	1
1,1,1,2-Tetrachloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.57 ug/l	
1,1,1-Trichloroethane	ug/l	<LOD	<LOD	9	WHO DWG 2011	2000 ug/l	
1,3-Dichlorobenzene	ug/l	<LOD	<LOD	9	LOD	LOD	
1,4-Dichlorobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	300 ug/l	
Tetrachloroethene (PCE)	ug/l	<LOD	<LOD	9	WFD England/Wales, 2015 - AA-EQS Inl	10 ug/l	
1,1,2-Trichloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.28 ug/l	
1,1-Dichloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	2.7 ug/l	
1,1-Dichloroethene (1,1 DCE)	ug/l	<LOD	<LOD	9	LOD	LOD	
1,1-Dichloropropane	ug/l	<LOD	<LOD	9	LOD	LOD	
1,2,3-Trichloropropane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.00075 ug/l	
1,2,4-Trimethylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	26100 ug/l	
1,2-Dibromoethane	ug/l	<LOD	<LOD	9	WHO DWG 2011	0.4 ug/l	
1,2-Dichlorobenzene	ug/l	<LOD	<LOD	9	WHO DWG 2011	1000 ug/l	
1,2-Dichloroethane	ug/l	<LOD	<LOD	9	WS Regs 2010 (Eng/Wal)	3 ug/l	
1,2-Dichloropropane	ug/l	<LOD	<LOD	9	WHO DWG 2011	40 ug/l	
1,3,5-Trimethylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	120 ug/l	
1,3-Dichloropropane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	370 ug/l	
2,2-Dichloropropane	ug/l	<LOD	<LOD	9	LOD	LOD	
2-Chlorotoluene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	240 ug/l	
4-Chlorotoluene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	250 ug/l	
Bromobenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	62 ug/l	
Bromochloromethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	83 ug/l	
Bromodichloromethane	ug/l	<LOD	<LOD	9	LOD	LOD	
Bromoform	ug/l	<LOD	<LOD	9	LOD	LOD	
cis-1,2-Dichloroethane	ug/l	<LOD	<LOD	9	LOD	LOD	
cis-1,3-Dichloropropene	ug/l	<LOD	<LOD	9	LOD	LOD	
Dibromomethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	8 ug/l	
4-Isopropyltoluene	ug/l	<LOD	<LOD	9	LOD	LOD	
Styrene	ug/l	<LOD	<LOD	9	WHO DWG 2011	20 ug/l	
trans-1,3-Dichloropropene	ug/l	<LOD	<LOD	9	LOD	LOD	
1,1,2,2-Tetrachloroethane	ug/l	<LOD	<LO				