LABORATORY RESULTS - *Particle Size Distribution*

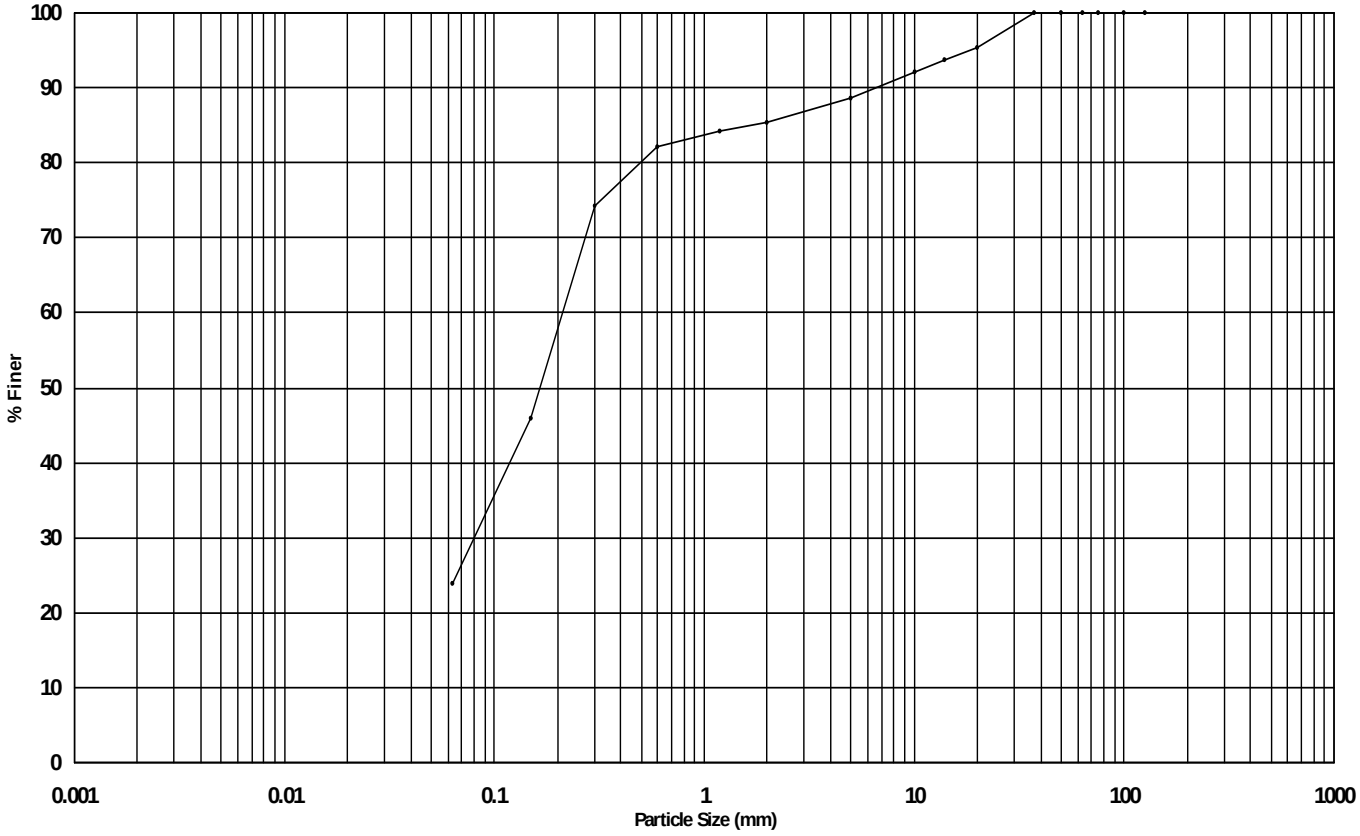
Project: STOCKPORT BUS STATION

Project No: PN153428

Hole	WS204
Sample Depth	1.20-2.00m
Sample Type	B
Sample Ref	N61795

Sample Description

MADE GROUND: Orangish brown and grey gravelly fine to coarse sand with clay inclusions and brick fragments.



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

Classification	% of each
SILT (including CLAY)	24
SAND	61
GRAVEL	15
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	95
14 mm	94
10 mm	92
5 mm	89
2 mm	85
1.18 mm	84
600 µm	82
300 µm	74
150 µm	46
63 µm	24

Size	% Finer

Uniformity Coefficient
Not Available
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

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LABORATORY RESULTS - *Particle Size Distribution*

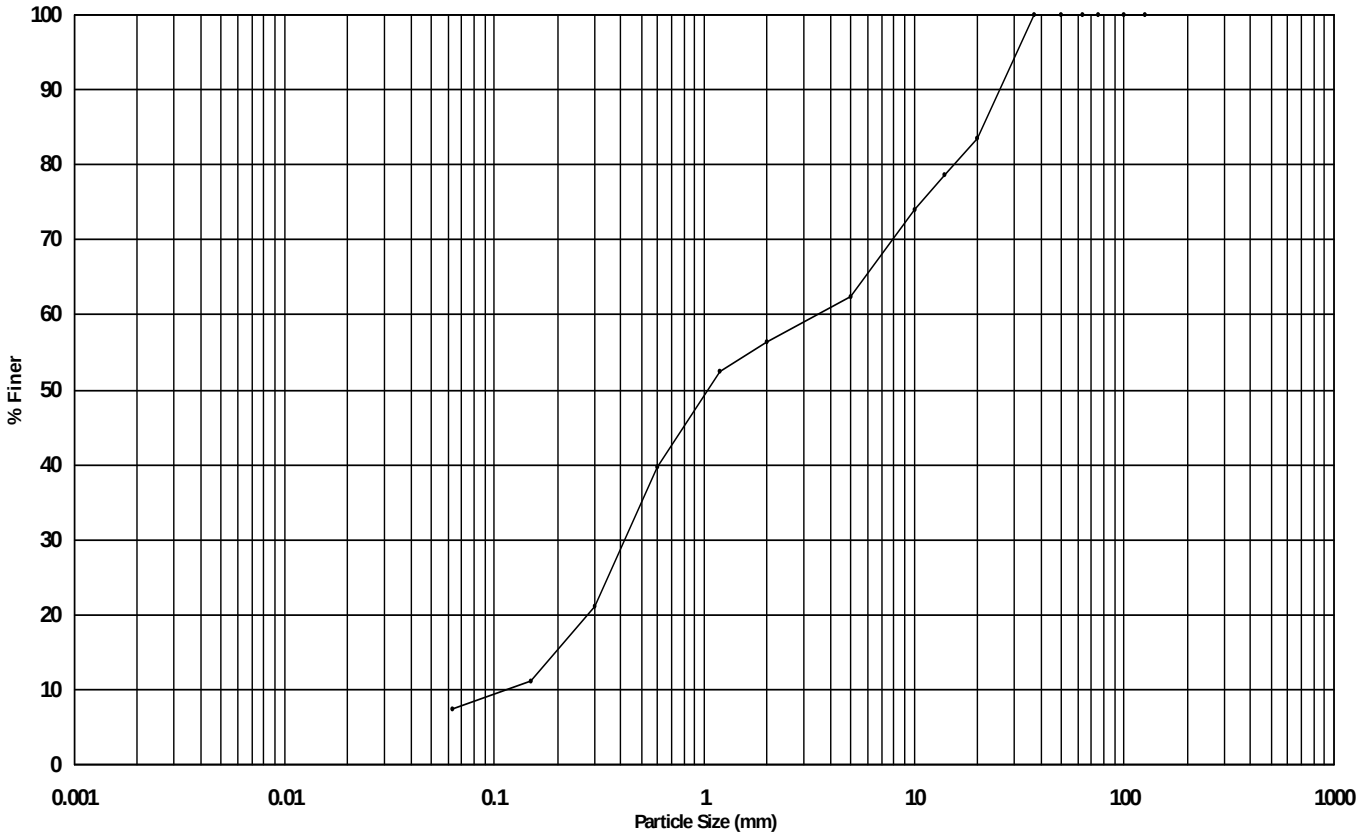
Project: STOCKPORT BUS STATION

Project No: PN153428

Hole	WS208
Sample Depth	2.40-2.80m
Sample Type	B
Sample Ref	N61672

Sample Description

Light brown and reddish brown silty SAND and GRAVEL.



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

Classification	% of each
SILT (including CLAY)	7
SAND	49
GRAVEL	44
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	79
10 mm	74
5 mm	62
2 mm	56
1.18 mm	52
600 µm	40
300 µm	21
150 µm	11
63 µm	7

Size	% Finer

Uniformity Coefficient
30.28
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

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LABORATORY RESULTS - *Particle Size Distribution*

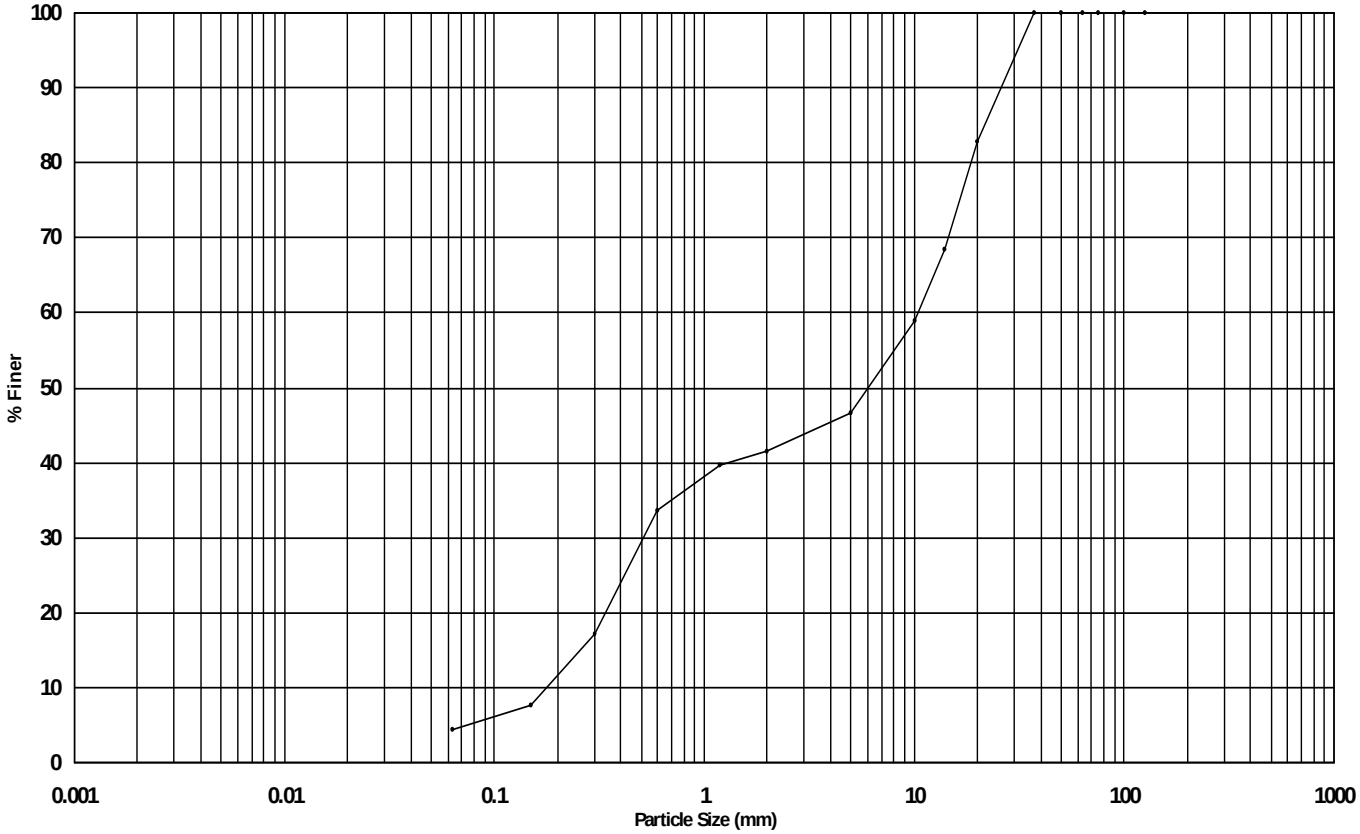
Project: STOCKPORT BUS STATION

Project No: PN153428

Hole WS210
Sample Depth 2.00-3.00m
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		Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulders
	CLAY	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

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LABORATORY RESULTS - *Particle Size Distribution*

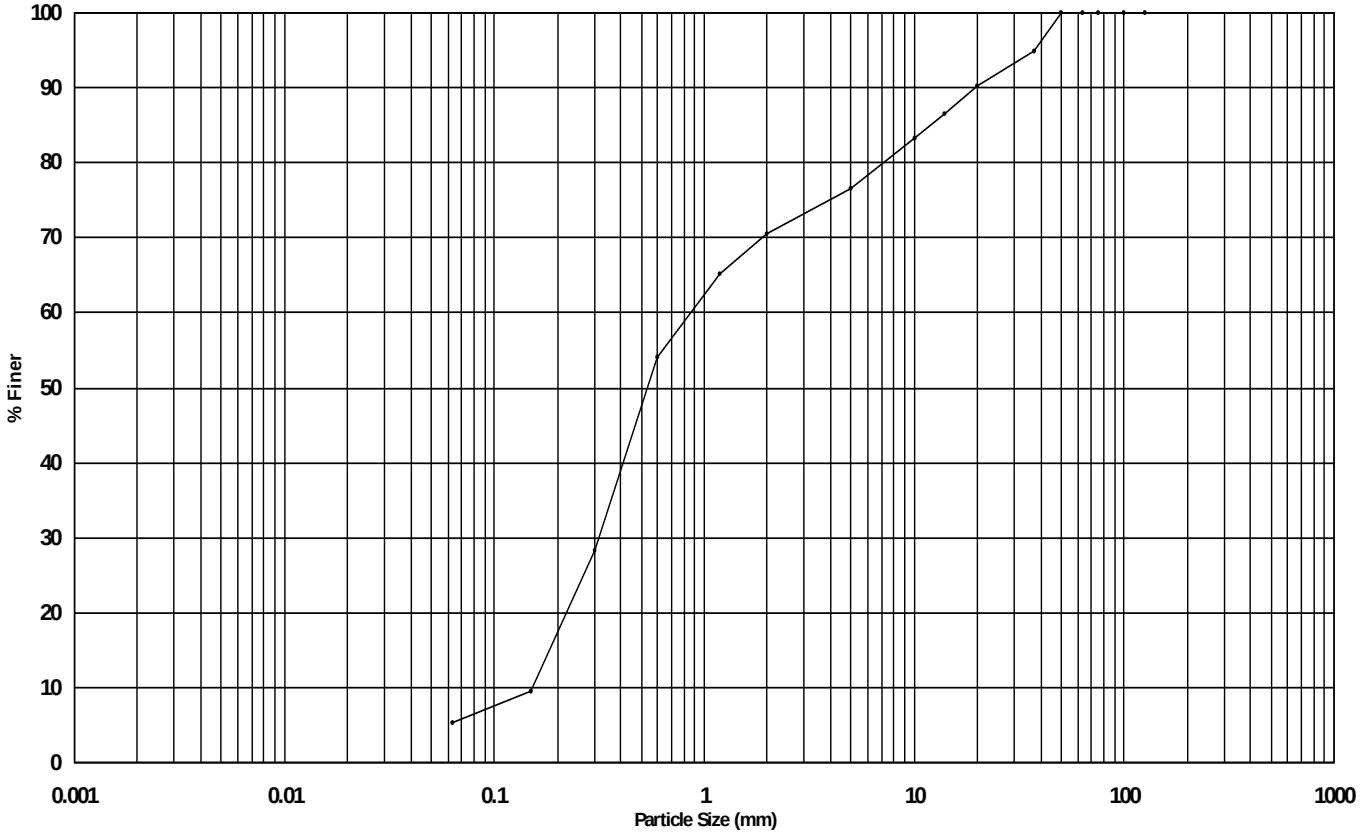
Project: STOCKPORT BUS STATION

Project No: PN153428

Hole WS210
Sample Depth 4.00-5.00m
Sample Type B
Sample Ref N61668

Sample Description

Greyish orange silty 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
SILT (including CLAY)	5
SAND	66
GRAVEL	29
COBBLES	0
BOULDERS	0

Size	% Finer
125 mm	100
100 mm	100
75 mm	100
63 mm	100
50 mm	100
37.5 mm	95
20 mm	90
14 mm	87
10 mm	83
5 mm	77
2 mm	71
1.18 mm	65
600 µm	54
300 µm	28
150 µm	9
63 µm	5

Size	% Finer

Uniformity Coefficient
5.62
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

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LABORATORY RESULTS - Particle Size Distribution

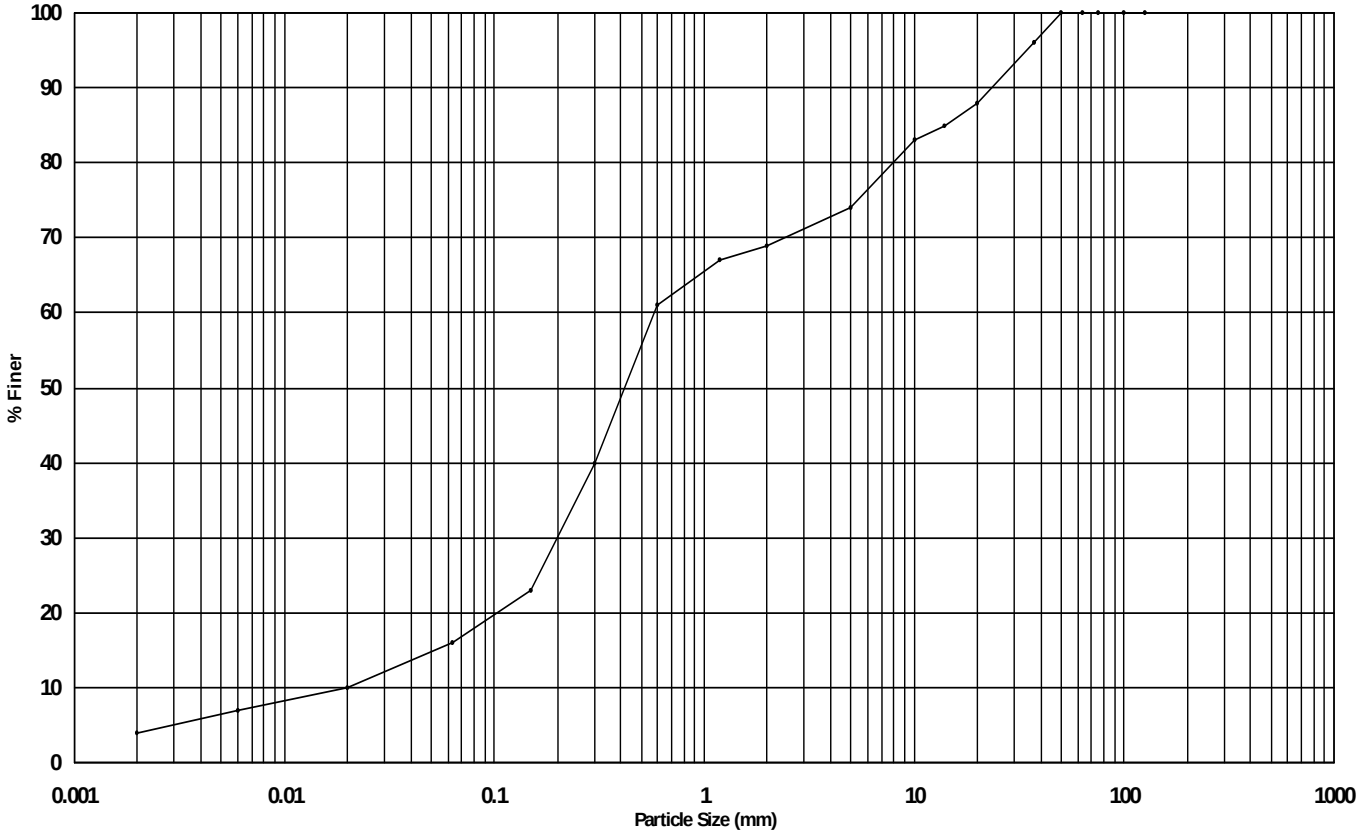
Project: STOCKPORT BUS STATION

Project No: PN153428

Hole WS214
Sample Depth 2.40-3.00m
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

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LABORATORY RESULTS - *Particle Size Distribution*

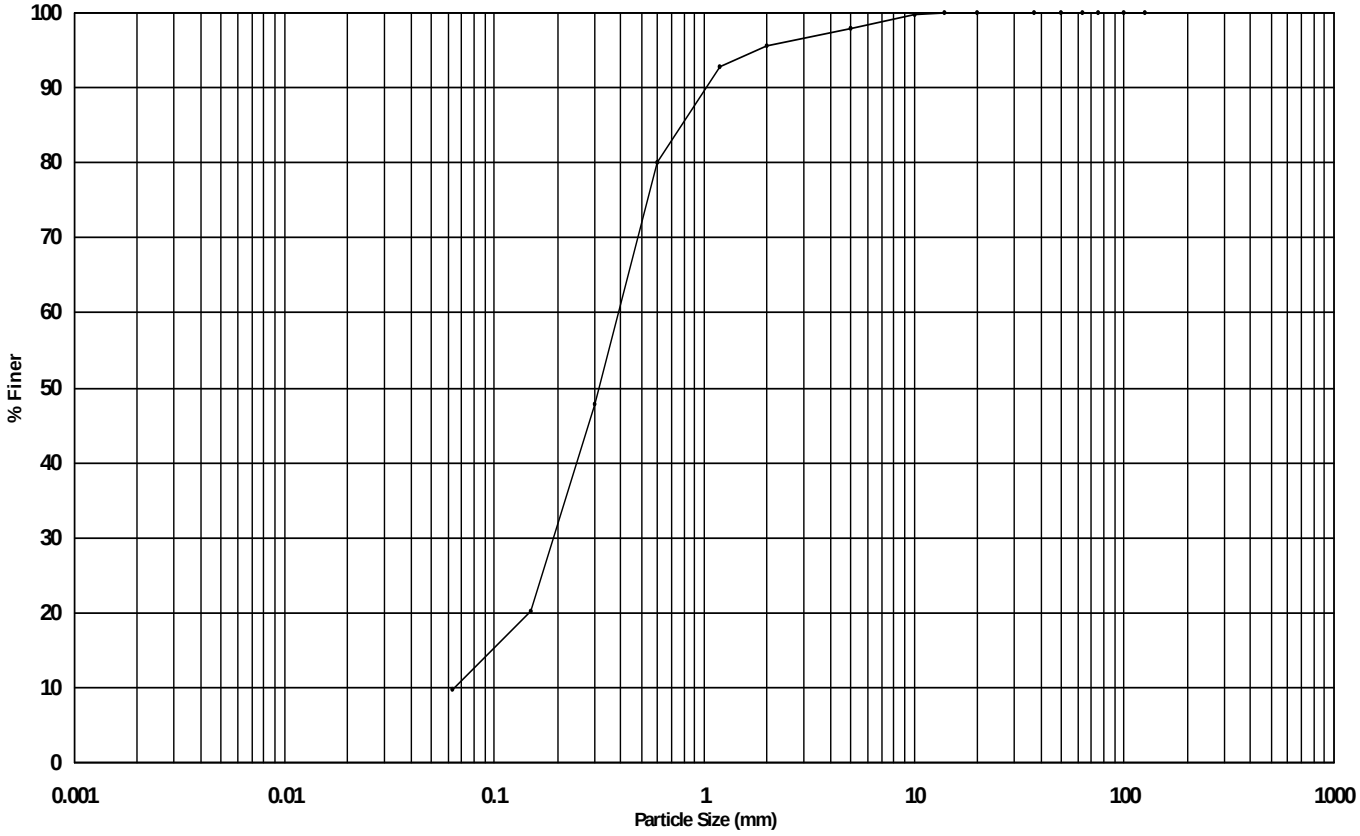
Project: STOCKPORT BUS STATION

Project No: PN153428

Hole WS223
Sample Depth 2.50-3.00m
Sample Type B
Sample Ref N61705

Sample Description

Greyish orange silty slightly gravelly fine to coarse SAND.



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

Classification	% of each
SILT (including CLAY)	10
SAND	86
GRAVEL	4
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	100
14 mm	100
10 mm	100
5 mm	98
2 mm	96
1.18 mm	93
600 µm	80
300 µm	48
150 µm	20
63 µm	10

Size	% Finer

Uniformity Coefficient
6.04
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

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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

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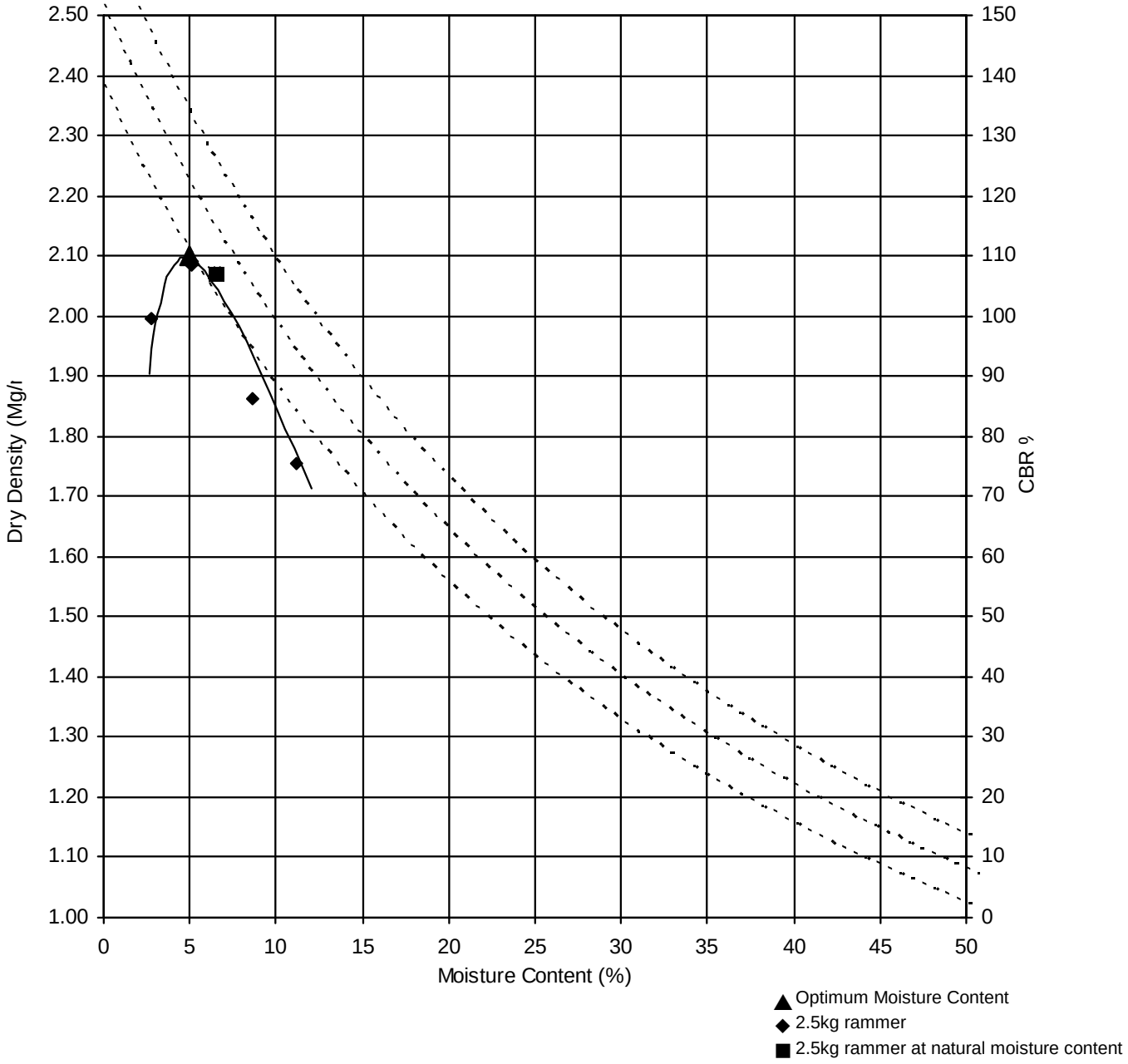
LABORATORY RESULTS - Compaction

Project: STOCKPORT BUS STATION

Project No: PN153428

Hole	BH106
Sample Depth	1.20-1.70m
Sample Type	B
Sample Ref	N61702



Optimum Moisture Content	5.0
Maximum Dry Density	2.10 Mg/m^3

Gravel retained on

37.5mm sieve	10 %
20mm sieve	18 %

Particle Density 2.65 (Assumed)

Preparation 2.5kg

Description Yellowish brown sandy fine to coarse GRAVEL.

Remarks BS1377 Part 4 1990 : Clause 3.3 and 3.4

09/02/2016

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LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION **Project No:** PN153428

Sample					w	W	D	Fail Load	Test Type/ Direction	De	De^2	Is	F	Is_{50}
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	%	mm	mm	kN		mm	mm^2	MN/m^2		MN/m^2
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

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LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION **Project No:** PN153428

Sample					w	W	D	Fail Load	Test Type/ Direction	De	De^2	Is	F	Is_{50}
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	%	mm	mm	kN		mm	mm^2	MN/m^2		MN/m^2
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 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

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LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION **Project No:** PN153428

Sample					w	W	D	Fail Load	Test Type/ Direction	De	De^2	Is	F	Is_{50}
Hole	Depth (Specimen Depth) m	Type	Sample Ref	Description	%	mm	mm	kN		mm	mm^2	MN/m^2		MN/m^2
BH112	6.50-6.80 (6.50-6.80)	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
						80	71	0.50	A/PD	85.04	7232	0.069	1.270	0.087
						80	57	0.57	A/PD	76.20	5806	0.099	1.209	0.119
BH112	9.60-9.80 (9.60-9.80)	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
						85	89	1.45	A/PD	98.14	9632	0.151	1.355	0.204
						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

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LABORATORY RESULTS - Test Remarks

Project STOCKPORT BUS STATION **Project No:** PN153428

Sample				Laboratory Remark
Hole	Depth (Specimen Depth) m	Type	Sample Ref	
WS220	1.30-1.70 (1.30-1.70)	D	N61793	Atterberg Limit Test - 1-point cone

Remarks

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Jones Environmental Laboratory

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

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

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

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.	1	2	3	4	5	6	7	8	9	10	LOD/LOR	Units	Method No.
Sample ID	103	106	107	109	111	BH108	BH108	BH112	CT4	CT5			
Depth	1.00-1.20	0.40-0.60	0.35-0.55	1.00-1.20	0.50-0.70	0.80	3.80	0.80	2.20-2.65	1.25-1.65			
COC No / misc													
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	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016			
Total Sulphate BRE	0.02	0.01	0.03	0.14	0.01	0.12	0.05	0.08	<0.01	0.14	<0.01	%	TM50/PM29
Sulphate as SO4 (2:1 Ext) #M	0.0577	0.0168	0.0456	0.1415	0.0252	0.0453	0.0285	0.0671	0.0101	0.0394	<0.0015	g/l	TM38/PM20
Organic Matter	1.1	<0.2	<0.2	1.9	1.3	14.6	0.7	<0.2	0.3	9.7	<0.2	%	TM21/PM24
pH #M	9.09	10.93	11.98	8.49	8.16	8.41	9.16	11.44	8.41	8.71	<0.01	pH units	TM73/PM11
Sample Type	Clayey Sand	Sand	Sand	Sand	Clay	Clayey Sand	Sand	Sand	Clayey Sand	Clay		None	PM13/PM0
Sample Colour	Medium Brown	Light Brown	Medium Grey	Medium Brown	Dark Brown	Dark Brown	Medium Brown	Light Brown	Medium Brown	Dark Brown		None	PM13/PM0
Other Items	stones, loam	stones	stones	stones, brick	stones, brick	loam, sand, brick	brick, stones	stones	stones	stones, sand		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.	11	12	13	14	15	16	17	18	19	20	LOD/LOR	Units	Method No.
Sample ID	CT6B	CT7	CT8	104	BH101	WS201	WS205	WS208	WS211	WS212			
Depth	1.20-1.65	3.00-3.45	1.20-1.65	0.40-0.60	1.00-1.20	1.00-1.20	2.00-2.38	1.20-1.30	1.20-1.65	1.50-1.70			
COC No / misc													
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	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016	08/01/2016			
Total Sulphate BRE	0.03	0.04	0.15	0.02	<0.01	0.05	<0.01	0.06	0.07	2.26$_{AA}$	<0.01	%	TM50/PM29
Sulphate as SO4 (2:1 Ext) $^{\#M}$	0.0146	0.0211	0.0380	0.0372	0.0175	0.0134	0.1181	0.1543	0.1833	1.7608	<0.0015	g/l	TM38/PM20
Organic Matter	3.8	6.5	18.3	0.2	<0.2	14.1	<0.2	9.3	9.5	56.5	<0.2	%	TM21/PM24
pH $^{\#M}$	8.96	8.50	8.54	11.72	8.87	8.81	9.49	8.05	8.21	7.86	<0.01	pH units	TM73/PM11
Sample Type	Sand	Clay	Clayey Sand	Sand	Clay	Clay	Sand	Clayey Loam	Clay	Loam		None	PM13/PM0
Sample Colour	Light Brown	Dark Brown	Dark Brown	Medium Grey	Medium Brown	Dark Brown	Medium Brown	Dark Brown	Dark Brown	Dark Brown		None	PM13/PM0
Other Items	stones	sand, stones	stones, brick	stones	stones, sand	stones, clinker, brick	stones	stones, sand, brick	stones	stones, sand		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.	21	22									LOD/LOR	Units	Method No.
Sample ID	WS217	WS218A											
Depth	1.20-1.30	1.20-1.65											
COC No / misc													
Containers	B	B											
Sample Date	<>	<>											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	08/01/2016	08/01/2016											
Total Sulphate BRE	0.02	<0.01									<0.01	%	TM50/PM29
Sulphate as SO4 (2:1 Ext) #M	0.0372	0.0201									<0.0015	g/l	TM38/PM20
Organic Matter	3.1	0.7									<0.2	%	TM21/PM24
pH #M	8.82	9.62									<0.01	pH units	TM73/PM11
Sample Type	Clay	Sand										None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown										None	PM13/PM0
Other Items	stones	NA										None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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.

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.

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WATERS

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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

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.

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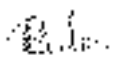
Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

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

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	LOD/LOR	Units	Method No.
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									
Sample ID	WS220	WS223	WS224									
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 SO4 (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

Please see attached notes for all abbreviations and acronyms

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

SOILS

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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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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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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.
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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
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

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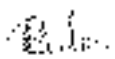
Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire
CH4 8RJ

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.
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: 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.	76										LOD/LOR	Units	Method No.
Sample ID	BH112												
Depth	1.80												
COC No / misc													
Containers	T												
Sample Date	27/01/2016												
Sample Type	Soil												
Batch Number	4												
Date of Receipt	27/01/2016												
Organic Matter	21.7										<0.2	%	TM21/PM24
Sample Type	Clay											None	PM13/PM0
Sample Colour	Dark Brown											None	PM13/PM0
Other Items	vegetation, sand											None	PM13/PM0

Please see attached notes for all abbreviations and acronyms

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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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.

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
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

celtest
INDEPENDENT MATERIALS TESTING I DIAMOND DRILLING & SAWING

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

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:- N. Hughes
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	Meduim 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

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
		Is	Uncorrected strength index
		Is (50)	Point load strength index
A	W*D minimum x-sectional area For axial or irregular block test 0.3W < D < W	F	Size correction factor
		#	Test perpendicular to fabric
D*D	= D*D for diametral (d) tests	//	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**

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

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

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. W =(W1 + W2)/2 for irregular blocks.	P	Load failure in KN
		Is	Uncorrected strength index
		Is (50)	Point load strength index
A	W*D minimum x-sectional area For axial or irregular block test 0.3W < D < W	F	Size correction factor
		#	Test perpendicular to fabric
D*D	= D*D for diametral (d) tests	//	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

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

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

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		LOD/LOR	Units	Method No.
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										Please see attached notes for all abbreviations and acronyms			
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				
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

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		LOD/LOR	Units	Method No.
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										Please see attached notes for all abbreviations and acronyms			
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				
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

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.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66		LOD/LOR	Units	Method No.
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				
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

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									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Dissolved Arsenic #	<2.5	5.9	6.2								<2.5	ug/l	TM30/PM14
Dissolved Boron #	<12	64	23								<12	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5	<0.5	<0.5								<0.5	ug/l	TM30/PM14
Dissolved Chromium #	<1.5	<1.5	<1.5								<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7	<7	<7								<7	ug/l	TM30/PM14
Dissolved Lead #	<5	<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 #	10.2	4.6	3.7								<1.5	ug/l	TM30/PM14
Dissolved Zinc #	5	3	4								<3	ug/l	TM30/PM14
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	108	109								<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	88	90	88								<0	%	TM15/PM69
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/TM36/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/TM36/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10	<10	<10								<10	ug/l	TM5/TM36/PM30/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.	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									

Please see attached notes for all abbreviations and acronyms

											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

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							Please see attached notes for all abbreviations and acronyms		
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(bk)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

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							Please see attached notes for all abbreviations and acronyms		
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										LOD/LOR	Units	Method No.
Other SVOCs												
1,2-Dichlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene [#M]	<10	<10	<10							<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10							<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10							<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Bromophenylphenylether [#M]	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10							<10	ug/kg	TM16/PM8
Carbazole	<10	221	1095							<10	ug/kg	TM16/PM8
Dibenzofuran [#M]	<10	272	1770							<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorobutadiene [#M]	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10							<10	ug/kg	TM16/PM8
Isophorone [#M]	<10	<10	<10							<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine [#M]	<10	<10	<10							<10	ug/kg	TM16/PM8
Nitrobenzene [#M]	<10	<10	<10							<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	89	96	105							<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	107	112	109							<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.	19-21	52-54	64-66									
Sample ID	BH102	BH112	WS206									
Depth	2.00	1.00	0.50							Please see attached notes for all abbreviations and acronyms		
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	<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

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							Please see attached notes for all abbreviations and acronyms		
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

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

VOC Report : **Solid**

J E Sample No.	19-21	52-54	64-66									
Sample ID	BH102	BH112	WS206									
Depth	2.00	1.00	0.50							Please see attached notes for all abbreviations and acronyms		
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/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	<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) #	8	<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	262							<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7							<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	112	105	97							<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	127	95	97							<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.	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									

Please see attached notes for all abbreviations and acronyms

											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

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 **Matrix : Solid**
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt

J E Job No.	Batch	Sample ID	Depth	J E Sample No.	NDP Reason
15/17326	1	WS201	0.50	31-33	Asbestos detected in sample
15/17326	1	BH112	1.00	52-54	Asbestos detected in sample
15/17326	1	WS206	0.50	64-66	Asbestos detected in sample

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.

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 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

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

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

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								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										
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									
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									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
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	10	<7	<7								<7	mg/kg	TM5/PM16
>C21-C35 #M	97	<7	<7								<7	mg/kg	TM5/PM16
>C35-C44	<7	<7	<7								<7	mg/kg	TM5/PM16
Total aliphatics C5-44	107	<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	68	<7	<7								<7	mg/kg	TM5/PM16
>EC21-EC35	349	<7	<7								<7	mg/kg	TM5/PM16
>EC35-EC44	39	<7	<7								<7	mg/kg	TM5/PM16
Total aromatics C5-44	456	<26	<26								<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	563	<52	<52								<52	mg/kg	TM5/TM36/PM16
PCB 28 #	<50 AA	<5	<5								<5	ug/kg	TM17/PM8
PCB 52 #	<50 AA	<5	<5								<5	ug/kg	TM17/PM8
PCB 101 #	<50 AA	<5	<5								<5	ug/kg	TM17/PM8
PCB 118 #	<50 AA	<5	<5								<5	ug/kg	TM17/PM8
PCB 138 #	<50 AA	<5	<5								<5	ug/kg	TM17/PM8
PCB 153 #	<50 AA	<5	<5								<5	ug/kg	TM17/PM8
PCB 180 #	<50 AA	<5	<5								<5	ug/kg	TM17/PM8
Total 7 PCBs #	<350 AA	<35	<35								<35	ug/kg	TM17/PM8
2-Chlorophenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
Natural Moisture Content	8.9	10.6	14.6								<0.1	%	PM4/PM0
2-Methylphenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
2-Nitrophenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<100 AA	<10	<10								<10	ug/kg	TM16/PM8
4-Methylphenol	<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.	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										
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

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.	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									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
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

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.	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									

Please see attached notes for all abbreviations and acronyms

											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	120	<10								<10	ug/l	TM5/PM30
>C35-C44	<10	20	<10								<10	ug/l	TM5/PM30
Total aliphatics C5-44	<10	140	<10								<10	ug/l	TM5/TM36/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	170	<10								<10	ug/l	TM5/PM30
>EC16-EC21	<10	790	<10								<10	ug/l	TM5/PM30
>EC21-EC35	<10	1330	<10								<10	ug/l	TM5/PM30
>EC35-EC44	<10	270	<10								<10	ug/l	TM5/PM30
Total aromatics C5-44	<10	2560	<10								<10	ug/l	TM5/TM36/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10	2700	<10								<10	ug/l	TM5/TM36/PM30/PM69
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
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

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.	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										
Total Speciated Phenols MS	<6	<6	<6								<6	ug/l	TM16/PM30
Mass of raw test portion	0.1048	0.1008	0.1018									kg	NONE/PM17
Leachant Volume	0.885	0.889	0.889									l	NONE/PM17
Dissolved Organic Carbon	5	6	5								<2	mg/l	TM60/PM0
pH	8.46	8.56	8.25								<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.	106-108	115-117	121-123									
Sample ID	WS204	WS220	WS220									
Depth	0.20	0.20	1.00							Please see attached notes for all abbreviations and acronyms		
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.
SVOC MS												
Phenols												
2-Chlorophenol #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2-Methylphenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2-Nitrophenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
4-Methylphenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
4-Nitrophenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Pentachlorophenol	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Phenol #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
PAHs												
2-Chloronaphthalene #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	<100 AA	<10	14							<10	ug/kg	TM16/PM8
Phthalates												
Bis(2-ethylhexyl) phthalate	<1000 AA	<100	<100							<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<1000 AA	<100	<100							<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<1000 AA	<100	<100							<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<1000 AA	<100	<100							<100	ug/kg	TM16/PM8
Diethyl phthalate	<1000 AA	<100	<100							<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<1000 AA	<100	<100							<100	ug/kg	TM16/PM8
Other SVOCs												
1,2-Dichlorobenzene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2-Nitroaniline	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
3-Nitroaniline	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
4-Chloroaniline	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
4-Nitroaniline	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Azobenzene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Carbazole	352 AA	<10	16							<10	ug/kg	TM16/PM8
Dibenzofuran #M	136 AA	<10	13							<10	ug/kg	TM16/PM8
Hexachlorobenzene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Hexachloroethane	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Isophorone #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Nitrobenzene #M	<100 AA	<10	<10							<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	97 AA	70	91							<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	95 AA	80	109							<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.	106-108	115-117	121-123									
Sample ID	WS204	WS220	WS220									
Depth	0.20	0.20	1.00							Please see attached notes for all abbreviations and acronyms		
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.
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
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
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
Surrogate Recovery 2-Fluorobiphenyl	80	80	78							<0	%	TM16/PM30
Surrogate Recovery p-Terphenyl-d14	86	87	86							<0	%	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.	106-108	115-117	121-123									
Sample ID	WS204	WS220	WS220									
Depth	0.20	0.20	1.00							Please see attached notes for all abbreviations and acronyms		
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/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
JE Job No.: 15/17326

VOC Report : **CEN 10:1 1 Batch**

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									

Please see attached notes for all abbreviations and acronyms

											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	91	85	91								<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	103	103	113								<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	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.

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

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							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(bk)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

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.	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									
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

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.	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	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										
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(bk)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

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									
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.
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/TM36/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/TM36/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10	<10	<10								<10	ug/l	TM5/TM36/PM30/PM69
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
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

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	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										
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

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.	79-81	91-93	100-102									
Sample ID	BH111	BH108	BH108									
Depth	0.20-0.40	1.00	4.00							Please see attached notes for all abbreviations and acronyms		
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.
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

SVOC 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							Please see attached notes for all abbreviations and acronyms		
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.
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
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
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

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									
Sample ID	BH111	BH108	BH108									
Depth	0.20-0.40	1.00	4.00							Please see attached notes for all abbreviations and acronyms		
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									

Please see attached notes for all abbreviations and acronyms

											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

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.

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

All solid results are expressed on a dry weight basis unless stated otherwise.

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 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

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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Geotechnics
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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

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											
Arsenic #M	8.1	13.4									<0.5	mg/kg	TM30/PM15
Cadmium #M	1.7	0.8									<0.1	mg/kg	TM30/PM15
Chromium #M	49.8	52.6									<0.5	mg/kg	TM30/PM15
Copper #M	34	44									<1	mg/kg	TM30/PM15
Lead #M	89	93									<5	mg/kg	TM30/PM15
Mercury #M	<0.1	0.2									<0.1	mg/kg	TM30/PM15
Nickel #M	12.6	15.3									<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1									<1	mg/kg	TM30/PM15
Vanadium	13	20									<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.7	0.3									<0.1	mg/kg	TM74/PM32
Zinc #M	197	139									<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #M	3.00	<0.04									<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.32	<0.03									<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.47	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene #M	0.68	<0.04									<0.04	mg/kg	TM4/PM8
Phenanthrene #M	3.98	0.41									<0.03	mg/kg	TM4/PM8
Anthracene #	0.88	0.10									<0.04	mg/kg	TM4/PM8
Fluoranthene #M	3.73	0.76									<0.03	mg/kg	TM4/PM8
Pyrene #	3.26	0.67									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.42	0.35									<0.06	mg/kg	TM4/PM8
Chrysene #M	1.66	0.42									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	2.16	0.53									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.49	0.32									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.82	0.20									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.22	0.07									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.72	0.18									<0.04	mg/kg	TM4/PM8
PAH 16 Total	24.8	4.0									<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.56	0.38									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.60	0.15									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	118	118									<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.	130-132	136-138											
Sample ID	WS203	WS224											
Depth	0.50	0.20									Please see attached notes for all abbreviations and acronyms		
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.
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									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											
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.

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

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

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

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												
Arsenic #M	10.4										<0.5	mg/kg	TM30/PM15
Cadmium #M	<0.1										<0.1	mg/kg	TM30/PM15
Chromium #M	41.3										<0.5	mg/kg	TM30/PM15
Copper #M	46										<1	mg/kg	TM30/PM15
Lead #M	29										<5	mg/kg	TM30/PM15
Mercury #M	0.5										<0.1	mg/kg	TM30/PM15
Nickel #M	29.0										<0.7	mg/kg	TM30/PM15
Selenium #M	1										<1	mg/kg	TM30/PM15
Vanadium	35										<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.9										<0.1	mg/kg	TM74/PM32
Zinc #M	49										<5	mg/kg	TM30/PM15
Methyl Tertiary Butyl Ether #M	<6										<6	ug/kg	TM15/PM10
Benzene #M	6										<5	ug/kg	TM15/PM10
Toluene #M	21										<3	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
Surrogate Recovery Toluene D8	104										<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	104										<0	%	TM15/PM10
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	0.3										<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	10										<7	mg/kg	TM5/PM16
>C21-C35 #M	43										<7	mg/kg	TM5/PM16
>C35-C44	<7										<7	mg/kg	TM5/PM16
Total aliphatics C5-44	53										<26	mg/kg	TM5/TM36/PM16
Aromatics													
>C5-EC7	<0.1										<0.1	mg/kg	TM36/PM12
>EC7-EC8	<0.1										<0.1	mg/kg	TM36/PM12
>EC8-EC10 #M	0.2										<0.1	mg/kg	TM36/PM12
>EC10-EC12	10.1										<0.2	mg/kg	TM5/PM16
>EC12-EC16	58										<4	mg/kg	TM5/PM16
>EC16-EC21	293										<7	mg/kg	TM5/PM16
>EC21-EC35	574										<7	mg/kg	TM5/PM16
>EC35-EC44	64										<7	mg/kg	TM5/PM16
Total aromatics C5-44	999										<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	1052										<52	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

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												
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 #	<50 AA										<5	ug/kg	TM17/PM8
PCB 52 #	<50 AA										<5	ug/kg	TM17/PM8
PCB 101 #	<50 AA										<5	ug/kg	TM17/PM8
PCB 118 #	<50 AA										<5	ug/kg	TM17/PM8
PCB 138 #	<50 AA										<5	ug/kg	TM17/PM8
PCB 153 #	<50 AA										<5	ug/kg	TM17/PM8
PCB 180 #	<50 AA										<5	ug/kg	TM17/PM8
Total 7 PCBs #	<350 AA										<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

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												
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.
Dissolved Arsenic #	2.7										<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 #	3.6										<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7										<7	ug/l	TM30/PM14
Dissolved Lead #	<5										<5	ug/l	TM30/PM14
Dissolved Mercury #	<1										<1	ug/l	TM30/PM14
Dissolved Nickel #	<2										<2	ug/l	TM30/PM14
Dissolved Selenium #	<3										<3	ug/l	TM30/PM14
Dissolved Vanadium #	6.8										<1.5	ug/l	TM30/PM14
Dissolved Zinc #	<3										<3	ug/l	TM30/PM14
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	91										<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	111										<0	%	TM15/PM69
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/TM36/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	45										<5	ug/l	TM5/PM30
>EC12-EC16	10										<10	ug/l	TM5/PM30
>EC16-EC21	30										<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	85										<10	ug/l	TM5/TM36/PM30/PM69
Total aliphatics and aromatics(C5-44)	85										<10	ug/l	TM5/TM36/PM30/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

Please see attached notes for all abbreviations and acronyms

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.
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										Please see attached notes for all abbreviations and acronyms		
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 #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												
Sample ID	WS212												
Depth	1.00										Please see attached notes for all abbreviations and acronyms		
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													
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

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										Please see attached notes for all abbreviations and acronyms		
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										<1	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	<1										<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5										<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1										<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5										<0.5	ug/l	TM16/PM30
4-Methylphenol	<1										<1	ug/l	TM16/PM30
4-Nitrophenol	<10										<10	ug/l	TM16/PM30
Pentachlorophenol	<1										<1	ug/l	TM16/PM30
Phenol	<1										<1	ug/l	TM16/PM30
PAHs													
2-Chloronaphthalene	<1										<1	ug/l	TM16/PM30
2-Methylnaphthalene	4										<1	ug/l	TM16/PM30
Naphthalene	44										<1	ug/l	TM16/PM30
Acenaphthylene	<0.5										<0.5	ug/l	TM16/PM30
Acenaphthene	3										<1	ug/l	TM16/PM30
Fluorene	1.1										<0.5	ug/l	TM16/PM30
Phenanthrene	4.1										<0.5	ug/l	TM16/PM30
Anthracene	<0.5										<0.5	ug/l	TM16/PM30
Fluoranthene	1.2										<0.5	ug/l	TM16/PM30
Pyrene	<0.5										<0.5	ug/l	TM16/PM30
Benzo(a)anthracene	<0.5										<0.5	ug/l	TM16/PM30
Chrysene	<0.5										<0.5	ug/l	TM16/PM30
Benzo(bk)fluoranthene	<1										<1	ug/l	TM16/PM30
Benzo(a)pyrene	<1										<1	ug/l	TM16/PM30
Indeno(123cd)pyrene	<1										<1	ug/l	TM16/PM30
Dibenzo(ah)anthracene	<0.5										<0.5	ug/l	TM16/PM30
Benzo(ghi)perylene	<0.5										<0.5	ug/l	TM16/PM30
Phthalates													
Bis(2-ethylhexyl) phthalate	<5										<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1										<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5										<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1										<1	ug/l	TM16/PM30
Diethyl phthalate	<1										<1	ug/l	TM16/PM30
Dimethyl phthalate	<1										<1	ug/l	TM16/PM30

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										Please see attached notes for all abbreviations and acronyms		
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													
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 **VOC Report :** **Solid**
Reference: PN153428
Location: Stockport Bus Station
Contact: Sarah Burt
JE Job No.: 15/17326

J E Sample No.	148-150												
Sample ID	WS212												
Depth	1.00										Please see attached notes for all abbreviations and acronyms		
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

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										Please see attached notes for all abbreviations and acronyms		
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/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.

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

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

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									
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									

Please see attached notes for all abbreviations and acronyms

											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

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									
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									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
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	0.5	<0.1								<0.1	mg/kg	TM36/PM12
>C10-C12 #M	<0.2	5.2	<0.2								<0.2	mg/kg	TM5/PM16
>C12-C16 #M	<4	22	<4								<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	62	<7								<7	mg/kg	TM5/PM16
>C21-C35 #M	13	197	<7								<7	mg/kg	TM5/PM16
>C35-C44	<7	23	<7								<7	mg/kg	TM5/PM16
Total aliphatics C5-44	<26	310	<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	1.7	14.9	0.9								<0.2	mg/kg	TM5/PM16
>EC12-EC16	29	337	10								<4	mg/kg	TM5/PM16
>EC16-EC21	278	2009	54								<7	mg/kg	TM5/PM16
>EC21-EC35	665	3359	185								<7	mg/kg	TM5/PM16
>EC35-EC44	71	349	21								<7	mg/kg	TM5/PM16
Total aromatics C5-44	1045	6069	271								<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	1045	6379	271								<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 #	<25 AA	<25 AA	-								<5	ug/kg	TM17/PM8
PCB 52 #	<25 AA	<25 AA	-								<5	ug/kg	TM17/PM8
PCB 101 #	<25 AA	<25 AA	-								<5	ug/kg	TM17/PM8
PCB 118 #	<25 AA	<25 AA	-								<5	ug/kg	TM17/PM8
PCB 138 #	<25 AA	<25 AA	-								<5	ug/kg	TM17/PM8
PCB 153 #	<25 AA	<25 AA	-								<5	ug/kg	TM17/PM8
PCB 180 #	<25 AA	<25 AA	-								<5	ug/kg	TM17/PM8
Total 7 PCBs #	<175 AA	<175 AA	-								<35	ug/kg	TM17/PM8
2-Chlorophenol	<50 AA	<100 AB	<10								<10	ug/kg	TM16/PM8
Natural Moisture Content	19.9	15.4	13.4								<0.1	%	PM4/PM0
2-Methylphenol	<50 AA	<100 AB	<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.	169-171	175-177	181-183									
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									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	169-171	175-177									LOD/LOR	Units	Method No.
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
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/TM36/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/TM36/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10	<10									<10	ug/l	TM5/TM36/PM30/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.	169-171	175-177									LOD/LOR	Units	Method No.
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											
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	<10.0$_{AC}$									<0.5	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	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
4-Methylphenol	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
4-Nitrophenol	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
Pentachlorophenol	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
Phenol	<0.5	<10.0$_{AC}$									<0.5	ug/l	TM16/PM30
Total Speciated Phenols MS	<6	<120$_{AC}$									<6	ug/l	TM16/PM30
pH	8.51	8.45									<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.	169-171	175-177									LOD/LOR	Units	Method No.
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 #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

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.	169-171	175-177									LOD/LOR	Units	Method No.
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													
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

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.	169-171	175-177											
Sample ID	WS214	WS211											
Depth	0.50	0.20									Please see attached notes for all abbreviations and acronyms		
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	<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

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									Please see attached notes for all abbreviations and acronyms		
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													
Other SVOCs													
1,2-Dichlorobenzene	<1	<20 AC									<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<20 AC									<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<20 AC									<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<20 AC									<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<20 AC									<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<20 AC									<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<20 AC									<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1	<20 AC									<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<20 AC									<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1	<20 AC									<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<20 AC									<1	ug/l	TM16/PM30
Carbazole	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<20 AC									<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<20 AC									<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<20 AC									<1	ug/l	TM16/PM30
Hexachloroethane	<1	<20 AC									<1	ug/l	TM16/PM30
Isophorone	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5	<10.0 AC									<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<20 AC									<1	ug/l	TM16/PM30
Surrogate Recovery 2-Fluorobiphenyl	78	78 AC									<0	%	TM16/PM30
Surrogate Recovery p-Terphenyl-d14	85	86 AC									<0	%	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.	169-171	175-177									LOD/LOR	Units	Method No.
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											
VOC MS													
Dichlorodifluoromethane	<2	<2									<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6									<6	ug/kg	TM15/PM10
Chloromethane #	<3	<3									<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2									<2	ug/kg	TM15/PM10
Bromomethane	<1	<1									<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6									<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6									<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7	<7									<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3									<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6									<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7									<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4									<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4									<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5									<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5									<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3									<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4									<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5									<5	ug/kg	TM15/PM10
Benzene #M	<5	<5									<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5									<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4									<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4									<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4									<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4									<4	ug/kg	TM15/PM10
Toluene #M	<3	15									<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3									<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4									<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	19	<3									<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4									<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5									<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3									<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4									<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5									<5	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
Styrene	<3	<3									<3	ug/kg	TM15/PM10
Bromoform	<4	<4									<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	10									<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3									<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2									<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4									<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4									<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3									<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	11	26									<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3									<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5									<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	19	47									<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4									<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	10									<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4									<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4									<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4									<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4									<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4									<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7									<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4									<4	ug/kg	TM15/PM10
Naphthalene	3737	9554									<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7									<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	109	95									<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	87	81									<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.	169-171	175-177											
Sample ID	WS214	WS211											
Depth	0.50	0.20									Please see attached notes for all abbreviations and acronyms		
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.
VOC MS													
Dichlorodifluoromethane	<2	<2									<2	ug/l	TM15/PM69
Methyl Tertiary Butyl Ether	<1	<1									<1	ug/l	TM15/PM69
Chloromethane	<3	<3									<3	ug/l	TM15/PM69
Vinyl Chloride	<0.1	<0.1									<0.1	ug/l	TM15/PM69
Bromomethane	<1	<1									<1	ug/l	TM15/PM69
Chloroethane	<3	<3									<3	ug/l	TM15/PM69
Trichlorofluoromethane	<3	<3									<3	ug/l	TM15/PM69
1,1-Dichloroethene (1,1 DCE)	<3	<3									<3	ug/l	TM15/PM69
Dichloromethane (DCM)	<3	<3									<3	ug/l	TM15/PM69
trans-1-2-Dichloroethene	<3	<3									<3	ug/l	TM15/PM69
1,1-Dichloroethane	<3	<3									<3	ug/l	TM15/PM69
cis-1-2-Dichloroethene	<3	<3									<3	ug/l	TM15/PM69
2,2-Dichloropropane	<1	<1									<1	ug/l	TM15/PM69
Bromochloromethane	<2	<2									<2	ug/l	TM15/PM69
Chloroform	<2	<2									<2	ug/l	TM15/PM69
1,1,1-Trichloroethane	<2	<2									<2	ug/l	TM15/PM69
1,1-Dichloropropene	<3	<3									<3	ug/l	TM15/PM69
Carbon tetrachloride	<2	<2									<2	ug/l	TM15/PM69
1,2-Dichloroethane	<2	<2									<2	ug/l	TM15/PM69
Benzene	<1	<1									<1	ug/l	TM15/PM69
Trichloroethene (TCE)	<3	<3									<3	ug/l	TM15/PM69
1,2-Dichloropropane	<2	<2									<2	ug/l	TM15/PM69
Dibromomethane	<3	<3									<3	ug/l	TM15/PM69
Bromodichloromethane	<2	<2									<2	ug/l	TM15/PM69
cis-1-3-Dichloropropene	<2	<2									<2	ug/l	TM15/PM69
Toluene	<2	<2									<2	ug/l	TM15/PM69
trans-1-3-Dichloropropene	<2	<2									<2	ug/l	TM15/PM69
1,1,2-Trichloroethane	<2	<2									<2	ug/l	TM15/PM69
Tetrachloroethene (PCE)	<3	<3									<3	ug/l	TM15/PM69
1,3-Dichloropropane	<2	<2									<2	ug/l	TM15/PM69
Dibromochloromethane	<2	<2									<2	ug/l	TM15/PM69
1,2-Dibromoethane	<2	<2									<2	ug/l	TM15/PM69
Chlorobenzene	<2	<2									<2	ug/l	TM15/PM69
1,1,1,2-Tetrachloroethane	<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
Styrene	<2	<2									<2	ug/l	TM15/PM69
Bromoform	<2	<2									<2	ug/l	TM15/PM69
Isopropylbenzene	<3	<3									<3	ug/l	TM15/PM69
1,1,2,2-Tetrachloroethane	<4	<4									<4	ug/l	TM15/PM69
Bromobenzene	<2	<2									<2	ug/l	TM15/PM69
1,2,3-Trichloropropane	<3	<3									<3	ug/l	TM15/PM69
Propylbenzene	<3	<3									<3	ug/l	TM15/PM69
2-Chlorotoluene	<3	<3									<3	ug/l	TM15/PM69
1,3,5-Trimethylbenzene	<3	<3									<3	ug/l	TM15/PM69
4-Chlorotoluene	<3	<3									<3	ug/l	TM15/PM69
tert-Butylbenzene	<3	<3									<3	ug/l	TM15/PM69
1,2,4-Trimethylbenzene	<3	<3									<3	ug/l	TM15/PM69
sec-Butylbenzene	<3	<3									<3	ug/l	TM15/PM69
4-Isopropyltoluene	<3	<3									<3	ug/l	TM15/PM69
1,3-Dichlorobenzene	<3	<3									<3	ug/l	TM15/PM69
1,4-Dichlorobenzene	<3	<3									<3	ug/l	TM15/PM69
n-Butylbenzene	<3	<3									<3	ug/l	TM15/PM69
1,2-Dichlorobenzene	<3	<3									<3	ug/l	TM15/PM69
1,2-Dibromo-3-chloropropane	<2	<2									<2	ug/l	TM15/PM69
1,2,4-Trichlorobenzene	<3	<3									<3	ug/l	TM15/PM69
Hexachlorobutadiene	<3	<3									<3	ug/l	TM15/PM69
Naphthalene	<2	19									<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3	<3									<3	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	89	90									<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	111	111									<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	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.

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

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

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.	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.
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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	184-186	LOD/LOR	Units	Method No.
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			
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

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										LOD/LOR	Units	Method No.
Date of Receipt	09/12/2015												
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.

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

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

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
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.	199-201	202-204									LOD/LOR	Units	Method No.
Sample ID	BH105	BH105											
Depth	1.00	2.00											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/12/2015	09/12/2015											
Sample Type	Soil	Soil											
Batch Number	6	6											
Date of Receipt	11/12/2015	11/12/2015											
Arsenic #M	<0.5	2.5									<0.5	mg/kg	TM30/PM15
Cadmium #M	7.4	6.3									<0.1	mg/kg	TM30/PM15
Chromium #M	17.0	58.8									<0.5	mg/kg	TM30/PM15
Copper #M	-	12									<1	mg/kg	TM30/PM15
Lead #M	26	23									<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1									<0.1	mg/kg	TM30/PM15
Nickel #M	2.4	9.9									<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1									<1	mg/kg	TM30/PM15
Vanadium	4	12									<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.4	0.3									<0.1	mg/kg	TM74/PM32
Zinc #M	31	23									<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	0.04	<0.03									<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.05	<0.03									<0.03	mg/kg	TM4/PM8
Pyrene #	0.05	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.06	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene #M	0.04	0.02									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	<0.07	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.04	<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	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	106	120									<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.	199-201	202-204									LOD/LOR	Units	Method No.
Sample ID	BH105	BH105											
Depth	1.00	2.00											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/12/2015	09/12/2015											
Sample Type	Soil	Soil											
Batch Number	6	6											
Date of Receipt	11/12/2015	11/12/2015											
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
Natural Moisture Content	1.6	11.1									<0.1	%	PM4/PM0
Total Cyanide #M	<0.5	<0.5									<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	<0.02	0.33									<0.02	%	TM21/PM24
pH #M	12.13	9.29									<0.01	pH units	TM73/PM11
Sample Type	Sand	Clayey Sand										None	PM13/PM0
Sample Colour	Light Brown	Medium Brown										None	PM13/PM0
Other Items	stones	mostly stones and water										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	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

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.

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	
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

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

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

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.	208-210	214-216									LOD/LOR	Units	Method No.
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											
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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	208-210	214-216									LOD/LOR	Units	Method No.
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											
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									LOD/LOR	Units	Method No.
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											
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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	208-210												
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.
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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	208-210										LOD/LOR	Units	Method No.
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												
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/TM36/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/TM36/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10										<10	ug/l	TM5/TM36/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												
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												
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

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.	208-210												
Sample ID	WS205												
Depth	0.50										Please see attached notes for all abbreviations and acronyms		
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.
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	<10										<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
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	<10										<10	ug/kg	TM16/PM8
Dibenzofuran #M	<10										<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

All solid results are expressed on a dry weight basis unless stated otherwise.

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.	208-210												
Sample ID	WS205												
Depth	0.50										Please see attached notes for all abbreviations and acronyms		
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.
SVOC MS													
Phenols													
2-Chlorophenol	<1										<1	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	<1										<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5										<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1										<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5										<0.5	ug/l	TM16/PM30
4-Methylphenol	<1										<1	ug/l	TM16/PM30
4-Nitrophenol	<10										<10	ug/l	TM16/PM30
Pentachlorophenol	<1										<1	ug/l	TM16/PM30
Phenol	<1										<1	ug/l	TM16/PM30
PAHs													
2-Chloronaphthalene	<1										<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1										<1	ug/l	TM16/PM30
Phthalates													
Bis(2-ethylhexyl) phthalate	<5										<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1										<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5										<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1										<1	ug/l	TM16/PM30
Diethyl phthalate	<1										<1	ug/l	TM16/PM30
Dimethyl phthalate	<1										<1	ug/l	TM16/PM30
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	<0.5										<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5										<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.	208-210												
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												

Please see attached notes for all abbreviations and acronyms

											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
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 #	<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	139										<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.	208-210												
Sample ID	WS205												
Depth	0.50										Please see attached notes for all abbreviations and acronyms		
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.
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	<2										<2	ug/l	TM15/PM69
1,2,3-Trichlorobenzene	<3										<3	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

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	7	WS205	0.50	209	23/12/2015	**Mass of Dry Sample**	55.4 (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.

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 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

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

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

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

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

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.	226-228	229-231	235-237	244-246	250-252	271-273					LOD/LOR	Units	Method No.
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							
Arsenic #M	8.0	8.8	21.5	24.1	19.1	1.4					<0.5	mg/kg	TM30/PM15
Cadmium #M	0.6	<0.1	0.3	0.4	0.1	10.1					<0.1	mg/kg	TM30/PM15
Chromium #M	66.0	87.3	58.0	66.3	51.4	16.1					<0.5	mg/kg	TM30/PM15
Copper #M	38	11	153	173	86	17					<1	mg/kg	TM30/PM15
Lead #M	85	18	68	192	106	46					<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1	0.3	6.5	0.4	<0.1					<0.1	mg/kg	TM30/PM15
Nickel #M	30.2	14.9	63.4	64.9	38.9	5.7					<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1	2	2	2	<1					<1	mg/kg	TM30/PM15
Vanadium	38	18	98	99	56	5					<1	mg/kg	TM30/PM15
Water Soluble Boron #M	1.3	1.2	4.0	2.0	1.9	0.2					<0.1	mg/kg	TM74/PM32
Zinc #M	62	20	109	185	142	42					<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #M	<0.04	<0.04	0.77	21.42 AC	0.92	<0.04					<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.80	10.58 AC	0.96	<0.03					<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.06	<0.05	1.08	222.46 AC	0.63	<0.05					<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	0.91	175.01 AC	0.77	<0.04					<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.38	0.17	9.61	1260.46 AC	5.71	0.05					<0.03	mg/kg	TM4/PM8
Anthracene #	0.09	0.04	2.75	363.51 AC	1.66	<0.04					<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.58	0.27	18.70	1312.54 AC	7.70	0.06					<0.03	mg/kg	TM4/PM8
Pyrene #	0.52	0.25	18.76	1372.58 AC	7.68	0.06					<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.27	0.14	9.46	591.71 AC	3.66	0.06					<0.06	mg/kg	TM4/PM8
Chrysene #M	0.31	0.15	10.70	628.96 AC	4.00	0.05					<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.35	0.18	15.65	801.62 AC	5.35	<0.07					<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.28	0.14	11.91	649.52 AC	4.23	0.05					<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.14	0.07	6.32	317.37 AC	2.42	<0.04					<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	1.42	58.58 AC	0.73	<0.04					<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.12	0.07	6.75	301.71 AC	2.59	<0.04					<0.04	mg/kg	TM4/PM8
PAH 16 Total	3.1	1.5	115.6	8088.0 AC	49.0	<0.6					<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.25	0.13	11.27	577.17 AC	3.85	<0.05					<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.10	0.05	4.38	224.45 AC	1.50	<0.02					<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	100	102	103	130 AC	114	116					<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6					<6	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
Toluene #M	<3	<3	5	24	13	<3					<3	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
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

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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	226-228	229-231	235-237	244-246	250-252	271-273					LOD/LOR	Units	Method No.
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							
TPH CWG													
Aliphatics													
>C5-C6 #M	<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	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	0.3	<0.1	<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	mg/kg	TM5/PM16
>C12-C16 #M	<4	<4	<4	23	<4	<4					<4	mg/kg	TM5/PM16
>C16-C21 #M	20	<7	12	111	9	<7					<7	mg/kg	TM5/PM16
>C21-C35 #M	436	<7	35	266	<7	62					<7	mg/kg	TM5/PM16
>C35-C44	392	<7	<7	53	<7	<7					<7	mg/kg	TM5/PM16
Total aliphatics C5-44	848	<26	47	453	<26	62					<26	mg/kg	TM5/TM36/PM16
Aromatics													
>C5-EC7	<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	mg/kg	TM36/PM12
>EC8-EC10 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>EC10-EC12	<0.2	<0.2	1.7	22.9	1.7	<0.2					<0.2	mg/kg	TM5/PM16
>EC12-EC16	8	<4	37	467	28	<4					<4	mg/kg	TM5/PM16
>EC16-EC21	93	<7	416	3055	159	<7					<7	mg/kg	TM5/PM16
>EC21-EC35	925	<7	1069	5438	401	31					<7	mg/kg	TM5/PM16
>EC35-EC44	1019	<7	106	543	40	<7					<7	mg/kg	TM5/PM16
Total aromatics C5-44	2045	<26	1630	9526	630	31					<26	mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	2893	<52	1677	9979	630	93					<52	mg/kg	TM5/TM36/PM16
PCB 28 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35					<35	ug/kg	TM17/PM8
2-Chlorophenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
Natural Moisture Content	13.1	12.2	14.8	13.6	17.1	3.5					<0.1	%	PM4/PM0
2-Methylphenol	<50 AA	<10	<50 AA	<100 AB	159	<10					<10	ug/kg	TM16/PM8
2-Nitrophenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<50 AA	<10	<50 AA	3030 AB	309	<10					<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
4-Methylphenol	<50 AA	<10	<50 AA	2907 AB	488	<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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	226-228	229-231	235-237	244-246	250-252	271-273					LOD/LOR	Units	Method No.
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							
4-Nitrophenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
Pentachlorophenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
Phenol	<50 AA	<10	<50 AA	<100 AB	<10	<10					<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<50 AA	<10	<50 AA	5937 AB	956	<10					<10	ug/kg	TM16/PM8
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Chromium III	66.0	87.3	58.0	66.3	51.4	16.1					<0.5	mg/kg	NONE/NONE
Total Cyanide #M	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	1.46	0.47	13.57	14.20	6.44	0.10					<0.02	%	TM21/PM24
pH #M	8.71	9.25	9.42	8.46	8.29	11.84					<0.01	pH units	TM73/PM11
Sample Type	Clay	Sand	Loamy Sand	Loamy Sand	Loamy Sand	Sand						None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Dark Grey	Dark Grey	Medium Brown	Light Brown						None	PM13/PM0
Other Items	sand, clinker and stones	stones	stones	stones and tar	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.	226-228	235-237	250-252	271-273							LOD/LOR	Units	Method No.
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									
Dissolved Arsenic #	30.4	46.5	8.0	3.0							<2.5	ug/l	TM30/PM14
Dissolved Boron #	50	187	61	<12							<12	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5	<0.5	<0.5	<0.5							<0.5	ug/l	TM30/PM14
Dissolved Chromium #	6.5	6.1	3.0	12.6							<1.5	ug/l	TM30/PM14
Dissolved Copper #	14	22	<7	<7							<7	ug/l	TM30/PM14
Dissolved Lead #	10	10	<5	<5							<5	ug/l	TM30/PM14
Dissolved Mercury #	<1	<1	<1	<1							<1	ug/l	TM30/PM14
Dissolved Nickel #	5	4	<2	<2							<2	ug/l	TM30/PM14
Dissolved Selenium #	<3	<3	<3	<3							<3	ug/l	TM30/PM14
Dissolved Vanadium #	22.6	39.8	5.1	2.6							<1.5	ug/l	TM30/PM14
Dissolved Zinc #	7	10	5	4							<3	ug/l	TM30/PM14
PAH MS													
Naphthalene	<0.1	<0.1	<0.1	<0.1							<0.1	ug/l	TM4/PM30
Acenaphthylene	0.040	0.130	0.060	0.040							<0.013	ug/l	TM4/PM30
Acenaphthene	0.040	0.140	0.050	0.080							<0.013	ug/l	TM4/PM30
Fluorene	0.040	0.110	0.040	0.080							<0.014	ug/l	TM4/PM30
Phenanthrene	0.100	0.830	0.090	0.130							<0.011	ug/l	TM4/PM30
Anthracene	0.050	0.320	0.050	0.030							<0.013	ug/l	TM4/PM30
Fluoranthene	0.220	2.930	0.220	0.110							<0.012	ug/l	TM4/PM30
Pyrene	0.310	3.740	0.270	0.080							<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	0.120	1.580	0.150	0.040							<0.015	ug/l	TM4/PM30
Chrysene	0.170	2.280	0.170	0.040							<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	0.200	3.240	0.240	0.070							<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	0.120	1.820	0.170	0.040							<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.040	0.710	0.070	0.030							<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.01	0.16	0.02	<0.01							<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	0.040	0.650	0.070	0.030							<0.011	ug/l	TM4/PM30
PAH 16 Total	1.490	18.640	1.670	0.800							<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.14	2.33	0.17	0.05							<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.06	0.91	0.07	0.02							<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	77	88	74	89							<0	%	TM4/PM30
Methyl Tertiary Butyl Ether	<1	<1	<1	<1							<1	ug/l	TM15/PM69
Benzene	<1	<1	<1	<1							<1	ug/l	TM15/PM69
Toluene	<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
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
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								

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
TPH CWG													
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/TM36/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/TM36/PM30/PM69
Total aliphatics and aromatics(C5-44)	<10	<10	<10	<10							<10	ug/l	TM5/TM36/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							LOD/LOR	Units	Method No.
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					LOD/LOR	Units	Method No.
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							
SVOC MS													
Phenols													
2-Chlorophenol #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2-Methylphenol	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	159	<10					<10	ug/kg	TM16/PM8
2-Nitrophenol	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<50$_{AA}$	<10	<50$_{AA}$	3030$_{AB}$	309	<10					<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
4-Methylphenol	<50$_{AA}$	<10	<50$_{AA}$	2907$_{AB}$	488	<10					<10	ug/kg	TM16/PM8
4-Nitrophenol	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Pentachlorophenol	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Phenol #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	3271$_{AA}$	<10	411$_{AA}$	121597$_{AB}$	1828	<10					<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	<500$_{AA}$	<100	<500$_{AA}$	<1000$_{AB}$	<100	<100					<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<500$_{AA}$	<100	<500$_{AA}$	<1000$_{AB}$	<100	<100					<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<500$_{AA}$	<100	<500$_{AA}$	<1000$_{AB}$	<100	<100					<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<500$_{AA}$	<100	<500$_{AA}$	<1000$_{AB}$	<100	<100					<100	ug/kg	TM16/PM8
Diethyl phthalate	<500$_{AA}$	<100	<500$_{AA}$	<1000$_{AB}$	<100	<100					<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<500$_{AA}$	<100	<500$_{AA}$	<1000$_{AB}$	<100	<100					<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2-Nitroaniline	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
3-Nitroaniline	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
4-Chloroaniline	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
4-Nitroaniline	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Azobenzene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Carbazole	5747$_{AA}$	<10	<50$_{AA}$	50353$_{AB}$	1366	<10					<10	ug/kg	TM16/PM8
Dibenzofuran #M	2429$_{AA}$	<10	490$_{AA}$	72535$_{AB}$	1188	<10					<10	ug/kg	TM16/PM8
Hexachlorobenzene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Hexachloroethane	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Isophorone #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<10	<10					<10	ug/kg	TM16/PM8
Nitrobenzene #M	<50$_{AA}$	<10	<50$_{AA}$	<100$_{AB}$	<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							LOD/LOR	Units	Method No.
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									
SVOC MS													
Phenols													
2-Chlorophenol	<1	<1	<1	<1							<1	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	<1	<1	<1	<1							<1	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	<1	<1	<1	<1							<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1	<1							<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10	<10							<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Phenol	<1	<1	<1	<1							<1	ug/l	TM16/PM30
PAHs													
2-Chloronaphthalene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Phthalates													
Bis(2-ethylhexyl) phthalate	<5	<5	<5	<5							<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5	<1.5	<1.5	<1.5							<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Diethyl phthalate	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Other SVOCs													
1,2-Dichlorobenzene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1	<1							<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1	<1							<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1	<1	<1	<1							<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1	<1							<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1	<1	<1	<1							<1	ug/l	TM16/PM30
4-Nitroaniline	<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	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	<0.5	<0.5							<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Carbazole	<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	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	<1	<1							<1	ug/l	TM16/PM30
Isophorone	<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	ug/l	TM16/PM30
Nitrobenzene	<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: 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						
VOC MS												
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2					<2	ug/kg
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6					<6	ug/kg
Chloromethane #	<3	<3	<3	<3	<3	<3					<3	ug/kg
Vinyl Chloride	<2	<2	<2	<2	<2	<2					<2	ug/kg
Bromomethane	<1	<1	<1	<1	<1	<1					<1	ug/kg
Chloroethane #M	<6	<6	<6	<6	<6	<6					<6	ug/kg
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3					<3	ug/kg
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6					<6	ug/kg
Dichloromethane (DCM) #	<7	<7	<7	<7	<7	<7					<7	ug/kg
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3					<3	ug/kg
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6					<6	ug/kg
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7					<7	ug/kg
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4					<4	ug/kg
Bromochloromethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
Chloroform #M	<5	<5	<5	<5	<5	<5					<5	ug/kg
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3					<3	ug/kg
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg
Benzene #M	<5	<5	<5	<5	<5	<5					<5	ug/kg
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5					<5	ug/kg
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
Dibromomethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4					<4	ug/kg
Toluene #M	<3	<3	5	24	13	<3					<3	ug/kg
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3					<3	ug/kg
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
Tetrachloroethene (PCE) #	26	<3	113	22	157	<3					<3	ug/kg
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3					<3	ug/kg
Chlorobenzene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg
Ethylbenzene #M	<3	<3	<3	62	<3	<3					<3	ug/kg
p/m-Xylene #M	<4	<4	<4	69	13	<4					<4	ug/kg
o-Xylene #M	<4	<4	<4	27	9	<4					<4	ug/kg
Styrene	<3	<3	<3	<3	<3	<3					<3	ug/kg
Bromoform	<4	<4	<4	<4	<4	<4					<4	ug/kg
Isopropylbenzene #	<3	<3	<3	16	<3	<3					<3	ug/kg
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3					<3	ug/kg
Bromobenzene	<2	<2	<2	<2	<2	<2					<2	ug/kg
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
Propylbenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg
2-Chlorotoluene	<3	<3	<3	<3	<3	<3					<3	ug/kg
1,3,5-Trimethylbenzene #	<3	<3	<3	31	<3	<3					<3	ug/kg
4-Chlorotoluene	<3	<3	<3	<3	<3	<3					<3	ug/kg
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5					<5	ug/kg
1,2,4-Trimethylbenzene #	<6	<6	<6	38	11	<6					<6	ug/kg
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4					<4	ug/kg
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg
n-Butylbenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4					<4	ug/kg
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7					<7	ug/kg
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4					<4	ug/kg
Naphthalene	<27	<27	<27	6844	951	<27					<27	ug/kg
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7					<7	ug/kg
Surrogate Recovery Toluene D8	112	111	103	83	101	113					<0	%
Surrogate Recovery 4-Bromofluorobenzene	111	130	74	70	81	131					<0	%

Please see attached notes for all abbreviations and acronyms

LOD/LOR	Units	Method No.
<2	ug/kg	TM15/PM10
<6	ug/kg	TM15/PM10
<3	ug/kg	TM15/PM10
<2	ug/kg	TM15/PM10
<1	ug/kg	TM15/PM10
<6	ug/kg	TM15/PM10
<3	ug/kg	TM15/PM10
<6	ug/kg	TM15/PM10
<7	ug/kg	TM15/PM10
<3	ug/kg	TM15/PM10
<6	ug/kg	TM15/PM10
<7	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<5	ug/kg	TM15/PM10
<5	ug/kg	TM15/PM10
<3	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<5	ug/kg	TM15/PM10
<5	ug/kg	TM15/PM10
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<3	ug/kg	TM15/PM10
<3	ug/kg	TM15/PM10
<3	ug/kg	TM15/PM10
<5	ug/kg	TM15/PM10
<6	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<4	ug/kg	TM15/PM10
<27	ug/kg	TM15/PM10
<7	ug/kg	TM15/PM10
<0	%	TM15/PM10
<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							LOD/LOR	Units	Method No.
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									
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

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

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.

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

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

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

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

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									
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									

Please see attached notes for all abbreviations and acronyms

											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								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

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.	289-291	292-294	313-315									
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									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Phenol	<10	<10	<10								<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10	<10								<10	ug/kg	TM16/PM8
Total Cyanide #M	<0.5	<0.5	<0.5								<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.24	0.19	1.79								<0.02	%	TM21/PM24
pH #M	9.30	8.90	9.56								<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand	Clayey Loam									None	PM13/PM0
Sample Colour	Medium Grey	Medium Brown	Medium Brown									None	PM13/PM0
Other Items	stones	stones	stones									None	PM13/PM0

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.

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

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

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.	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											
Arsenic #M	6.9	5.3									<0.5	mg/kg	TM30/PM15
Cadmium #M	0.1	<0.1									<0.1	mg/kg	TM30/PM15
Chromium #M	58.4	68.2									<0.5	mg/kg	TM30/PM15
Copper #M	22	7									<1	mg/kg	TM30/PM15
Lead #M	91	10									<5	mg/kg	TM30/PM15
Mercury #M	0.1	<0.1									<0.1	mg/kg	TM30/PM15
Nickel #M	12.4	20.8									<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1									<1	mg/kg	TM30/PM15
Vanadium	21	22									<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.4	0.5									<0.1	mg/kg	TM74/PM32
Zinc #M	25	82									<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	0.20	<0.03									<0.03	mg/kg	TM4/PM8
Anthracene #	0.08	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.64	0.04									<0.03	mg/kg	TM4/PM8
Pyrene #	0.60	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.41	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene #M	0.42	0.05									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.89	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.60	0.06									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.30	<0.04									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.06	<0.04									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.32	<0.04									<0.04	mg/kg	TM4/PM8
PAH 16 Total	4.6	<0.6									<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.64	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.25	<0.02									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	99	110									<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	117	-									<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

Please see attached notes for all abbreviations and acronyms

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											
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/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	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/TM36/PM16
Total aliphatics and aromatics(C5-44)	218	79									<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	15.8	21.4									<0.1	%	PM4/PM0
2-Methylphenol	<10	<10									<10	ug/kg	TM16/PM8

Client Name: Geotechnics
Reference: PN153428
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JE Job No.: 15/17326

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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											
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

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.	334-336												
Sample ID	BH109												
Depth	1.00-1.20										Please see attached notes for all abbreviations and acronyms		
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

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										Please see attached notes for all abbreviations and acronyms		
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
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 #	<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

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	10	BH109	1.00-1.20	335	24/12/2015	**Mass of Dry Sample**	49.9 (g)
					24/12/2015	**General Description (Bulk Analysis)**	Soil/Stone/Brick
					24/12/2015	**Asbestos Containing Material**	None
					24/12/2015	**Asbestos Containing Material (2)**	None
					24/12/2015	**Asbestos Screen**	NAD
					24/12/2015	**Asbestos Screen (2)**	NAD
					24/12/2015	**Asbestos Level**	NAD
					24/12/2015	**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.

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 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

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

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

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

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

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.	349-351	355									LOD/LOR	Units	Method No.
Sample ID	WS218A	WS218A											
Depth	0.50	1.20											
COC No / misc													
Containers	V J	V											
Sample Date	<>	<>											
Sample Type	Soil	Soil											
Batch Number	11	11											
Date of Receipt	18/12/2015	18/12/2015											
Arsenic #M	0.9	1.5									<0.5	mg/kg	TM30/PM15
Cadmium #M	12.5	5.4									<0.1	mg/kg	TM30/PM15
Chromium #M	17.6	55.9									<0.5	mg/kg	TM30/PM15
Copper #M	12	14									<1	mg/kg	TM30/PM15
Lead #M	42	31									<5	mg/kg	TM30/PM15
Mercury #M	<0.1	<0.1									<0.1	mg/kg	TM30/PM15
Nickel #M	5.5	11.4									<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1									<1	mg/kg	TM30/PM15
Vanadium	4	12									<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.2	0.2									<0.1	mg/kg	TM74/PM32
Zinc #M	32	42									<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	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene #M	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene #M	0.02	0.02									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	<0.07	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<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	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	114	103									<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #M	<6	-									<6	ug/kg	TM15/PM10
Benzene #M	<5	-									<5	ug/kg	TM15/PM10
Toluene #M	9	-									<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.	349-351	355											
Sample ID	WS218A	WS218A											
Depth	0.50	1.20									Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	V J	V											
Sample Date	<>	<>											
Sample Type	Soil	Soil											
Batch Number	11	11											
Date of Receipt	18/12/2015	18/12/2015									LOD/LOR	Units	Method No.
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	1.3	13.2									<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.	349-351	355											
Sample ID	WS218A	WS218A											
Depth	0.50	1.20											
COC No / misc													
Containers	V J	V											
Sample Date	<>	<>											
Sample Type	Soil	Soil											
Batch Number	11	11											
Date of Receipt	18/12/2015	18/12/2015											
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
Hexavalent Chromium #	<0.3	<0.3									<0.3	mg/kg	TM38/PM20
Chromium III	17.6	55.9									<0.5	mg/kg	NONE/NONE
Total Cyanide #M	<0.5	<0.5									<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	<0.02	0.24									<0.02	%	TM21/PM24
pH #M	12.46	9.54									<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand										None	PM13/PM0
Sample Colour	Light Brown	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

SVOC Report : **Solid**

J E Sample No.	349-351												
Sample ID	WS218A												
Depth	0.50										Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	V J												
Sample Date	<>												
Sample Type	Soil												
Batch Number	11										LOD/LOR	Units	Method No.
Date of Receipt	18/12/2015												
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	<10										<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
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	13										<10	ug/kg	TM16/PM8
Dibenzofuran #M	<10										<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

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

VOC Report : **Solid**

J E Sample No.	349-351												
Sample ID	WS218A												
Depth	0.50												
COC No / misc													
Containers	V J												
Sample Date	<>												
Sample Type	Soil												
Batch Number	11												
Date of Receipt	18/12/2015												

Please see attached notes for all abbreviations and acronyms

											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	9										<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
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 #	<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	139										<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	11	WS218A	0.50	350	24/12/2015	**Mass of Dry Sample**	56.2 (g)
					24/12/2015	**General Description (Bulk Analysis)**	Stones/Soil
					24/12/2015	**Asbestos Containing Material**	None
					24/12/2015	**Asbestos Containing Material (2)**	None
					24/12/2015	**Asbestos Screen**	NAD
					24/12/2015	**Asbestos Screen (2)**	NAD
					24/12/2015	**Asbestos Level**	NAD
					24/12/2015	**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.

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 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

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

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.
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.	356										LOD/LOR	Units	Method No.
Sample ID	WS223												
Depth	2.00												
COC No / misc													
Containers	T												
Sample Date	<>												
Sample Type	Soil												
Batch Number	12												
Date of Receipt	04/01/2016												
Arsenic #M	14.6										<0.5	mg/kg	TM30/PM15
Chromium #M	35.2										<0.5	mg/kg	TM30/PM15
Copper #M	150										<1	mg/kg	TM30/PM15
Lead #M	272										<5	mg/kg	TM30/PM15
Mercury #M	0.4										<0.1	mg/kg	TM30/PM15
Nickel #M	22.6										<0.7	mg/kg	TM30/PM15
Selenium #M	<1										<1	mg/kg	TM30/PM15
Vanadium	23										<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.9										<0.1	mg/kg	TM74/PM32
Zinc #M	103										<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	104										<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

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

Please see attached notes for all abbreviations and acronyms

J E Sample No.	356												
Sample ID	WS223												
Depth	2.00												
COC No / misc													
Containers	T												
Sample Date	<>												
Sample Type	Soil												
Batch Number	12												
Date of Receipt	04/01/2016												
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	14.5											<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	35.2											<0.5	mg/kg	NONE/NONE
Total Cyanide #M	<0.5											<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	4.96											<0.02	%	TM21/PM24

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.	356												
Sample ID	WS223												
Depth	2.00												
COC No / misc													
Containers	T												
Sample Date	<>												
Sample Type	Soil												
Batch Number	12												
Date of Receipt	04/01/2016												
pH #M	8.15											<0.01	pH units	TM73/PM11
Sample Type	Clayey Loam												None	PM13/PM0
Sample Colour	Dark Brown												None	PM13/PM0
Other Items	roots, grass, stones												None	PM13/PM0

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.

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

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Zone 3
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CH5 2UA

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

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
$H=H_2SO_4$, Z=ZnAc, N=NaOH, $HN=HN0_3$

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75			LOD/LOR	Units	Method No.
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					
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(bk)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
$H=H_2SO_4$, Z=ZnAc, N=NaOH, $HN=HN0_3$

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75			LOD/LOR	Units	Method No.
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					
TPH CWG													
Aliphatics													
>C5-C6 #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
>C6-C8 #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
>C8-C10 #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
>C10-C12 #	<5	<5	<5	<5	<5	<5	9	<5			<5	ug/l	TM5/PM30
>C12-C16 #	<10	<10	<10	<10	<10	<10	1280	<10			<10	ug/l	TM5/PM30
>C16-C21 #	<10	<10	<10	<10	<10	<10	10	<10			<10	ug/l	TM5/PM30
>C21-C35 #	<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	ug/l	TM5/TM36/PM30
Aromatics													
>C5-EC7 #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
>EC7-EC8 #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
>EC8-EC10 #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM36/PM12
>EC10-EC12 #	<5	<5	<5	<5	<5	<5	<5	<5			<5	ug/l	TM5/PM30
>EC12-EC16 #	<10	<10	<10	<10	<10	<10	80	<10			<10	ug/l	TM5/PM30
>EC16-EC21 #	<10	<10	<10	<10	<10	<10	<10	<10			<10	ug/l	TM5/PM30
>EC21-EC35 #	<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	ug/l	TM5/PM30
Total aliphatics and aromatics(C5-35) #	<10	<10	<10	<10	<10	<10	1379	<10			<10	ug/l	TM5/TM36/PM30
PCB 28	<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	ug/l	TM17/PM30
PCB 101	<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	ug/l	TM17/PM30
PCB 138	<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	ug/l	TM17/PM30
PCB 180	<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	ug/l	TM17/PM30
Resorcinol	<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	ug/l	TM26/PM0
Phenol	<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	ug/l	TM26/PM0
o-cresol	<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	ug/l	TM26/PM0
Xylenols	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	ug/l	TM26/PM0
1-naphthol	<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	ug/l	TM26/PM0
2-isopropylphenol	<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	ug/l	TM26/PM0
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

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
$H=H_2SO_4$, Z=ZnAc, N=NaOH, $HN=HN0_3$

J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75			LOD/LOR	Units	Method No.
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					
Total Cyanide #	0.15	0.01	0.01	<0.01	<0.01	0.01	0.01	0.01			<0.01	mg/l	TM89/PM0
Ammoniacal Nitrogen as N #	0.77	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03			<0.03	mg/l	TM38/PM0
Hexavalent Chromium #	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006			<0.006	mg/l	TM38/PM0
Total Dissolved Chromium III	<6	<6	<6	<6	<6	<6	<6	<6			<6	ug/l	NONE/NONE
Sulphide	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3			<0.3	mg/l	TM106/PM0
pH #	7.05	7.57	6.89	7.10	7.42	7.54	7.52	7.47			<0.01	pH units	TM73/PM0
Total Organic Carbon #	5	<2	<2	<2	<2	<2	49	<2			<2	mg/l	TM60/PM0

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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											Please see attached notes for all abbreviations and acronyms		
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.
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

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

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											Please see attached notes for all abbreviations and acronyms		
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			LOD/LOR	Units	Method No.
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					
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	5	<2			<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.

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

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

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:

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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NFD	No Fibres Detected
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N	Client Sample
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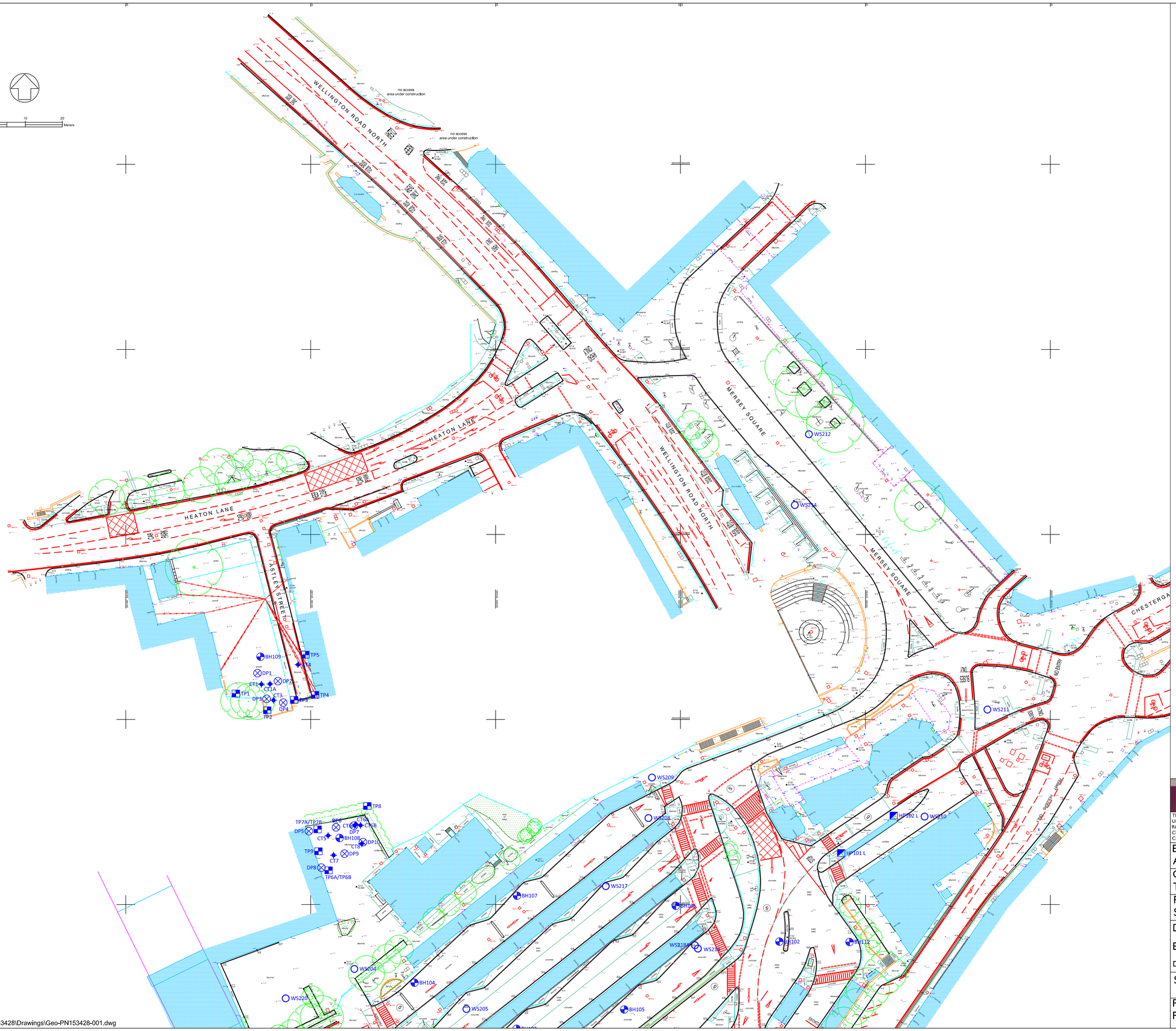
OC	Outside Calibration Range

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 (mE)	Northing (mN)	Level (mOD)
BH101	389243.299	390165.094	45.218
BH102	389276.731	390239.978	43.345
BH103	389205.655	390216.422	42.422
BH104	389178.078	390228.877	42.473
BH105	389234.786	390221.642	42.624
BH106	389248.707	390249.657	42.445
BH107	389205.789	390252.392	42.265
BH108	389157.818	390267.979	42.717
BH109	389136.430	390316.960	42.360
BH111	389253.456	390080.226	50.919
BH112	389295.702	390239.877	43.703
CT1	389136.670	390309.530	42.240
CT1A	389139.000	390309.600	42.190
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
CT6B	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	390270.840	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	389154.835	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	390232.600	42.851
WS205	389192.101	390221.783	42.391
WS206	389278.750	390194.812	48.125
WS208	389241.331	390273.366	42.350
WS209	389242.280	390284.319	42.673
WS210	389315.993	390273.770	44.431
WS211	389332.987	390302.677	44.884
WS212	389284.728	390377.074	45.736
WS214	389280.915	390357.942	46.345
WS217	389229.781	390254.966	42.295
WS218	389254.700	390238.100	42.750
WS218A	389253.900	390239.000	42.710
WS219	389259.659	390175.323	45.127
WS220	389143.232	390224.649	44.686
WS221	389275.017	390086.165	51.031
WS223	389237.657	390204.856	43.392
WS224	389229.683	390086.414	53.306

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Engineer:
Aecom

Client:
TfGM

Project:
Stockport Bus Station

Drawing Title:
Exploratory Hole Location Plan

Drawing 1 of 2

Scale: 1:500@A1

Date:
February 2016

Project No:
PN153428

File Name:
Geo-PN153428-001(1)

G:\Projects\Chester\2015\PN153428\Drawings\Geo-PN153428-001.dwg

Key

- Borehole
- CT
- Dynamic Probe
- Trial Pit
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BH108	389157.818	390267.979	42.717
BH109	389136.430	390316.960	42.360
BH111	389253.456	390080.226	50.919
BH112	389295.702	390239.877	43.703
CT1	389136.670	390309.530	42.240
CT1A	389139.000	390309.600	42.190
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
CT6B	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	390270.840	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	389154.835	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	390232.600	42.851
WS205	389192.101	390221.783	42.391
WS206	389278.750	390194.812	48.125
WS208	389241.331	390273.366	42.350
WS209	389242.280	390284.319	42.673
WS210	389315.993	390273.770	44.431
WS211	389332.987	390302.677	44.884
WS212	389284.728	390377.074	45.736
WS214	389280.915	390357.942	46.345
WS217	389229.781	390254.966	42.295
WS218	389254.700	390238.100	42.750
WS218A	389253.900	390239.000	42.710
WS219	389259.659	390175.323	45.127
WS220	389143.232	390224.649	44.686
WS221	389275.017	390086.165	51.031
WS223	389237.657	390204.856	43.392
WS224	389229.683	390086.414	53.306

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Project:
Stockport Bus Station

Drawing Title:

Exploratory Hole Location Plan

Drawing 2 of 2

Scale: 1:500@A1

Date:
February 2016

Project No:
PN153428

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Geo-PN153428-001(2)

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APPENDIX 14

Investigation Techniques and General Notes

INVESTIGATION TECHNIQUES

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.

GENERAL NOTES

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

Stockport Bus Station
Total Soils Testing

> Threshold Value
> 2x Threshold Value
>10 x Threshold value
Above LOD where no AGAC is avaliable

	Name	Date
Author:	WH	11/03/2016

Exploratory Hole				BH101	BH102	BH103	BH104	BH105	BH105	BH106	BH108	BH108	BH108	BH109	BH109	BH111	BH112	BH112	HP01	HP02	HP02
Depth				0.50-0.70	2.00	0.35-0.55	1.00-1.20	1.00	2.00	1.10-1.20	1.00	4.00	5.00	1.00-1.20	3.00-3.20	0.20-0.40	0.50	1.00	0.20	0.20	0.50
Target				Made Ground	Glacial Sands and Gravels	Made Ground	Glacial Sands and Gravels	Made Ground	Glacial Sands and Gravels	Glacial Sands and Gravels	Made Ground	Made Ground	Chester Pebble Beds	Made Ground	Glacial Sands and Gravels	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground
Strata Logs				Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Sand	Gravel	Gravel	Gravel	Gravel	Gravel	Sand	Sand	Sand
Determinant	LOD	Unit	LOD																		
Metals																					
Arsenic	<0.5	mg/kg	<0.5	1.5	1.9	1.4	5.3	<0.5	2.5	3	66.7	44.9	4.3	6.9	5.3	0.8	1.2	13.4	21.5	8	8.8
Cadmium	<0.1	mg/kg	<0.1	25	4.2		0.4	7.4	6.3	<0.1				0.1	<0.1		5.7	2.5	0.3	0.6	<0.1
Hexavalent Chromium	<0.3	mg/kg	<0.3			<0.3					<0.3	<0.3	<0.3			<0.3			<0.3	<0.3	<0.3
Chromium III	<0.5	mg/kg	<0.5			13.4					72	66.5	69.5			8			58	66	87.3
Chromium	<0.5	mg/kg	<0.5	11.5	31.8	13.4	62	17	58.8	93	72	66.5	69.5	58.4	68.2	8	15.3	15.5	58	66	87.3
Copper	<1	mg/kg	<1	17	13	4	15	NA	12	19	180	54	6	22	7	4	13	41	153	38	11
Lead	<5	mg/kg	<5	73	39	9	28	26	23	13	947	224	9	91	10	17	29	89	68	85	18
Mercury	<0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.2	0.7	<0.1	0.1	<0.1	<0.1	<0.1	0.2	0.3	<0.1	<0.1
Mercury	<0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.2	0.7	<0.1	0.1	<0.1	<0.1	<0.1	0.2	0.3	<0.1	<0.1
Nickel	<0.7	mg/kg	<0.7	4.8	10.9	6.4	15.9	2.4	9.9	11.6	39	25.4	15	12.4	20.8	4.9	5.7	17	63.4	30.2	14.9
Selenium	<1	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1
Vanadium	<1	mg/kg	<1	4	17	5	16	4	12	15	49	28	15	21	22	2	5		98	38	18
Zinc	<5	mg/kg	<5	50	44	41	82	31	23	22	495	53	23	25	82	34	26	55	109	62	20
Water Soluble Boron	<0.1	mg/kg	<0.1	0.2	0.3	<0.1	0.4	0.4	0.3	<0.1	0.6	0.5	0.3	0.4	0.5	0.1	0.1		4	1.3	1.2
Non Metals																					
Total Cyanide	<0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	9.6	0.7	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5
pH	<0.01	pH units	<0.01	9.42	9.38	8.92	9.77	12.13	9.29	9.56	8.48	8.82	8.67	8.36	8.36	8.43	11.23	8.48	9.42	8.71	9.25
Total Organic Carbon	<0.02	%	<0.02	<0.02	0.24	0.1	0.87	<0.02	0.33	1.79	11.89	1.24	0.14	0.32	0.15	0.08			13.57	1.46	0.47
TPH compounds																					
Benzene	<5	ug/kg	<5	<5		<5	30	<5	<5	<5			<5		<5						
Toluene	<5	ug/kg	<5	<5		<5	<5	<5	<5	<5			<5		<5						
Ethylbenzene	<5	ug/kg	<5	<5		<5	<5	<5	<5	<5			<5		<5						
o-Xylene	<5	ug/kg	<5	<5		<5	<5	<5	<5	<5			<5		<5						
m/p-Xylene	<5	ug/kg	<5	<5		<5	<5	<5	<5	<5			<5		<5						
MTBE	<5	ug/kg	<5	<5			<5	<5	<5	<5			<5		<5						
Aliphatics >C5-C6	<0.1	mg/kg	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aliphatics >C6-C8	<0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aliphatics >C8-C10	<0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Aliphatics >C10-C12	<0.2	mg/kg	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Aliphatics >C12-C16	<4	mg/kg	<4	<4	<4	<0.2	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Aliphatics >C16-C21	<7	mg/kg	<7	<7	<7	<4	<7	<7	<7	<7	27	<7	<7	<7	<7	<7	<7	<7	12	20	<7
Aliphatics >C21-C35	<7	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	360	67	<7	23	30	11	<7	<7	35	436	<7
Total aliphatics C5-35	<26	mg/kg	<26	<26	<26	<7	<26	<26	<26	<26	430	67	<26	<26	30	<26	<26	<26	47	848	<26
Aromatics >C5-EC7	<0.1	mg/kg	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aromatics >EC7-EC8	<0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aromatics >EC8-EC10	<0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aromatics> EC10-EC12	<0.2	mg/kg	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2	1.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.7	<0.2	<0.2
Aromatics >EC12-EC16	<4	mg/kg	<4	<4	<4	<0.2	9	<4	<4	<4	37	6	<4	<4	<4	<4	<4	6	37	8	<4
Aromatics >EC16-EC21	<7	mg/kg	<7	<7	<7	<4	50	<7	<7	<7	229	33	<7	8	<7	<7	<7	35	416	93	<7
Aromatics >EC21-EC35	<7	mg/kg	<7	<7	<7	<7	107	<7	<7	<7	543	98	<7	162	38	<7	31	74	1069	925	<7
Total aromatics C5-35	<26	mg/kg	<26	<26	<26	<7	177	<26	<26	<26	909	147	<26	218	49	<26	31	124	1630	2045	<26
Total aliphatics and aromatics (C5-35)	<52	mg/kg	<52	<52	<52	<26	177	<52	<52	<52	1339	214	<52	218	79	<52	<52	124	1677	2893	<52
PCBS																					
PCB101	<5	ug/kg	<5								<5	<50		<5		<5		<5	<5	<5	<5
PCB118	<5	ug/kg	<5								<5	<50		<5		<5		<5	<5	<5	<5
PCB138	<5	ug/kg	<5								<5	<50		<5		<5		<5	<5	<5	<5
PCB153	<5	ug/kg	<5								<5	<50		<5		<5		<5	<5	<5	<5
PCB180	<5	ug/kg	<5								<5	<50		<5		<5		<5	<5	<5	<5
PCB28	<5	ug/kg	<5								<5	<50		<5		<5		<5	<5	<5	<5
PCB52	<5	ug/kg	<5								<5	<50		<5		<5		<5	<5	<5	<5
Total 7 PCBs	#N/A	ug/kg	<35								<35	<350		<35		<35		<35	<35	<35	<35
Phenol																					
Phenol	<10	ug/kg	<10	<10	<10	<10	198			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
2,4-Dichlorophenol	<10	ug/kg	<10	<10	<10	<10	<10			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
2,4,5-Trichlorophenol	<10	ug/kg	<10	<10	<10	<10	<10			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
2-Chlorophenol	<10	ug/kg	<10	<10	<10	<10	<10			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
2-Methylphenol	<10	ug/kg	<10	<10	<10	<10	146			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
2-Nitrophenol	<10	ug/kg	<10	<10	<10	<10	<10			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
4-Chloro-3-methylphenol	<10	ug/kg	<10	<10	<10	<10	<10			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
4-Methylphenol	<10	ug/kg	<10	<10	<10	<10	357			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
4-Nitrophenol	<10	ug/kg	<10	<10	<10	<10	<10			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
2,4-Dimethylphenol	<10	ug/kg	<10	<10	<10	<10	320			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
2,4,6-Trichlorophenol	<10	ug/kg	<10	<10	<10	<10	<10			<10	<100	<10	<10	<10	<10	<10		<10	<50	<50	<10
Poly Aromatic Hydrocarbons																					
Acenaphthene	<0.05	mg/kg	<0.05	<0.05	NA	<0.05	11.61	<0.05	<0.05	0.07	2.79	0.17	<0.05	<0.05	<0.05	<0.05	NA	NA	1.08	0.06	<0.05
Acenaphthylene	<0.03	mg/kg	<0.03	<0.03	NA	<0.03	0.57	<0.03	<0.03	0.03	0.19	0.07	<0.03	0.03	<0.03	0.03	NA	NA	0.8	<0.03	<0.03
Anthracene	<0.04	mg/kg	<0.04	<0.04	NA	<0.04	14.68	<0.04	<0.04	0.2	3.61	0.45	<0.04	0.08	<0.04	0.14	NA	NA	2.75	0.09	0.04
Benzo (a) Anthracene	<0.06	mg/kg	<0.06	<0.06	NA	<0.06	22.09	0.06	<0.06	0.38	5.43	0.6	<0.06	0.41	<0.06	0.3	NA	NA	9.46	0.27	0.14
Benzo (a) Pyrene	<0.04	mg/kg	<0.04	<0.04	NA	<0.04	19.4	0.04		0.43	6.33	0.55	0.05	0.6	0.06	0.3	NA	NA	11.91	0.28	0.14
Benzo(k)fluoranthene	<0.02	mg/kg	<0.02	<0.02	NA	<0.02	7.61	<0.02	<0.02	0.16	2.51	0.21	<0.02	0.25	<0.02	0.13	NA	NA	4.38	0.1	0.05
Benzo(bk)fluoranthene	<0.07	mg/kg	<0.07	<0.07	NA	<0.07	27.17	<0.07	<0.07	0.57	8.95	0.76	<0.07	0.89	<0.07	0.47	NA	NA	15.65	0.35	0.18
Benzo(b)fluoranthene	<0.05	mg/kg	<0.05	<0.05	NA	<0.05	19.56	<0.05	<0.05	0.41	6.44	0.55	<0.05	0.64	<0.05	0.34	NA	NA	11.27	0.25	0.13
Benzo (ghi) perylene	<0.04	mg/kg	<0.04	<0.04	NA	<0.04	9.17	<0.04	<0.04	0.2	3.6	0.24	<0.04	0.32	<0.04	0.16	NA	NA	6.75	0.12	0.07
Chrysene	<0.02	mg/kg	<0.02	<0.02	NA	<0.02	23.02	0.04	0.02	0.45	6.34	0.72	0.05	0.42	0.05	0.35	NA	NA	10.7	0.31	0.15
Dibenzo (ah) Anthracene	<0.04	mg/kg	<0.04	<0.04	NA	<0.04	2.35	<0.04	<0.04	0.04	0.96	0.08	<0.04	0.06	<0.04	0.05	NA	NA	1.42	<0.04	<0.04
Fluoranthene	<0.03	mg/kg	<0.03	<0.03	NA	<0.03	56.83	0.05	<0.03	0.87	15.7	1.29	0.08	0.64	0.04	0.75	NA	NA	18.7	0.58	0.27
Fluorene	<0.04	mg/kg	<0.04	<0.04	NA	<0.04	9.05	<0.04	<0.04	0.05	1.85	0.21	<0.04	<0.04	<0.04	0.04	NA	NA	0.91	<0.04	<0.04
Indeno (123cd) pyrene	<0.04	mg/kg	<0.04	<0.04	NA	<0.04	9.29	0.04	<0.04	0.22	3.77	0.25	<0.04	0.3	<0.04	0.2	NA	NA	6.32	0.14	0.07
Naphthalene	<0.04	mg/kg	<0.04	<0.04	NA	<0.04	11.56	<0.04	<0.04	<0.04	2	0.23	<0.04	<0.04	<0.04	0.05	NA	NA	0.77	<0.04	<0.04
Phenanthrene	<0.03	mg/kg	<0.03	<0.03	NA	<0.03	63.86	0.04	<0.03	0.66	16.09	1.83	0.11	0.2	<0.03	0.43	NA	NA	9.61	0.38	0.17
Pyrene	<0.03	mg/kg	<0.03	<0.03	NA	<0.03	53.5	0.05	<0.03	0.76	13.88	1.36	0.1	0.6	<0.03	0.67	NA	NA	18.76	0.52	0.25
PAH 17 Total	<0.6	mg/kg	<0.6	<0.6	NA	<0.6	334.2	<0.6	<0.6	4.9	91.5	8.8	<0.6	4.6	<0.6	3.9	NA	NA	115.6	3.1	1.5
SVOCs																					
Pentachlorophenol	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
2,4-Dinitrotoluene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
2,6-Dinitrotoluene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
2-Chloronaphthalene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
2-Methylnaphthalene	<10	ug/kg	<10		<10						<100	112		22		<10		176	411	3271	<10
2-Nitroaniline	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
3-Nitroaniline	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
4-Methylphenol	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
4-Nitroaniline	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
4-Nitrophenol	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Azobenzene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Bis(2-chloroethoxy)methane	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Carbazole	<10	ug/kg	<10		<10						<100	184		28		<10		221	<50	5747	<10
Di-n-butylphthalate	<100	ug/kg	<100		<100						<1000	<100		<100		<100		<100	<500	<500	<100
Di-n-octylphthalate	<100	ug/kg	<100		<100						<1000	<100		<100		<100		<100	<500	<500	<100
Dibenzofuran	<10	ug/kg	<10		<10						<100	97		31		<10		272	490	2429	<10
Hexachlorobenzene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Hexachlorocyclopentadiene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Bis(2-chloroethyl)ether	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
4-Chloroaniline	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Nitrobenzene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Isophorone	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Hexachlorobutadiene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Hexachloroethane	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Butylbenzylphthalate	<100	ug/kg	<100		<100						<1000	<100		<100		<100		<100	<500	<500	<100
Diethylphthalate	<100	ug/kg	<100		<100						<1000	<100		<100		<100		<100	<500	<500	<100
Dimethyl phthalate	<100	ug/kg	<100		<100						<1000	<100		<100		<100		<100	<500	<500	<100
4-Bromophenylphenylether	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
1,2,4-Trichlorobenzene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
1,3-Dichlorobenzene	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
Benzo(b)fluoranthene	<0.05	mg/kg	<0.05	<0.05	NA	<0.05	19.56	<0.05	<0.05	0.41	6.44	0.55	<0.05	0.64	<0.05	0.34	NA	NA	11.27	0.25	0.13
4-Chlorophenylphenylether	<10	ug/kg	<10		<10						<100	<10		<10		<10		<10	<50	<50	<10
VOCs																					
Vinyl Chloride	<2	ug/kg	<2		<2						<2	<2		<2		<2		<2	<2	<2	<2
Trichloroethene (TCE)	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
Carbon tetrachloride	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Chlorobenzene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Chloroform	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
1,1,1-Trichloroethane	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
1,3-Dichlorobenzene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
1,4-Dichlorobenzene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Tetrachloroethene (PCE)	<3	ug/kg	<3		8						<3	<3		<3		<3		<3	113	26	<3
1,1,2-Trichloroethane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
1,1-Dichloroethane	<6	ug/kg	<6		<6						<6	<6		<6		<6		<6	<6	<6	<6
1,1-Dichloroethene (1,1 DCE)	<6	ug/kg	<6		<6						<6	<6		<6		<6		<6	<6	<6	<6
1,1-Dichloropropene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
1,2,3-Trichloropropane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
1,2,4-Trimethylbenzene	<6	ug/kg	<6		<6						<6	<6		<6		<6		<6	<6	<6	<6
1,2-Dibromoethane	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
1,2-Dichlorobenzene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
1,2-Dichloroethane	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
1,2-Dichloropropane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
1,3,5-Trimethylbenzene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
1,3-Dichloropropane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
2,2-Dichloropropane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
2-Chlorotoluene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
4-Chlorotoluene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
Bromobenzene	<2	ug/kg	<2		<2						<2	<2		<2		<2		<2	<2	<2	<2
Bromochloromethane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Bromodichloromethane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Bromoform	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
cis-1-2-Dichloroethene	<7	ug/kg	<7		<7						<7	<7		<7		<7		<7	<7	<7	<7
cis-1-3-Dichloropropene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Dibromomethane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
4-Isopropyltoluene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Styrene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
trans-1-3-Dichloropropene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
1,1,2,2-Tetrachloroethane	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
Bromomethane	<1	ug/kg	<1		<1						<1	<1		<1		<1		<1	<1	<1	<1
Chloroethane	<6	ug/kg	<6		<6						<6	<6		<6		<6		<6	<6	<6	<6
Chloromethane	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
Isopropylbenzene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
Dichlorodifluoromethane	<2	ug/kg	<2		<2						<2	<2		<2		<2		<2	<2	<2	<2
sec-Butylbenzene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
tert-Butylbenzene	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
trans-1-2-Dichloroethene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
Dichloromethane (DCM)	<7	ug/kg	<7		<7						100	32		<7		<7		<7	<7	<7	<7
Trichlorofluoromethane	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
1,2,3-Trichlorobenzene	<7	ug/kg	<7		<7						<7	<7		<7		<7		<7	<7	<7	<7
1,2,4-Trichlorobenzene	<7	ug/kg	<7		<7						<7	<7		<7		<7		<7	<7	<7	<7
1,2-Dibromo-3-chloropropane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Benzene	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
Toluene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	5	<3	<3
Ethylbenzene	<3	ug/kg	<3		<3						<3	<3		<3		<3		<3	<3	<3	<3
o-Xylene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
p/m-Xylene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Methyl Tertiary Butyl Ether	<6	ug/kg	<6		<6						<6	<6		<6		<6		<6	<6	<6	<6
n-Butylbenzene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Dibromochloromethane	<5	ug/kg	<5		<5						<5	<5		<5		<5		<5	<5	<5	<5
Propylbenzene	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
1,2-Dibromo-3-chloropropane	<4	ug/kg	<4		<4						<4	<4		<4		<4		<4	<4	<4	<4
Asbestos																					
Asbestos Containing Material		None		None	None			None			None	None		None		None		Fibre Bundles	None	None	None
Asbestos Containing Material (2)		None		None	None			None			None	None		None		None			None	None	None
General Description (Bulk Analysis)		None		Soil-Silt/Brick	Soil-Silt/Clay/			Soil/Stones			Soil/Stone	Soil/Stone		Soil/Stone/Bric		Soil/Stone/Br		Soil-Silt/Clay/B	soil/stones	Soil/Stone	Soil/Stone
Asbestos Level		None		NAD	NAD			NAD			NAD	NAD		NAD		NAD		Quantifiable	NAD	NAD	NAD
Asbestos Screen		None		NAD	NAD			NAD			NAD	NAD		NAD		NAD		Chrysotile	NAD	NAD	NAD
Asbestos Screen (2)		None		NAD	NAD			NAD			NAD	NAD		NAD		NAD			NAD	NAD	NAD
Others																					

Exploratory Hole	WS201	WS203	WS204	WS205	WS205	WS206	WS208	WS210	WS210	WS211	WS211	WS212	WS214	WS217	WS217	WS218A	WS218A	WS219	WS220	WS220	WS223	WS223	WS224
Depth	0.50	0.50	0.20	0.50	1.50	0.50	0.50	0.20	1.00	0.20	1.00	1.00	0.50	1.00	1.30	0.50	1.20	1.00	0.20	1.00	1.00	2.00	0.20
Target	Made Ground	Made Ground	Made Ground	Made Ground	Glacial Sands and Gravels	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Glacial Sands and Gravels	Made Ground	Glacial Sands and Gravels	Glacial Sands and Gravels	Made Ground	Made Ground	Made Ground	Glacial Sands and Gravels	Made Ground
Strata Logs	Sand	Gravel	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Gravel	Sand	Sand	Sand	Clay	Sand
Metals																							
Arsenic	8.7	8.1	10	1	2.3	9.2	2.5	24.1	19.1	13.5	8.7	10.4	21.5	1.1	8.6	0.9	1.5	1.2	6.3	39.2	1.4	14.6	13.4
Cadmium	1.7	1.7	0.5	0.4	NA	2.8	0.4	0.4	0.1	0.2	<0.1	<0.1	0.3	0.4	0.2	12.5	5.4	9.6	0.2	0.1	10.1		0.8
Hexavalent Chromium					<0.3			<0.3	<0.3							<0.3	<0.3				<0.3	<0.3	
Chromium III					85.5			66.3	51.4							17.6	55.9				16.1	35.2	
Chromium	11.6	49.8		11.2	85.5	11.2	16.9	66.3	51.4	39.1	40.5	41.3	39.4	13.5	75.7	17.6	55.9	10.7			16.1	35.2	52.6
Copper	45	34	125	3	10	61	13	173	86	114	37	46	79	7	10	12	14	13	15	57	17	150	44
Lead	106	89		6	7	128	23	192	106	42	81	29	131	9	21	42	31	40			46	272	93
Mercury	0.2	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	6.5	0.4	0.2	0.2	0.5	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.2
Mercury	0.2	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	6.5	0.4	0.2	0.2	0.5	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.2
Nickel	15	12.6		5.3	21.2	20.7	6.6	64.9	38.9	44.5	20.9	29	35.5	6.9	19.9	5.5	11.4	5.1			5.7	22.6	15.3
Selenium	<1	<1	1	<1	<1	<1	<1	2	2	2	<1	1	1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1
Vanadium		13		4	26		11	99	56	60	28	35	53	4	30	4	12	3			5	23	20
Zinc	157	197		19	46	168	35	185	142	104	32	49	131	17	207	32	42	44			42	103	139
Water Soluble Boron		0.7	0.2	0.2	<0.1		0.2	2	1.9	0.9	0.9	0.9	0.8	0.2	0.1	0.2	0.2	0.1	<0.1	0.8	0.2	0.9	0.3
Non Metals																							
Total Cyanide	1.8			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	
pH	8.79	8.95	8.7	10.43	9.14	8.79	10.5	8.46	8.29	8.6	8.78	11.39	8.92	9.3	8.9	12.46		9.9	9.1	8.6	11.84	8.15	7.89
Total Organic Carbon	NDP	0.5	5.87	<0.02	0.15		0.78	14.2	6.44			7.74		0.24	0.19	<0.02	0.24	0.07	0.3	1.4	0.1	4.96	1.01
TPH compounds																							
Benzene	<5	<5			<5		35				<5	12		<5	<5		<5	<5				<5	<5
Toluene	<5	<5			<5		42				<5	30		<5	<5		<5	<5				<5	<5
Ethylbenzene	<5	<5			<5		22				<5	24		<5	<5		<5	<5				<5	<5
o-Xylene	<5	<5			<5		70				<5	47		<5	<5		<5	<5				<5	<5
m/p-Xylene	<5	<5			<5		93				<5	61		<5	<5		<5	<5				<5	<5
MTBE	<5	<5			<5		<5				<5	<5		<5	<5		<5	<5				<5	<5
Aliphatics >C5-C6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aliphatics >C6-C8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aliphatics >C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.3	<0.1	0.5	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aliphatics >C10-C12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Aliphatics >C12-C16	<4	<4	<4	<4	<4	<4	6	23	<4	22	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Aliphatics >C16-C21	10	<7	10	<7	<7	<7	19	111	9	62	<7	10	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
Aliphatics >C21-C35	42	<7	97	<7	<7	42	105	266	<7	197	<7	43	13	122	<7	<7	<7	<7	<7	<7	62	<7	<7
Total aliphatics C5-35	52	<26	107	<26	<26	42	141	453	<26	310	<26	53	<26	132	<26	<26	<26	<26	<26	<26	62	<26	<26
Aromatics >C5-EC7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aromatics >EC7-EC8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aromatics >EC8-EC10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aromatics> EC10-EC12	3.7	<0.2	<0.2	<0.2	<0.2	0.6	<0.2	22.9	1.7	14.9	0.9	10.1	1.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Aromatics >EC12-EC16	46	<4	<4	<4	<4	13	14	467	28	337	10	58	29	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Aromatics >EC16-EC21	351	<7	68	<7	<7	113	110	3055	159	2009	54	293	278	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
Aromatics >EC21-EC35	824	<7	349	<7	<7	340	281	5438	401	3359	185	574	665	86	<7	<7	<7	<7	<7	<7	31	<7	<7
Total aromatics C5-35	1317	<26	456	<26	<26	501	437	9526	630	6069	271	999	1045	86	<26	<26	<26	<26	<26	<26	31	<26	<26
Total aliphatics and aromatics (C5-35)	1369	<52	563	<52	<52	543	578	9979	630	6379	271	1052	1045	218	<52	<52	<52	<52	<52	<52	93	<52	<52
PCBS																							
PCB101			<50	<5		<50		<5	<5	<25		<50	<25			<5			<5	<5	<5		
PCB118			<50	<5		<50		<5	<5	<25		<50	<25			<5			<5	<5	<5		
PCB138			<50	<5		<50		<5	<5	<25		<50	<25			<5			<5	<5	<5		
PCB153			<50	<5		<50		<5	<5	<25		<50	<25			<5			<5	<5	<5		
PCB180			<50	<5		<50		<5	<5	<25		<50	<25			<5			<5	<5	<5		
PCB28			<50	<5		<50		<5	<5	<25		<50	<25			<5			<5	<5	<5		
PCB52			<50	<5		<50		<5	<5	<25		<50	<25			<5			<5	<5	<5		
Total 7 PCBs			<350	<35		<350		<35	<35	<175		<350	<175			<35			<35	<35	<35		
Phenol																							
Phenol	<10	<10	<100	<10	<10	<10	<10	<100	<10	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dichlorophenol	<10	<10	<100	<10	<10	<10	<10	<100	<10	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,5-Trichlorophenol	<10	<10	<100	<10	<10	<10	<10	<100	<10	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chlorophenol	<10	<10	<100	<10	<10	<10	<10	<100	<10	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Methylphenol	<10	<10	<100	<10	<10	<10	<10	<100	159	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Nitrophenol	<10	<10	<100	<10	<10	<10	<10	<100	<10	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Chloro-3-methylphenol	<10	<10	<100	<10	<10	<10	<10	<100		<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methylphenol	426	<10	<100	<10	<10	<10	<10	2907	488	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Nitrophenol	<10	<10	<100	<10	<10	<10	<10	<100	<10	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	179	<10	<100	<10	<10	<10	<10	3030	309	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,6-Trichlorophenol	<10	<10	<100	<10	<10	<10	<10	<100	<10	<100	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Poly Aromatic Hydrocarbons																							
Acenaphthene	11.58	0.47	<0.50	<0.05	<0.05	NA	1.38	222.46	0.63	NA	0.35		NA	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	8.02	0.32		<0.03	<0.03	NA	0.5	10.58	0.96	NA	0.11		NA	<0.03	<0.03	<0.03	<0.03	<0.03			<0.03	<0.03	<0.03
Anthracene	23.29	0.88		<0.04	<0.04	NA	3.03	363.51	1.66	NA	0.64		NA	<0.04	<0.04	<0.04	<0.04	<0.04			<0.04	<0.04	0.1
Benzo (a) Anthracene	35.32	1.42	3.67	0.06	<0.06	NA	5.66	591.71	3.66	NA	1.38		NA	<0.06	<0.06	<0.06	<0.06	<0.06	0.11	0.32	0.06	<0.06	0.35
Benzo (a) Pyrene	37.68	1.49	3.61	0.05	<0.04	NA	5.45	649.52	4.23	NA	1.73		NA	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.41	0.05	<0.04	0.32
Benzo(k)fluoranthene	14.84	0.6	1.61	0.03	<0.02	NA	2.41	224.45	1.5	NA	0.66		NA	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	0.19	<0.02	<0.02	0.15
Benzo(bk)fluoranthene	53.01	2.16	5.76	0.09	<0.07	NA	8.59	801.62	5.35	NA	2.35		NA	<0.07	<0.07	<0.07	<0.07	<0.07	0.15	0.69	<0.07	<0.07	0.53
Benzo(b)fluoranthene	38.17	1.56	4.15	0.06	<0.05	NA	6.18	577.17	3.85	NA	1.69		NA	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	0.5	<0.05	<0.05	0.38
Benzo (ghi) perylene	19.26	0.72	2.13	0.04	<0.04	NA	3.12	301.71	2.59	NA	0.84		NA	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	0.41	<0.04	<0.04	0.18
Chrysene	37	1.66	4.02	0.06	<0.02	NA	6.12	628.96	4	NA	1.62		NA	0.03	<0.02	0.02	0.02	<0.02	0.1	0.37	0.05	<0.02	0.42
Dibenzo (ah) Anthracene	4.9	0.22	0.69	<0.04	<0.04	NA	0.77	58.58	0.73	NA	0.31		NA	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	0.07
Fluoranthene	86.9	3.73	6.98	0.08	<0.03	NA	13.08	1312.54	7.7	NA	2.99		NA	0.05	<0.03	<0.03	<0.03	<0.03	0.14	0.37	0.06	<0.03	0.76
Fluorene	10.47	0.68		<0.04	<0.04	NA	1.38	175.01	0.77	NA	0.34		NA	<0.04	<0.04	<0.04	<0.04	<0.04			<0.04	<0.04	<0.04
Indeno (123cd) pyrene	21.16	0.82	2.73	<0.04	<0.04	NA	3.35	317.37	2.42	NA	1.2		NA	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	0.47	<0.04	<0.04	0.2
Naphthalene	13.8	3	0.61	<0.04	<0.04	NA	0.87	21.42	0.92	NA	0.32		NA	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.09	<0.04	<0.04	<0.04
Phenanthrene	70.79	3.98	2.59	0.06	<0.03	NA	8.3	1260.46	5.71	NA	2.55		NA	0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.17	0.05	<0.03	0.41
Pyrene	76.18	3.26		0.08	<0.03	NA	12.04	1372.58	7.68	NA	2.83		NA	0.06	<0.03	<0.03	<0.03	<0.03			0.06	<0.03	0.67
PAH 17 Total	509.4	24.8	40.6	<0.6	<0.6	NA	73.6	8088	49	NA	19.6		NA	<0.6	<0.6	<0.6	<0.6	<0.6	1	4	<0.6	<0.6	4
SVOCs																							
Pentachlorophenol			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
2,4-Dinitrotoluene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
2,6-Dinitrotoluene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
2-Chloronaphthalene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
2-Methylnaphthalene			<100	<10		2203		121597	1828	10161		22027	3980			<10			<10	14	<10		
2-Nitroaniline			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
3-Nitroaniline			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
4-Methylphenol			<100	<10		<10		2907	488	<100		<10	<50			<10			<10	<10	<10		
4-Nitroaniline			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
4-Nitrophenol			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Azobenzene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Bis(2-chloroethoxy)methane			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Carbazole			352	<10		1095		50353	1366	6378		10140	3472			<10			<10	16	<10		
Di-n-butylphthalate			<1000	<100		<100		<1000	<100	<1000		<100	<500			<100			<100	<100	<100		
Di-n-octylphthalate			<1000	<100		<100		<1000	<100	<1000		<100	<500			<100			<100	<100	<100		
Dibenzofuran			136	<10		1770		72535	1188	13379		20120	4577			13			<10	13	<10		
Hexachlorobenzene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Hexachlorocyclopentadiene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Bis(2-chloroethyl)ether			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
4-Chloroaniline			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Nitrobenzene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Isophorone			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Hexachlorobutadiene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Hexachloroethane			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Butylbenzylphthalate			<1000	<100		<100		<1000	<100	<1000		<100	<500			<100			<100	<100	<100		
Diethylphthalate			<1000	<100		<100		<1000	<100	<1000		<100	<500			<100			<100	<100	<100		
Dimethyl phthalate			<1000	<100		<100		<1000	<100	<1000		<100	<500			<100			<100	<100	<100		
4-Bromophenylphenylether			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
1,2,4-Trichlorobenzene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
1,3-Dichlorobenzene			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
Benzo(b)fluoranthene	38.17	1.56	4.15	0.06	<0.05	NA	6.18	577.17	3.85	NA	1.69		NA	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	0.5	<0.05	<0.05	0.38
4-Chlorophenylphenylether			<100	<10		<10		<100	<10	<100		<10	<50			<10			<10	<10	<10		
VOCs																							
Vinyl Chloride			<2	<2		<2		<2	<2	<2		<2	<2			<2			<2	<2	<2		
Trichloroethene (TCE)			<5	<5		<5		<5	<5	<5		<5	<5			<5			<5	11	<5		
Carbon tetrachloride			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Chlorobenzene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Chloroform			<5	<5		<5		<5	<5	<5		<5	<5			<5			<5	<5	<5		
1,1,1,2-Tetrachloroethane			<5	<5		<5		<5	<5	<5		<5	<5			<5			<5	<5	<5		
1,1,1-Trichloroethane			<5	<5		<5		<5	<5	<5		<5	<5			<5			<5	<5	<5		
1,3-Dichlorobenzene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
1,4-Dichlorobenzene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Tetrachloroethene (PCE)			<3	<3		<3		22	157	<3		<3	19			<3			<3	<3	<3		
1,1,2-Trichloroethane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
1,1-Dichloroethane			<6	<6		<6		<6	<6	<6		<6	<6			<6			<6	<6	<6		
1,1-Dichloroethene (1,1 DCE)			<6	<6		<6		<6	<6	<6		<6	<6			<6			<6	<6	<6		
1,1-Dichloropropene			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
1,2,3-Trichloropropane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
1,2,4-Trimethylbenzene			<6	<6		<6		38	11	47		54	19			<6			<6	<6	<6		
1,2-Dibromoethane			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
1,2-Dichlorobenzene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
1,2-Dichloroethane			<5	<5		<5		<5	<5	<5		<5	<5			<5			<5	<5	<5		
1,2-Dichloropropane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
1,3,5-Trimethylbenzene			<3	<3		<3		31	<3	26		21	11			<3			<3	<3	<3		
1,3-Dichloropropane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
2,2-Dichloropropane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
2-Chlorotoluene			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
4-Chlorotoluene			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
Bromobenzene			<2	<2		<2		<2	<2	<2		<2	<2			<2			<2	<2	<2		
Bromochloromethane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Bromodichloromethane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Bromoform			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
cis-1-2-Dichloroethene			<7	<7		<7		<7	<7	<7		<7	<7			<7			<7	<7	<7		
cis-1-3-Dichloropropene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Dibromomethane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
4-Isopropyltoluene			<4	<4		<4		<4	<4	10		<4	<4			<4			<4	<4	<4		
Styrene			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
trans-1-3-Dichloropropene			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
1,1,2,2-Tetrachloroethane			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
Bromomethane			<1	<1		<1		<1	<1	<1		<1	<1			<1			<1	<1	<1		
Chloroethane			<6	<6		<6		<6	<6	<6		<6	<6			<6			<6	<6	<6		
Chloromethane			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
Isopropylbenzene			<3	<3		<3		16	<3	10		<3	<3			<3			<3	<3	<3		
Dichlorodifluoromethane			<2	<2		<2		<2	<2	<2		<2	<2			<2			<2	<2	<2		
sec-Butylbenzene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
tert-Butylbenzene			<5	<5		<5		<5	<5	<5		<5	<5			<5			<5	<5	<5		
trans-1-2-Dichloroethene			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
Dichloromethane (DCM)			<7	<7		<7		<7	<7	<7		<7	<7			<7			<7	<7	<7		
Trichlorofluoromethane			<3	<3		<3		<3	<3	<3		<3	<3			<3			<3	<3	<3		
1,2,3-Trichlorobenzene			<7	<7		<7		<7	<7	<7		<7	<7			<7			<7	<7	<7		
1,2,4-Trichlorobenzene			<7	<7		<7		<7	<7	<7		<7	<7			<7			<7	<7	<7		
1,2-Dibromo-3-chloropropane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Benzene			<5	<5		<5		<5	<5	<5		6	<5			<5			<5	<5	<5		
Toluene			<3	<3		<3		24	13	15		21	<3			9			<3	<3	<3		
Ethylbenzene			<3	<3		<3		62	<3	42		14	15			<3			<3	<3	<3		
o-Xylene			<4	<4		<4		27	9	19		20	7			<4			<4	<4	<4		
p/m-Xylene			<4	<4		<4		69	13	37		36	14			<4			<4	<4	<4		
Methyl Tertiary Butyl Ether			<6	<6		<6		<6	<6	<6		<6	<6			<6			<6	<6	<6		
n-Butylbenzene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Dibromochloromethane			<5	<5		<5		<5	<5	<5		<5	<5			<5			<5	<5	<5		
Propylbenzene			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
1,2-Dibromo-3-chloropropane			<4	<4		<4		<4	<4	<4		<4	<4			<4			<4	<4	<4		
Asbestos																							
Asbestos Containing Material	Fibre Bundles	None	None	None		Fibre Bundles	None	None	None	None	None		None	None		None			None	None	None		None
Asbestos Containing Material (2)		None	None	None			None	None	None	None	None		None	None		None			None	None	None		None
General Description (Bulk Analysis)	Soil-Silt/Clay/Br	soil/stones	Soil-Silt/Clay/Br	Soil/Stone		Soil-Silt/Clay/Br	Soil-Silt/Sand/B	Soil/Stone/Silt	Soil/Stone/Silt	Soil-Silt/Clay/Bric	Soil-Silt/Clay/E		Soil-Silt/Clay/Bric	Soil/Stone		Stones/Soil	stones		Soil-Silt/Clay/Br	Soil-Silt/Clay/Br	Soil/Stone		soil/stones
Asbestos Level	Quantifiable	NAD	NAD	NAD		Quantifiable	NAD	NAD	NAD	NAD	NAD		NAD	NAD		NAD			NAD	NAD	NAD		NAD
Asbestos Screen	Chrysotile	NAD	NAD	NAD		Chrysotile	NAD	NAD	NAD	NAD	NAD		NAD	NAD		NAD			NAD	NAD	NAD		NAD
Asbestos Screen (2)		NAD	NAD	NAD			NAD	NAD	NAD	NAD	NAD		NAD	NAD		NAD			NAD	NAD	NAD		NAD
Others																							

Determinant	Unit	Minimum	Maximum	Count	Source	*Guideline Value (Commerical TOC 0.58 to 3.48%)	Exceedances of AECOM GACs
Arsenic	mg/kg	<LOD	66.7	42	LQM/CIEH S4ULs 2014	640 mg/kg	
Cadmium	mg/kg	<LOD	25	36	LQM/CIEH S4ULs 2014	190 mg/kg	
Hexavalent Chromium	mg/kg	<LOD	<LOD	16	LQM/CIEH S4ULs 2014	33 mg/kg	
Chromium III	mg/kg	<LOD	87.3	16	LQM/CIEH S4ULs 2014	8600 mg/kg	
Chromium	mg/kg	<LOD	93	39	LQM/CIEH S4ULs 2014	8600 mg/kg	
Copper	mg/kg	<LOD	180	42	LQM/CIEH S4ULs 2014	68000 mg/kg	
Lead	mg/kg	<LOD	947	39	Defra C4SL 12/2014	2300 mg/kg	
Mercury	mg/kg	<LOD	6.5	42	LQM/CIEH S4ULs 2014	58 mg/kg	
Mercury	mg/kg	<LOD	6.5	42	LQM/CIEH S4ULs 2014	1100 mg/kg	
Nickel	mg/kg	<LOD	64.9	39	LQM/CIEH S4ULs 2014	980 mg/kg	
Selenium	mg/kg	<LOD	2	42	LQM/CIEH S4ULs 2014	12000 mg/kg	
Vanadium	mg/kg	<LOD	99	39	LQM/CIEH S4ULs 2014	730000 mg/kg	
Zinc	mg/kg	<LOD	495	39	LQM/CIEH S4ULs 2014	9000 mg/kg	
Water Soluble Boron	mg/kg	<LOD	4	42	LQM/CIEH S4ULs 2014	240000 mg/kg	
Non Metals							
Total Cyanide	mg/kg	<LOD	9.6	31	USEPA RSL	12 mg/kg	
pH	pH units	<LOD	12.46	41	LOD	LOD	
Total Organic Carbon	%	<LOD	14.2	36	LOD	LOD	
TPH compounds							
Benzene	ug/kg	<LOD	35	21	LQM/CIEH S4ULs 2014	27000 ug/kg	
Toluene	ug/kg	<LOD	42	21	LQM/CIEH S4ULs 2014	56000000 ug/kg	
Ethylbenzene	ug/kg	<LOD	24	21	LQM/CIEH S4ULs 2014	5700000 ug/kg	
o-Xylene	ug/kg	<LOD	70	21	LQM/CIEH S4ULs 2014	6600000 ug/kg	
m/p-Xylene	ug/kg	<LOD	93	21	LQM/CIEH S4ULs 2014	5900000 ug/kg	
MTBE	ug/kg	<LOD	<LOD	20	EIC/AGS/CL:AIRE	7900000 ug/kg	
Aliphatics >C5-C6	mg/kg	<LOD	<LOD	41	LQM/CIEH S4ULs 2014	3200 mg/kg	
Aliphatics >C6-C8	mg/kg	<LOD	<LOD	42	LQM/CIEH S4ULs 2014	7800 mg/kg	
Aliphatics >C8-C10	mg/kg	<LOD	0.5	42	LQM/CIEH S4ULs 2014	2000 mg/kg	
Aliphatics >C10-C12	mg/kg	<LOD	5.2	42	LQM/CIEH S4ULs 2014	9700 mg/kg	
Aliphatics >C12-C16	mg/kg	<LOD	23	42	LQM/CIEH S4ULs 2014	59000 mg/kg	
Aliphatics >C16-C21	mg/kg	<LOD	111	42	LQM/CIEH S4ULs 2014	1600000 mg/kg	
Aliphatics >C21-C35	mg/kg	<LOD	436	42	LQM/CIEH S4ULs 2014	1600000 mg/kg	
Total aliphatics C5-35	mg/kg	<LOD	848	42	AGAC	1600000 mg/kg	
		<LOD					
Aromatics >C5-EC7	mg/kg	<LOD	<LOD	41	LQM/CIEH S4ULs 2014	26000 mg/kg	
Aromatics >EC7-EC8	mg/kg	<LOD	<LOD	42	LQM/CIEH S4ULs 2014	56000 mg/kg	
Aromatics >EC8-EC10	mg/kg	<LOD	0.2	42	LQM/CIEH S4ULs 2014	3500 mg/kg	
Aromatics> EC10-EC12	mg/kg	<LOD	22.9	42	LQM/CIEH S4ULs 2014	16000 mg/kg	
Aromatics >EC12-EC16	mg/kg	<LOD	467	42	LQM/CIEH S4ULs 2014	36000 mg/kg	
Aromatics >EC16-EC21	mg/kg	<LOD	3055	42	LQM/CIEH S4ULs 2014	28000 mg/kg	
Aromatics >EC21-EC35	mg/kg	<LOD	5438	42	LQM/CIEH S4ULs 2014	28000 mg/kg	
Total aromatics C5-35	mg/kg	<LOD	9526	42	LQM/CIEH S4ULs 2014	28000 mg/kg	
Total aliphatics and aromatics (C5-35)	mg/kg	<LOD	9979	42	LOD	LOD	20
PCBs							
PCB101	ug/kg	<LOD	<LOD	21	LOD	LOD	
PCB118	ug/kg	<LOD	<LOD	21	LOD	LOD	
PCB138	ug/kg	<LOD	<LOD	21	LOD	LOD	
PCB153	ug/kg	<LOD	<LOD	21	LOD	LOD	
PCB180	ug/kg	<LOD	<LOD	21	LOD	LOD	
PCB28	ug/kg	<LOD	<LOD	21	LOD	LOD	
PCB52	ug/kg	<LOD	<LOD	21	LOD	LOD	
Total 7 PCBs	ug/kg	<LOD	<LOD	21	LOD	LOD	
Phenol							
Phenol	ug/kg	<LOD	198	39	LQM/CIEH S4ULs 2014	440000 ug/kg	
2,4-Dichlorophenol	ug/kg	<LOD	<LOD	39	AGAC	2500000 ug/kg	
2,4,5-Trichlorophenol	ug/kg	<LOD	<LOD	39	AGAC	82000000 ug/kg	
2-Chlorophenol	ug/kg	<LOD	<LOD	39	AGAC	5800000 ug/kg	
2-Methylphenol	ug/kg	<LOD	159	39	AGAC	160000000 ug/kg	
2-Nitrophenol	ug/kg	<LOD	<LOD	39	LOD	LOD	
4-Chloro-3-methylphenol	ug/kg	<LOD	<LOD	39	LOD	82000000 ug/kg	
4-Methylphenol	ug/kg	<LOD	2907	39	LOD	LOD	4
4-Nitrophenol	ug/kg	<LOD	<LOD	39	LOD	LOD	
2,4-Dimethylphenol	ug/kg	<LOD	3030	39	LOD	16000000 ug/kg	
2,4,6-Trichlorophenol	ug/kg	<LOD	<LOD	39	AGAC	210000 ug/kg	
Poly Aromatic Hydrocarbons							
Acenaphthene	mg/kg	<LOD	222.46	41	LQM/CIEH S4ULs 2014	84000 mg/kg	
Acenaphthylene	mg/kg	<LOD	10.58	38	LQM/CIEH S4ULs 2014	83000 mg/kg	
Anthracene	mg/kg	<LOD	363.51	38	LQM/CIEH S4ULs 2014	520000 mg/kg	
Benzo (a) Anthracene	mg/kg	<LOD	591.71	41	LQM/CIEH S4ULs 2014	170 mg/kg	1
Benzo (a) Pyrene	mg/kg	<LOD	649.52	41	LQM/CIEH S4ULs 2014	35 mg/kg	2
Benzo(k)fluoranthene	mg/kg	<LOD	224.45	41	LQM/CIEH S4ULs 2014	1200 mg/kg	
Benzo(bk)fluoranthene	mg/kg	<LOD	801.62	41	LQM/CIEH S4ULs 2014	1200 mg/kg	
Benzo(b)fluoranthene	mg/kg	<LOD	577.17	41	LQM/CIEH S4ULs 2014	44 mg/kg	1
Benzo (ghi) perylene	mg/kg	<LOD	301.71	41	LQM/CIEH S4ULs 2014	3900 mg/kg	
Chrysene	mg/kg	<LOD	628.96	41	LQM/CIEH S4ULs 2014	350 mg/kg	1
Dibenzo (ah) Anthracene	mg/kg	<LOD	58.58	41	LQM/CIEH S4ULs 2014	3.5 mg/kg	2
Fluoranthene	mg/kg	<LOD	1312.54	41	LQM/CIEH S4ULs 2014	23000 mg/kg	
Fluorene	mg/kg	<LOD	175.01	38	LQM/CIEH S4ULs 2014	63000 mg/kg	
Indeno (123cd) pyrene	mg/kg	<LOD	317.37	41	LQM/CIEH S4ULs 2014	500 mg/kg	
Naphthalene	mg/kg	<LOD	21.42	41	LQM/CIEH S4ULs 2014	190 mg/kg	
Phenanthrene	mg/kg	<LOD	1260.46	41	LQM/CIEH S4ULs 2014	22000 mg/kg	
Pyrene	mg/kg	<LOD	1372.58	38	LQM/CIEH S4ULs 2014	54000 mg/kg	
	mg/kg	<LOD	8088	41			19
SVOCs							
Pentachlorophenol	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	400000 ug/kg	
2,4-Dinitrotoluene	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	3700000 ug/kg	
2,6-Dinitrotoluene	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	1900000 ug/kg	
2-Chloronaphthalene	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	390000 ug/kg	
2-Methylnaphthalene	ug/kg	<LOD	121597	22	USEPA RSL	164200 ug/kg	
2-Nitroaniline	ug/kg	<LOD	<LOD	22	USEPA RSL	8000000 ug/kg	
3-Nitroaniline	ug/kg	<LOD	<LOD	22	LOD	LOD	
4-Methylphenol	ug/kg	<LOD	2907	22	LOD	LOD	2
4-Nitroaniline	ug/kg	<LOD	<LOD	22	USEPA RSL	110000 ug/kg	
4-Nitrophenol	ug/kg	<LOD	<LOD	22	LOD	LOD	
Azobenzene	ug/kg	<LOD	<LOD	22	USEPA RSL	26000 ug/kg	
Bis(2-chloroethoxy)methane	ug/kg	<LOD	<LOD	22	LOD	LOD	
Carbazole	ug/kg	<LOD	50353	22	LOD	LOD	12
Di-n-butylphthalate	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	15000000 ug/kg	
Di-n-octylphthalate	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	89000000 ug/kg	
Dibenzofuran	ug/kg	<LOD	72535	22	USEPA RSL	1000000 ug/kg	
Hexachlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	110000 ug/kg	
Hexachlorocyclopentadiene	ug/kg	<LOD	<LOD	22	USEPA RSL	7500 ug/kg	
Bis(2-chloroethyl)ether	ug/kg	<LOD	<LOD	22	USEPA RSL	2500000 ug/kg	
4-Chloroaniline	ug/kg	<LOD	<LOD	22	LOD	LOD	
Nitrobenzene	ug/kg	<LOD	<LOD	22	USEPA RSL	22000 ug/kg	
Isophorone	ug/kg	<LOD	<LOD	22	USEPA RSL	2400000 ug/kg	
Hexachlorobutadiene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	31000 ug/kg	
Hexachloroethane	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	22000 ug/kg	
Butylbenzylphthalate	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	940000000 ug/kg	
Diethylphthalate	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	150000000 ug/kg	
Dimethyl phthalate	ug/kg	<LOD	<LOD	22	LOD	LOD	
4-Bromophenylphenylether	ug/kg	<LOD	<LOD	22	USEPA RSL	400000 ug/kg	
1,2,4-Trichlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	220000 ug/kg	
1,3-Dichlorobenzene	ug/kg	<LOD	<LOD	22	LOD	LOD	
Benzo(b)fluoranthene	mg/kg	<LOD	577.17	41	LQM/CIEH S4ULs 2014	44 mg/kg	1
4-Chlorophenylphenylether	ug/kg	<LOD	<LOD	22	AGAC	LOD	
VOCs							
Vinyl Chloride	ug/kg	<LOD	<LOD	22	LOD	LOD	
Trichloroethene (TCE)	ug/kg	<LOD	11	22	LOD	LOD	1
Carbon tetrachloride	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	2900 ug/kg	
Chlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	56000 ug/kg	
Chloroform	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	99000 ug/kg	
1,1,1,2-Tetrachloroethane	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	110000 ug/kg	
1,1,1-Trichloroethane	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	660000 ug/kg	
1,3-Dichlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	30000 ug/kg	
1,4-Dichlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	4400000 ug/kg	
Tetrachloroethene (PCE)	ug/kg	<LOD	157	22	LQM/CIEH S4ULs 2014	19000 ug/kg	
1,1,2-Trichloroethane	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	94000 ug/kg	
1,1-Dichloroethane	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	280000 ug/kg	
1,1-Dichloroethene (1,1 DCE)	ug/kg	<LOD	<LOD	22	LOD	LOD	
1,1-Dichloropropene	ug/kg	<LOD	<LOD	22	LOD	LOD	
1,2,3-Trichloropropane	ug/kg	<LOD	<LOD	22	USEPA RSL	110 ug/kg	
1,2,4-Trimethylbenzene	ug/kg	<LOD	54	22	EIC/AGS/CL:AIRE	26100 ug/kg	
1,2-Dibromoethane	ug/kg	<LOD	<LOD	22	USEPA RSL	160 ug/kg	
1,2-Dichlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	2000000 ug/kg	
1,2-Dichloroethane	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	670 ug/kg	
1,2-Dichloropropane	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	3300 ug/kg	
1,3,5-Trimethylbenzene	ug/kg	<LOD	31	22	USEPA RSL	12000000 ug/kg	
1,3-Dichloropropane	ug/kg	<LOD	<LOD	22	USEPA RSL	23000000 ug/kg	
2,2-Dichloropropane	ug/kg	<LOD	<LOD	22	LOD	LOD	
2-Chlorotoluene	ug/kg	<LOD	<LOD	22	USEPA RSL	23000000 ug/kg	
4-Chlorotoluene	ug/kg	<LOD	<LOD	22	USEPA RSL	23000000 ug/kg	
Bromobenzene	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	97000 ug/kg	
Bromochloromethane	ug/kg	<LOD	<LOD	22	USEPA RSL	630000 ug/kg	
Bromodichloromethane	ug/kg	<LOD	<LOD	22	USEPA RSL	1300 ug/kg	
Bromoform	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	760000 ug/kg	
cis-1-2-Dichloroethene	ug/kg	<LOD	<LOD	22	LOD	LOD	
cis-1-3-Dichloropropene	ug/kg	<LOD	<LOD	22	LOD	LOD	
Dibromomethane	ug/kg	<LOD	<LOD	22	USEPA RSL	98000 ug/kg	
4-Isopropyltoluene	ug/kg	<LOD	10	22	LOD	LOD	1
Styrene	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	3300000 ug/kg	
trans-1-3-Dichloropropene	ug/kg	<LOD	<LOD	22	LOD	LOD	
1,1,2,2-Tetrachloroethane	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	102000 ug/kg	
Bromomethane	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	270000 ug/kg	
Chloroethane	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	960000 ug/kg	
Chloromethane	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	1000 ug/kg	
Isopropylbenzene	ug/kg	<LOD	16	22	LOD	LOD	2
Dichlorodifluoromethane	ug/kg	<LOD	<LOD	22	USEPA RSL	370000 ug/kg	
sec-Butylbenzene	ug/kg	<LOD	<LOD	22	USEPA RSL	120000000 ug/kg	
tert-Butylbenzene	ug/kg	<LOD	<LOD	22	USEPA RSL	120000000 ug/kg	
trans-1-2-Dichloroethene	ug/kg	<LOD	<LOD	22	LOD	LOD	
Dichloromethane (DCM)	ug/kg	<LOD	100	22	LOD	LOD	2
Trichlorofluoromethane	ug/kg	<LOD	<LOD	22	LOD	LOD	
1,2,3-Trichlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	102000 ug/kg	
1,2,4-Trichlorobenzene	ug/kg	<LOD	<LOD	22	LQM/CIEH S4ULs 2014	220000 ug/kg	
1,2-Dibromo-3-chloropropane	ug/kg	<LOD	<LOD	22	USEPA RSL	64 ug/kg	
Benzene	ug/kg	<LOD	6	22	LQM/CIEH S4ULs 2014	27000 ug/kg	
Toluene	ug/kg	<LOD	24	22	LQM/CIEH S4ULs 2014	56000000 ug/kg	
Ethylbenzene	ug/kg	<LOD	62	22	LQM/CIEH S4ULs 2014	5700000 ug/kg	
o-Xylene	ug/kg	<LOD	27	22	LQM/CIEH S4ULs 2014	6600000 ug/kg	
p/m-Xylene	ug/kg	<LOD	69	22	LQM/CIEH S4ULs 2014	5900000 ug/kg	
Methyl Tertiary Butyl Ether	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	7900000 ug/kg	
n-Butylbenzene	ug/kg	<LOD	<LOD	22	LOD	LOD	
Dibromochloromethane	ug/kg	<LOD	<LOD	22	LOD	LOD	
Propylbenzene	ug/kg	<LOD	<LOD	22	EIC/AGS/CL:AIRE	4100000 ug/kg	
1,2-Dibromo-3-chloropropane	ug/kg	<LOD	<LOD	22			
Asbestos Containing Material	None	<LOD	<LOD	28			
Asbestos Containing Material (2)	None	<LOD	<LOD	25			
General Description (Bulk Analysis)	None	<LOD	<LOD	29			
Asbestos Level	None	<LOD	<LOD	28			
Asbestos Screen	None	<LOD	<LOD	28			3
Asbestos Screen (2)	None	<LOD	<LOD	25			

Capabilities on project:
Environment

Appendix E – Controlled Waters Screening Assessment

Stockport Bus Station
Soils Leachate testing

> Threshold Value
> 2x Threshold Value
>10 x Threshold value
Above LOD where no AGAC is avaliable

	Name	Date
Author:	WH	
Checked By:		
Approved By:		

Exploratory Hole			BH102	BH108	BH108	BH111	BH112	HP01	HP02	WS204	WS205	WS206	WS210	WS211	WS212	WS214	WS220	WS220	WS223
Depth			2	1	4	0.20-0.40	1	0.2	0.2	0.2	0.5	0.5	1	0.2	1	0.5	0.2	1	1
Target			Glacial Sands and Gravels	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground
Strata Logs			Gravel	Gravel	Gravel	Gravel	Gravel	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
Determinant	Unit																		
Metals																			
Arsenic	ug/l	<2.5	<2.5	24.7	41.5	3.2	5.9	46.5	30.4	7.2	<2.5	6.2	8	3.5	2.7	3.9	12.4	79.1	3
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Cadmium	ug/l	<0.5	<0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexavalent Chromium	mg/l	<0.006		0.02	<0.006	0.006		<0.006	<0.006				<0.006						<0.006
Chromium III	mg/l	<0.006		<0.006	0.008	<0.006		0.006	0.007				<0.006						0.013
Chromium	ug/l	<1.5	<1.5	25.4	7.9	6	<1.5	6.1	6.5	<1.5	13.9	<1.5	3	<1.5	3.6	<1.5	3.9	11.9	12.6
Copper	ug/l	<7	<7	<7	<7	<7	<7	22	14	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
Lead	ug/l	<5	<5	23	<5	<5	<5	10	10	7	8	<5	<5	<5	<5	<5	<5	<5	<5
Mercury	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mercury	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nickel	ug/l	<2	<2	6	5	4	<2	4	5	<2	4	<2	<2	<2	<2	<2	<2	<2	<2
Selenium	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Vanadium	ug/l	<1.5	10.2				4.6	39.8	22.6	3.7	5.3	3.7	5.1	3.5	6.8	5.2	1.7	9.4	2.6
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Zinc	ug/l	<3	5	9	6	6	3	10	7	6	5	4	5	4	<3	5	4	6	4
Boron	ug/l	<12	<12	13	15	<12	64	187	50	<12	<12	23	61	12	<12	<12	<12	28	<12
Non Metals																			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Cyanide	mg/l	<0.01	<0.01	0.08	<0.01	<0.01	NA	<0.01	<0.01		<0.01	<0.01	<0.01						<0.01
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
pH	pH units	<0.01	9.49	7.94	8.61	7.57	8.26	9.7	8.62	8.46	10.99	8.59	7.9	8.45	11.55	8.51	8.56	8.25	11.71
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Dissolved Organic Carbon	mg/l	<2	3	2	3	<2	NA	13	7	5	3	NA	3		6		6	5	5
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
TPH compounds																			
Benzene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Ethylbenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
o-Xylene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
p/m-Xylene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Methyl Tertiary Butyl Ether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aliphatics																			
Ali >C5-C6	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C6-C9	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C8-C11	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C10-C13	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C12-C17	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ali >C16-C22	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ali >C21-C36	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	120	<10	<10
Aliphatics >C35-C44	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	20	<10	<10
Aromatics																			
Arom >EC5-EC7	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom >EC7-EC9	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom >EC8-EC11	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom >EC10-EC13	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	45	<5	<5	<5	<5
Arom >EC12-EC17	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10	<10	170	<10	<10
Arom >EC16-EC22	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	30	<10	790	<10	<10
Arom >EC21-EC36	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	1330	<10	<10
Aromatics >EC35-EC44	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	270	<10	<10
EPH (C8-C40)	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	85	<10	2560	<10	<10
PCBS																			
Total 7 PCBs	ug/l	<0.7	NA	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
PCB 101	ug/l	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PCB 118	ug/l	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PCB 138	ug/l	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 153	ug/l	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PCB 180	ug/l	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PCB 28	ug/l	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 52	ug/l	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Phenol																			
Phenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
2-Chlorophenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
2-Methylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dichlorophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
2-Nitrophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-Trichlorophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-methylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
4-Methylphenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
4-Nitrophenol	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<200	<10	<10	<10	<10	<10
2,4-Dimethylphenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Poly Aromatic Hydrocarbons																			
Acenaphthene	ug/l	<0.013		0.11	0.07	0.08		0.14	0.04	0.02	0.05		0.05				0.02	0.06	0.08
Acenaphthylene	ug/l	<0.1		0.05	0.05	0.06		0.13	0.04	0.05	0.05		0.06				0.04	0.03	0.04
Anthracene	ug/l	<0.011		0.09	0.06	0.05		0.32	0.05	0.04	0.03		0.05				<0.013	0.05	0.03
Benzo(a)anthracene	ug/l	<0.013		0.11	0.06	0.05		1.58	0.12	0.2	0.04		0.15				0.02	0.15	0.04
Benzo(a)pyrene	ug/l	<0.018		0.14	0.02	0.03		1.82	0.12	0.31	0.03		0.17				<0.016	0.23	0.04
Benzo(k)fluoranthene	ug/l	<0.01		0.06	0.01	0.02		0.91	0.06	0.14	0.02		0.07				<0.01	0.11	0.02
Benzo(bk)fluoranthene	ug/l	<0.011		0.21	0.05	0.07		3.24	0.2	0.5	0.06		0.24				0.02	0.38	0.07
Benzo(b)fluoranthene	ug/l	<0.195		0.15	0.04	0.05		2.33	0.14	0.36	0.04		0.17				0.01	0.27	0.05
Benzo(ghi)perylene	ug/l	<0.01		0.09	<0.011	0.02		0.65	0.04	0.15	0.02		0.07				<0.011	0.08	0.03
Chrysene	ug/l	<0.015		0.13	0.07	0.05		2.28	0.17	0.24	0.04		0.17				0.02	0.19	0.04
Dibenzo(ah)anthracene	ug/l	<0.011		0.03	<0.01	0.02		0.16	<0.01	<0.01	<0.01		0.02				<0.01	<0.01	<0.01
Fluoranthene	ug/l	<0.013		0.21	0.16	0.06		2.93	0.22	0.33	0.06		0.22				0.04	0.18	0.11
Fluorene	ug/l	<0.013		0.09	0.05	0.09		0.11	0.04	0.02	0.05		0.04				0.02	0.05	0.08
Indeno(123cd)pyrene	ug/l	<0.016		0.08	<0.011	0.02		0.71	0.04	0.19	0.03		0.07				<0.011	0.1	0.03
Naphthalene	ug/l			<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1		<0.1				0.1	<0.1	<0.1
Phenanthrene	ug/l	<0.014		0.19	0.18	0.12		0.83	0.1	0.12	0.12		0.09				0.07	0.11	0.13
Pyrene	ug/l	<0.012		0.2	0.16	0.05		3.74	0.31	0.36	0.05		0.27				0.04	0.16	0.08
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PAH 17 Total	ug/l	<0.011		1.73	0.93	0.77		18.64	1.49	2.53	0.63		1.67				0.39	1.77	0.8
SVOCs																			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Pentachlorophenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2,4-Dinitrotoluene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dinitrotoluene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
2-Chloronaphthalene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
2-Methylnaphthalene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	4	<1	<1	<1	<1
2-Nitroaniline	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
3-Nitroaniline	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
4-Methylphenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
4-Nitroaniline	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
4-Nitrophenol	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<200	<10	<10	<10	<10	<10
Azobenzene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Carbazole	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	8	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	ug/l	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<30.0	<1.5	<1.5	<1.5	<1.5	<1.5
Di-n-Octyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Dibenzofuran	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	1.8	<0.5	<0.5	<0.5	<0.5
Hexachlorobenzene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Hexachlorocyclopentadiene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Bis(2-chloroethyl)ether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Bis(2-ethylhexyl) phthalate	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<5	<5	<5	<5	<5
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2-Nitrophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloroaniline	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Nitrobenzene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<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	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Hexachloroethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Butylbenzyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Diethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
Dimethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1
4-Bromophenylphenylether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	<1	<1	<1

Determinant	Unit	Minimum	Maximum	Count	Source	AGAC	Exceedances of AECOM GACs
Arsenic	ug/l	<LOD	79.1	18	WS Regs 2010 (Eng/Wal)	10 ug/l	6
#N/A	#N/A	<LOD	#N/A	56	WHO DWG 2011	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	WHO DWG 2011	#N/A #N/A	56
Cadmium	ug/l	<LOD	<LOD	15	WFD England/Wales. 2015 - AA-EQS Inl	0.08 ug/l	
Hexavalent Chromium	mg/l	<LOD	0.02	8	WFD England/Wales. 2015 - Freshwater	0.0034 mg/l	2
Chromium III	mg/l	<LOD	0.013	8	WFD England/Wales. 2015 - Freshwater	0.0047 mg/l	4
Chromium	ug/l	<LOD	25.4	18	WFD England/Wales. 2015 - Freshwater	4.7 ug/l	8
Copper	ug/l	<LOD	22	18	WFD England/Wales. 2015 - Freshwater	1 ug/l	2
Lead	ug/l	<LOD	23	18	WFD England/Wales. 2015 - AA-EQS Inl	1.2 ug/l	5
Mercury	ug/l	<LOD	<LOD	18	LOD	LOD	
Mercury	ug/l	<LOD	<LOD	18	LOD	LOD	
Nickel	ug/l	<LOD	6	18	WFD England/Wales. 2015 - AA-EQS Inl	4 ug/l	3
Selenium	ug/l	<LOD	<LOD	18	WS Regs 2010 (Eng/Wal)	10 ug/l	
Vanadium	ug/l	<LOD	39.8	15	WFD England/Wales. 2015 - Freshwater	10.9 ug/l	2
#N/A	#N/A	<LOD	#N/A	56	WS Regs 2010 (Eng/Wal)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	WS Regs 2010 (Eng/Wal)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	WS Regs 2010 (Eng/Wal)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	WHO DWG 2011	#N/A #N/A	56
Zinc	ug/l	<LOD	10	18	SEPA WAT-SG-53 Fresh EQS - AA - 201	20 ug/l	
Boron	ug/l	<LOD	187	18	WS Regs 2010 (Eng/Wal)	1000 ug/l	
Non Metals							
#N/A	#N/A	<LOD	#N/A	56	WFD England/Wales. 2015 - Freshwater	#N/A #N/A	56
Total Cyanide	mg/l	<LOD	0.08	12	WFD England/Wales. 2015 - Freshwater	0.001 mg/l	1
#N/A	#N/A	<LOD	#N/A	56	WFD England/Wales. 2015 - Freshwater	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
pH	pH units	<LOD	11.71	18	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
Dissolved Organic Carbon	mg/l	<LOD	13	16	LOD	LOD	12
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
TPH compounds							
Benzene	ug/l	<LOD	<LOD	18	WS Regs 2010 (Eng/Wal)	1 ug/l	
Toluene	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - Freshwater	74 ug/l	
Ethylbenzene	ug/l	<LOD	<LOD	18	SEPA WAT-SG-53 Fresh EQS - AA - 201	20 ug/l	
o-Xylene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	190 ug/l	
p/m-Xylene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	190 ug/l	
Methyl Tertiary Butyl Ether	ug/l	<LOD	<LOD	18	WHO DWG 2011	15 ug/l	
Ali >C5-C6	ug/l	<LOD	<LOD	18	WHO Petroleum DWG 2008	15000 ug/l	
Ali >C6-C9	ug/l	<LOD	<LOD	18	WHO Petroleum DWG 2008	15000 ug/l	
Ali >C8-C11	ug/l	<LOD	<LOD	18	WHO Petroleum DWG 2008	300 ug/l	
Ali >C10-C13	ug/l	<LOD	<LOD	18	WHO Petroleum DWG 2008	300 ug/l	
Ali >C12-C17	ug/l	<LOD	<LOD	18	WHO Petroleum DWG 2008	300 ug/l	
Ali >C16-C22	ug/l	<LOD	<LOD	18	LOD	LOD	
Ali >C21-C36	ug/l	<LOD	120	18	LOD	LOD	1
Aliphatics >C35-C44	ug/l	<LOD	20	18	AGAC	LOD	1
		<LOD					
Arom >EC5-EC7	ug/l	<LOD	<LOD	18	WS Regs 2010 (Eng/Wal)	1 ug/l	
Arom >EC7-EC9	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - Freshwater	74 ug/l	
Arom >EC8-EC11	ug/l	<LOD	<LOD	18	WHO Petroleum DWG 2008	300 ug/l	
Arom >EC10-EC13	ug/l	<LOD	45	18	WHO Petroleum DWG 2008	90 ug/l	
Arom >EC12-EC17	ug/l	<LOD	170	18	WHO Petroleum DWG 2008	90 ug/l	1
Arom >EC16-EC22	ug/l	<LOD	790	18	WHO Petroleum DWG 2008	90 ug/l	1
Arom >EC21-EC36	ug/l	<LOD	1330	18	WHO Petroleum DWG 2008	90 ug/l	1
Aromatics >EC35-EC44	ug/l	<LOD	270	18	WHO Petroleum DWG 2008	90 ug/l	1
EPH (C8-C40)	ug/l	<LOD	2560	18	LOD	LOD	2
PCBs							
Total 7 PCBs	ug/l	<LOD	#N/A	19	USEPA RSL (tapwater)	0.044 ug/l	
PCB 101	ug/l	<LOD	#N/A	19	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
PCB 118	ug/l	<LOD	#N/A	19	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
PCB 138	ug/l	<LOD	#N/A	19	LOD	LOD	
PCB 153	ug/l	<LOD	#N/A	19	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
PCB 180	ug/l	<LOD	#N/A	19	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
PCB 28	ug/l	<LOD	#N/A	19	LOD	LOD	
PCB 52	ug/l	<LOD	#N/A	19	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
Phenol							
Phenol	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - Freshwater	7.7 ug/l	
2-Chlorophenol	ug/l	<LOD	<LOD	18	LOD	0.1 ug/l	
2-Methylphenol	ug/l	<LOD	<LOD	18	LOD	LOD	
2,4-Dichlorophenol	ug/l	<LOD	<LOD	18	AGAC	0.3 ug/l	
2-Nitrophenol	ug/l	<LOD	<LOD	18	AGAC	LOD	
2,4,5-Trichlorophenol	ug/l	<LOD	<LOD	18	AGAC	1200 ug/l	
4-Chloro-3-methylphenol	ug/l	<LOD	<LOD	18	AGAC	1400 ug/l	
4-Methylphenol	ug/l	<LOD	<LOD	18	LOD	LOD	
4-Nitrophenol	ug/l	<LOD	<LOD	18	LOD	LOD	
2,4-Dimethylphenol	ug/l	<LOD	<LOD	18	LOD	LOD	
2,4,6-Trichlorophenol	ug/l	<LOD	<LOD	18	AGAC	200 ug/l	
Poly Aromatic Hydrocarbons							
Acenaphthene	ug/l	<LOD	0.14	12	AECOM DWG (WHO method)	18 ug/l	
Acenaphthylene	ug/l	<LOD	0.13	12	AECOM DWG (WHO method)	18 ug/l	
Anthracene	ug/l	<LOD	0.32	12	WFD England/Wales. 2015 - AA-EQS Inl	0.1 ug/l	1
Benzo(a)anthracene	ug/l	<LOD	1.58	12	AECOM DWG (WHO method)	3.5 ug/l	
Benzo(a)pyrene	ug/l	<LOD	1.82	12	WFD England/Wales. 2015 - AA-EQS Inl	0.00017 ug/l	10
Benzo(k)fluoranthene	ug/l	<LOD	0.91	12	WFD England/Wales. 2015 - MAC-EQS I	0.017 ug/l	9
Benzo(bk)fluoranthene	ug/l	<LOD	3.24	12	WFD England/Wales. 2015 - MAC-EQS I	0.017 ug/l	11
Benzo(b)fluoranthene	ug/l	<LOD	2.33	12	WFD England/Wales. 2015 - MAC-EQS I	0.017 ug/l	10
Benzo(ghi)perylene	ug/l	<LOD	0.65	12	WFD England/Wales. 2015 - MAC-EQS I	0.0082 ug/l	9
Chrysene	ug/l	<LOD	2.28	12	AECOM DWG (WHO method)	7 ug/l	
Dibenzo(ah)anthracene	ug/l	<LOD	0.16	12	AECOM DWG (WHO method)	0.07 ug/l	1
Fluoranthene	ug/l	<LOD	2.93	12	WFD England/Wales. 2015 - AA-EQS Inl	0.0063 ug/l	11
Fluorene	ug/l	<LOD	0.11	12	AECOM DWG (WHO method)	12 ug/l	
Indeno(123cd)pyrene	ug/l	<LOD	0.71	12	LOD	LOD	9
Naphthalene	ug/l	<LOD	0.1	11	WFD England/Wales. 2015 - AA-EQS Inl	2 ug/l	
Phenanthrene	ug/l	<LOD	0.83	12	AECOM DWG (WHO method)	4 ug/l	
Pyrene	ug/l	<LOD	3.74	12	AECOM DWG (WHO method)	9 ug/l	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
	ug/l	<LOD	18.64	12			11
SVOCs							
#N/A	#N/A	<LOD	#N/A	56	AGAC	#N/A #N/A	56
Pentachlorophenol	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - AA-EQS Inl	0.4 ug/l	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
2,4-Dinitrotoluene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.24 ug/l	
2,6-Dinitrotoluene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.048 ug/l	
2-Chloronaphthalene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	750 ug/l	
2-Methylnaphthalene	ug/l	<LOD	4	18	USEPA RSL (tapwater)	164200 ug/l	
2-Nitroaniline	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	190 ug/l	
3-Nitroaniline	ug/l	<LOD	<LOD	18	LOD	LOD	
4-Methylphenol	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	1900 ug/l	
4-Nitroaniline	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	3.8 ug/l	
4-Nitrophenol	ug/l	<LOD	<LOD	18	LOD	LOD	
Azobenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.12 ug/l	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
Carbazole	ug/l	<LOD	8	18	LOD	LOD	1
Di-n-butyl phthalate	ug/l	<LOD	<LOD	18	SEPA WAT-SG-53 Fresh EQS - AA - 201	8 ug/l	
Di-n-Octyl phthalate	ug/l	<LOD	<LOD	18	SEPA WAT-SG-53 Fresh EQS - AA - 201	20 ug/l	
Dibenzofuran	ug/l	<LOD	1.8	18	USEPA RSL (tapwater)	7.9 ug/l	
Hexachlorobenzene	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - MAC-EQS I	0.05 ug/l	
Hexachlorocyclopentadiene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.41 ug/l	
Bis(2-chloroethyl)ether	ug/l	<LOD	<LOD	18	USEPA RSL	2500 ug/l	
Bis(2-ethylhexyl) phthalate	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - AA-EQS Inl	1.3 ug/l	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
2-Nitrophenol	ug/l	<LOD	<LOD	18	LOD	LOD	
4-Chloroaniline	ug/l	<LOD	<LOD	18	LOD	LOD	
Nitrobenzene	ug/l	<LOD	<LOD	18	WHO DWG 2011	30 ug/l	
Isophorone	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	78 ug/l	
Hexachlorobutadiene	ug/l	<LOD	<LOD	18	WHO DWG 2011	0.6 ug/l	
Hexachloroethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.33 ug/l	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	WFD England/Wales. 2015 - AA-EQS Inl	#N/A #N/A	56
Butylbenzyl phthalate	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - Freshwater	7.5 ug/l	
Diethyl phthalate	ug/l	<LOD	<LOD	18	SEPA WAT-SG-53 Fresh EQS - AA - 201	200 ug/l	
Dimethyl phthalate	ug/l	<LOD	<LOD	18	LOD	LOD	
4-Bromophenylphenylether	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	13 ug/l	

Exploratory Hole			BH102	BH108	BH108	BH111	BH112	HP01	HP02	WS204	WS205	WS206	WS210	WS211	WS212	WS214	WS220	WS220	WS223
Depth			2	1	4	0.20-0.40	1	0.2	0.2	0.2	0.5	0.5	1	0.2	1	0.5	0.2	1	1
Target			Glacial Sands and Gravels	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1,2,4-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1,3-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5	<0.5
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
4-Chlorophenylphenylether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<20	<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	<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	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<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	<2	<2	<2	<2	<2	<2	<2	<2
1,1,1-Trichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<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	<3	<3	<3	<3	<3	<3	<3	<3
1,4-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Tetrachloroethene (PCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<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	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethene (1,1 DCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloropropene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<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	<3	<3	<3	<3	<3	<3	<3	<3
1,2,4-Trimethylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<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	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<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	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dichloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<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	<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	<2	<2	<2	<2	<2	<2
2,2-Dichloropropane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Bromobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromodichloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromoform	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1-2-Dichloroethene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<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	<2	<2	<2	<2	<2	<2	<2	<2
Dibromomethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
4-Isopropyltoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Styrene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<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	<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	<4	<4	<4	<4	<4	<4	<4	<4
Bromomethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Chloromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Isopropylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Dichlorodifluoromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
sec-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
tert-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1-2-Dichloroethene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Dichloromethane (DCM)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Trichlorofluoromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1,2,3-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<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	<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	<2	<2	<2	<2	<2	<2	<2	<2
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
n-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Dibromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Propylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1,2-Dibromo-3-chloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Others																			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Determinant	Unit	Minimum	Maximum	Count	Source	AGAC	Exceedances of AECOM GACs
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
1,2,4-Trichlorobenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	1.1 ug/l	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
1,3-Dichlorobenzene	ug/l	<LOD	<LOD	18	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	WFD England/Wales. 2015 - Freshwater	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	AECOM (modified LOM/CIEH S4ULs)	#N/A #N/A	56
Bis(2-chloroethoxy)methane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	59 ug/l	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	#N/A	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	WHO DWG 2011	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	WHO DWG 2011	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
4-Chlorophenylphenylether	ug/l	<LOD	<LOD	18	AGAC	LOD	
VOCs							
Vinyl Chloride	ug/l	<LOD	<LOD	18	LOD	LOD	
Trichloroethene (TCE)	ug/l	<LOD	<LOD	18	LOD	LOD	
Carbon tetrachloride	ug/l	<LOD	<LOD	18	WS Regs 2010 (Eng/Wal)	3 ug/l	
Chlorobenzene	ug/l	<LOD	<LOD	18	WHO DWG 2011	300 ug/l	
Chloroform	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - AA-EQS Inl	2.5 ug/l	
1,1,1,2-Tetrachloroethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.57 ug/l	
1,1,1-Trichloroethane	ug/l	<LOD	<LOD	18	WHO DWG 2011	2000 ug/l	
1,3-Dichlorobenzene	ug/l	<LOD	<LOD	18	LOD	LOD	
1,4-Dichlorobenzene	ug/l	<LOD	<LOD	18	WHO DWG 2011	300 ug/l	
Tetrachloroethene (PCE)	ug/l	<LOD	<LOD	18	WFD England/Wales. 2015 - AA-EQS Inl	10 ug/l	
1,1,2-Trichloroethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.28 ug/l	
1,1-Dichloroethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	2.7 ug/l	
1,1-Dichloroethene (1,1 DCE)	ug/l	<LOD	<LOD	18	LOD	LOD	
1,1-Dichloropropene	ug/l	<LOD	<LOD	18	LOD	LOD	
1,2,3-Trichloropropane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.00075 ug/l	
1,2,4-Trimethylbenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	26100 ug/l	
1,2-Dibromoethane	ug/l	<LOD	<LOD	18	WHO DWG 2011	0.4 ug/l	
1,2-Dichlorobenzene	ug/l	<LOD	<LOD	18	WHO DWG 2011	1000 ug/l	
1,2-Dichloroethane	ug/l	<LOD	<LOD	18	WS Regs 2010 (Eng/Wal)	3 ug/l	
1,2-Dichloropropane	ug/l	<LOD	<LOD	18	WHO DWG 2011	40 ug/l	
1,3,5-Trimethylbenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	120 ug/l	
1,3-Dichloropropane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	370 ug/l	
2,2-Dichloropropane	ug/l	<LOD	<LOD	18	LOD	LOD	
2-Chlorotoluene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	240 ug/l	
4-Chlorotoluene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	250 ug/l	
Bromobenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	62 ug/l	
Bromochloromethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	83 ug/l	
Bromodichloromethane	ug/l	<LOD	<LOD	18	LOD	LOD	
Bromoform	ug/l	<LOD	<LOD	18	LOD	LOD	
cis-1-2-Dichloroethene	ug/l	<LOD	<LOD	18	LOD	LOD	
cis-1-3-Dichloropropene	ug/l	<LOD	<LOD	18	LOD	LOD	
Dibromomethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	8 ug/l	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	160800000 #N/A	
4-Isopropyltoluene	ug/l	<LOD	<LOD	18	LOD	LOD	
Styrene	ug/l	<LOD	<LOD	18	WHO DWG 2011	20 ug/l	
trans-1-3-Dichloropropene	ug/l	<LOD	<LOD	18	LOD	LOD	
1,1,2,2-Tetrachloroethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	7 ug/l	
Bromomethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	0.076 ug/l	
Chloroethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	21000 ug/l	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
Chloromethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	190 ug/l	
Isopropylbenzene	ug/l	<LOD	<LOD	18	LOD	LOD	
Dichlorodifluoromethane	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	200 ug/l	
sec-Butylbenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	2000 ug/l	
tert-Butylbenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	690 ug/l	
trans-1-2-Dichloroethene	ug/l	<LOD	<LOD	18	LOD	LOD	
Dichloromethane (DCM)	ug/l	<LOD	<LOD	18	LOD	LOD	
Trichlorofluoromethane	ug/l	<LOD	<LOD	18	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
1,2,3-Trichlorobenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	7 ug/l	
1,2,4-Trichlorobenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	1.1 ug/l	
1,2-Dibromo-3-chloropropane	ug/l	<LOD	<LOD	18	WHO DWG 2011	1 ug/l	
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
n-Butylbenzene	ug/l	<LOD	<LOD	18	LOD	LOD	
Dibromochloromethane	ug/l	<LOD	<LOD	18	LOD	LOD	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
Propylbenzene	ug/l	<LOD	<LOD	18	USEPA RSL (tapwater)	660 ug/l	
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
1,2-Dibromo-3-chloropropane	ug/l	<LOD	<LOD	18			
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56
#N/A	#N/A	<LOD	#N/A	56	LOD	LOD	56

Appendix F – Groundwater Screening Assessment

Stockport Bus Station
Groundwater Testing

> Threshold Value
> 2x Threshold Value
>10 x Threshold value
Above LOD where no AGAC is avaliable

	Name	Date
Author:	WH	
Checked By:		
Approved By:		

Exploratory Hole			BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112
Depth			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
Target		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
Strata Logs			Sandstone	Sandstone	Sandstone	Sandstone	Sandstone	Sandstone	Sandstone	Sandstone
Determinant	**Unit**									
Metals										
Arsenic	ug/l	<2.5	<2.5	3.2	3	4.1	<2.5	3.2	<2.5	<2.5
Cadmium	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexavalent Chromium	mg/l									
Chromium III	mg/l									
Chromium	ug/l	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Copper	ug/l	<7	<7	<7	<7	<7	<7	<7	<7	<7
Lead	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Mercury	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mercury	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nickel	ug/l	<2	8	<2	8	6	<2	<2	4	<2
Selenium	ug/l	<3	<3	14	<3	<3	<3	<3	<3	<3
Vanadium	ug/l	<1.5	1.8	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Zinc	ug/l	<3	5	15	<3	<3	<3	<3	<3	<3
Boron	ug/l	<12	73	57	146	61	62	16	19	40
Non Metals										
Total Cyanide	mg/l									
Nitrate as NO3	mg/l	<0.2	4.9	2.5	1.9	7.4	10.7	0.8	0.6	1.7
pH	pH units									
Sulphide	mg/l	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Dissolved Organic Carbon	mg/l									
Total Organic Carbon	mg/l	<2	5	<2	<2	<2	<2	<2	49	<2
Sulphate	mg/l	<0.05	92.76	71.35	169.71	62.72	38.55	25.69	31.61	33.03
TPH compounds										
Benzene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<0.5
Ethylbenzene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-Xylene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p/m-Xylene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl Tertiary Butyl Ether	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aliphatics										
Ali >C5-C6	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C6-C9	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C8-C11	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ali >C10-C13	ug/l	<5	<5	<5	<5	<5	<5	<5	9	<5
Ali >C12-C17	ug/l	<10	<10	<10	<10	<10	<10	<10	1280	<10
Ali >C16-C22	ug/l	<10	<10	<10	<10	<10	<10	<10	10	<10
Ali >C21-C36	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aliphatics >C35-C44	ug/l	<10	<10	<10	<10	<10	<10	<10	1299	<10
Aromatics										
Arom >EC5-EC7	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom >EC7-EC9	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom >EC8-EC11	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom >EC10-EC13	ug/l	<10	<10	<10	<10	<10	<10	<10	80	<10
Arom >EC12-EC17	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
Arom >EC16-EC22	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
Arom >EC21-EC36	ug/l	<10	<10	<10	<10	<10	<10	<10	80	<10
PCBS										
Total 7 PCBs	ug/l	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
PCB 101	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 118	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 138	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 153	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 180	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 28	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 52	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol										
Phenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorophenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Methylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dichlorophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Nitrophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-Trichlorophenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-methylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Methylphenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Nitrophenol	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Poly Aromatic Hydrocarbons										
Acenaphthene	ug/l	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Acenaphthylene	ug/l	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Anthracene	ug/l	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Benzo(a)anthracene	ug/l	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(a)pyrene	ug/l	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Benzo(k)fluoranthene	ug/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(bk)fluoranthene	ug/l	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Benzo(b)fluoranthene	ug/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(ghi)perylene	ug/l	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Chrysene	ug/l	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Dibenzo(ah)anthracene	ug/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	ug/l	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Fluorene	ug/l	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Indeno(123cd)pyrene	ug/l	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Naphthalene	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Phenanthrene	ug/l	<0.011	0.02	0.02	<0.011	<0.011	<0.011	<0.011	0.02	<0.011
Pyrene	ug/l	<0.013	<0.013	0.04	<0.013	<0.013	<0.013	<0.013	0.04	<0.013
PAH 17 Total	ug/l	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195	<0.195
SVOCs										
Pentachlorophenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-Dinitrotoluene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dinitrotoluene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chloronaphthalene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Methylnaphthalene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Nitroaniline	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-Nitroaniline	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Methylphenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Nitroaniline	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Nitrophenol	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
Azobenzene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbazole	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	ug/l	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Di-n-Octyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibenzofuran	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobenzene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hexachlorocyclopentadiene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bis(2-chloroethyl)ether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bis(2-ethylhexyl) phthalate	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5

Determinant	Unit	Minimum	Maximum	Count	Source	AGAC	Exceedances of AECOM GACs
Arsenic	ug/l	<LOD	4.1	9	WS Regs 2010 (Eng/Wal)	10 ug/l	
Cadmium	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - AA-EQS Inla	0.08 ug/l	
Hexavalent Chromium	mg/l	<LOD	<LOD		WFD England/Wales. 2015 - Freshwater	0.0034 mg/l	
Chromium III	mg/l	<LOD	<LOD		WFD England/Wales. 2015 - Freshwater	0.0047 mg/l	
Chromium	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - Freshwater	4.7 ug/l	
Copper	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - Freshwater	1 ug/l	
Lead	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - AA-EQS Inla	1.2 ug/l	
Mercury	ug/l	<LOD	<LOD	9	LOD	LOD	
Mercury	ug/l	<LOD	<LOD	9	LOD	LOD	
Nickel	ug/l	<LOD	8	9	WFD England/Wales. 2015 - AA-EQS Inla	4 ug/l	3
Selenium	ug/l	<LOD	14	9	WS Regs 2010 (Eng/Wal)	10 ug/l	1
Vanadium	ug/l	<LOD	1.8	9	WFD England/Wales. 2015 - Freshwater	10.9 ug/l	
Zinc	ug/l	<LOD	15	9	SEPA WAT-SG-53 Fresh EQS - AA - 201	20 ug/l	
Boron	ug/l	<LOD	146	9	WS Regs 2010 (Eng/Wal)	1000 ug/l	
Non Metals							
Total Cyanide	mg/l	<LOD	<LOD		WFD England/Wales. 2015 - Freshwater	0.001 mg/l	
Nitrate as NO3	mg/l	<LOD	10.7	9	LOD	LOD	8
pH	pH units	<LOD	<LOD		LOD	LOD	
Sulphide	mg/l	<LOD	<LOD	9	LOD	LOD	
Dissolved Organic Carbon	mg/l	<LOD	<LOD		LOD	LOD	
Total Organic Carbon	mg/l	<LOD	49	9	LOD	LOD	2
Sulphate	mg/l	<LOD	169.71	9	LOD	LOD	8
TPH compounds							
Benzene	ug/l	<LOD	<LOD	9	WS Regs 2010 (Eng/Wal)	1 ug/l	
Toluene	ug/l	<LOD	2.2	9	WFD England/Wales. 2015 - Freshwater	74 ug/l	
Ethylbenzene	ug/l	<LOD	<LOD	9	SEPA WAT-SG-53 Fresh EQS - AA - 201	20 ug/l	
o-Xylene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	190 ug/l	
p/m-Xylene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	190 ug/l	
Methyl Tertiary Butyl Ether	ug/l	<LOD	<LOD	9	WHO DWG 2011	15 ug/l	
Ali >C5-C6	ug/l	<LOD	<LOD	9	WHO Petroleum DWG 2008	15000 ug/l	
Ali >C6-C9	ug/l	<LOD	<LOD	9	WHO Petroleum DWG 2008	15000 ug/l	
Ali >C8-C11	ug/l	<LOD	<LOD	9	WHO Petroleum DWG 2008	300 ug/l	
Ali >C10-C13	ug/l	<LOD	9	9	WHO Petroleum DWG 2008	300 ug/l	
Ali >C12-C17	ug/l	<LOD	1280	9	WHO Petroleum DWG 2008	300 ug/l	1
Ali >C16-C22	ug/l	<LOD	10	9	LOD	LOD	1
Ali >C21-C36	ug/l	<LOD	<LOD	9	LOD	LOD	
Aliphatics >C35-C44	ug/l	<LOD	1299	9	AGAC	LOD	1
		<LOD					
Arom >EC5-EC7	ug/l	<LOD	<LOD	9	WS Regs 2010 (Eng/Wal)	1 ug/l	
Arom >EC7-EC9	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - Freshwater	74 ug/l	
Arom >EC8-EC11	ug/l	<LOD	<LOD	9	WHO Petroleum DWG 2008	300 ug/l	
Arom >EC10-EC13	ug/l	<LOD	80	9	WHO Petroleum DWG 2008	90 ug/l	
Arom >EC12-EC17	ug/l	<LOD	<LOD	9	WHO Petroleum DWG 2008	90 ug/l	
Arom >EC16-EC22	ug/l	<LOD	<LOD	9	WHO Petroleum DWG 2008	90 ug/l	
Arom >EC21-EC36	ug/l	<LOD	80	9	WHO Petroleum DWG 2008	90 ug/l	
PCBs							
Total 7 PCBs	ug/l	<LOD	<LOD	10	USEPA RSL (tapwater)	0.044 ug/l	
PCB 101	ug/l	<LOD	<LOD	10	LOD	LOD	
PCB 118	ug/l	<LOD	<LOD	10	LOD	LOD	
PCB 138	ug/l	<LOD	<LOD	10	LOD	LOD	
PCB 153	ug/l	<LOD	<LOD	10	LOD	LOD	
PCB 180	ug/l	<LOD	<LOD	10	LOD	LOD	
PCB 28	ug/l	<LOD	<LOD	10	LOD	LOD	
PCB 52	ug/l	<LOD	<LOD	10	LOD	LOD	
Phenol							
Phenol	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - Freshwater	7.7 ug/l	
2-Chlorophenol	ug/l	<LOD	<LOD	9	LOD	0.1 ug/l	
2-Methylphenol	ug/l	<LOD	<LOD	9	LOD	LOD	
2,4-Dichlorophenol	ug/l	<LOD	<LOD	9	AGAC	0.3 ug/l	
2-Nitrophenol	ug/l	<LOD	<LOD	9	AGAC	LOD	
2,4,5-Trichlorophenol	ug/l	<LOD	<LOD	9	AGAC	1200 ug/l	
4-Chloro-3-methylphenol	ug/l	<LOD	<LOD	9	AGAC	1400 ug/l	
4-Methylphenol	ug/l	<LOD	<LOD	9	LOD	LOD	
4-Nitrophenol	ug/l	<LOD	<LOD	9	LOD	LOD	
2,4-Dimethylphenol	ug/l	<LOD	<LOD	9	LOD	LOD	
2,4,6-Trichlorophenol	ug/l	<LOD	<LOD	9	AGAC	200 ug/l	
Poly Aromatic Hydrocarbons							
Acenaphthene	ug/l	<LOD	<LOD	9	AECOM DWG (WHO method)	18 ug/l	
Acenaphthylene	ug/l	<LOD	<LOD	9	AECOM DWG (WHO method)	18 ug/l	
Anthracene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - AA-EQS Inla	0.1 ug/l	
Benzo(a)anthracene	ug/l	<LOD	<LOD	9	AECOM DWG (WHO method)	3.5 ug/l	
Benzo(a)pyrene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - AA-EQS Inla	0.00017 ug/l	
Benzo(k)fluoranthene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - MAC-EQS In	0.017 ug/l	
Benzo(bk)fluoranthene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - MAC-EQS In	0.017 ug/l	
Benzo(b)fluoranthene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - MAC-EQS In	0.017 ug/l	
Benzo(ghi)perylene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - MAC-EQS In	0.0082 ug/l	
Chrysene	ug/l	<LOD	<LOD	9	AECOM DWG (WHO method)	7 ug/l	
Dibenzo(ah)anthracene	ug/l	<LOD	<LOD	9	AECOM DWG (WHO method)	0.07 ug/l	
Fluoranthene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - AA-EQS Inla	0.0063 ug/l	
Fluorene	ug/l	<LOD	<LOD	9	AECOM DWG (WHO method)	12 ug/l	
Indeno(123cd)pyrene	ug/l	<LOD	<LOD	9	LOD	LOD	
Naphthalene	ug/l	<LOD	0.1	9	WFD England/Wales. 2015 - AA-EQS Inla	2 ug/l	
Phenanthrene	ug/l	<LOD	0.02	9	AECOM DWG (WHO method)	4 ug/l	
Pyrene	ug/l	<LOD	0.04	9	AECOM DWG (WHO method)	9 ug/l	
	ug/l	<LOD	<LOD	9			
SVOCs							
Pentachlorophenol	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - AA-EQS Inla	0.4 ug/l	
2,4-Dinitrotoluene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.24 ug/l	
2,6-Dinitrotoluene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.048 ug/l	
2-Chloronaphthalene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	750 ug/l	
2-Methylnaphthalene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	164200 ug/l	
2-Nitroaniline	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	190 ug/l	
3-Nitroaniline	ug/l	<LOD	<LOD	9	LOD	LOD	
4-Methylphenol	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	1900 ug/l	
4-Nitroaniline	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	3.8 ug/l	
4-Nitrophenol	ug/l	<LOD	<LOD	9	LOD	LOD	
Azobenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.12 ug/l	
Carbazole	ug/l	<LOD	<LOD	9	LOD	LOD	
Di-n-butyl phthalate	ug/l	<LOD	<LOD	9	SEPA WAT-SG-53 Fresh EQS - AA - 201	8 ug/l	
Di-n-Octyl phthalate	ug/l	<LOD	<LOD	9	SEPA WAT-SG-53 Fresh EQS - AA - 201	20 ug/l	
Dibenzofuran	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	7.9 ug/l	
Hexachlorobenzene	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - MAC-EQS In	0.05 ug/l	
Hexachlorocyclopentadiene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.41 ug/l	
Bis(2-chloroethyl)ether	ug/l	<LOD	<LOD	9	USEPA RSL	2500 ug/l	
Bis(2-ethylhexyl) phthalate	ug/l	<LOD	<LOD	9	WFD England/Wales. 2015 - AA-EQS Inla	1.3 ug/l	

Exploratory Hole			BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112
Depth			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
Target		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
2-Nitrophenol	ug/l	<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
Nitrobenzene	ug/l	<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
Hexachlorobutadiene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Hexachloroethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butylbenzyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Diethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dimethyl phthalate	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Bromophenylphenylether	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,3-Dichlorobenzene	ug/l	<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
4-Chlorophenylphenylether	ug/l	<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
Trichloroethene (TCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Carbon tetrachloride	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chlorobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	ug/l	<2	<2	<2	<2	<2	<2	<2	5	<2
1,1,1,2-Tetrachloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,1-Trichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,3-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,4-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Tetrachloroethene (PCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1,2-Trichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethene (1,1 DCE)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloropropene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-Trichloropropane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,4-Trimethylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dibromoethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-Dichloroethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-Dichloropropane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,3,5-Trimethylbenzene	ug/l	<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-Dichloropropane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-Chlorotoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Bromobenzene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromodichloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromoform	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-1-2-Dichloroethene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
cis-1-3-Dichloropropene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dibromomethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-Isopropyltoluene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Styrene	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1-3-Dichloropropene	ug/l	<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
Bromomethane	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Chloromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Isopropylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Dichlorodifluoromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
sec-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
tert-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1-2-Dichloroethene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Dichloromethane (DCM)	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Trichlorofluoromethane	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,4-Trichlorobenzene	ug/l	<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
n-Butylbenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
Dibromochloromethane	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2
Propylbenzene	ug/l	<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
Others										
1-naphthol	ug/l	<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
Catechol	ug/l	<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
Xylenols	ug/l	<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
o-cresol	ug/l	<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
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

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 EQS - 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	5	9	WFD England/Wales. 2015 - AA-EQS Inla	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 Inla	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-Dichloropropene	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-Dichloroethene	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	<LOD	9	USEPA RSL (tapwater)	7 ug/l	
Bromomethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	0.076 ug/l	
Chloroethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	21000 ug/l	
Chloromethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	190 ug/l	
Isopropylbenzene	ug/l	<LOD	<LOD	9	LOD	LOD	
Dichlorodifluoromethane	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	200 ug/l	
sec-Butylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	2000 ug/l	
tert-Butylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	690 ug/l	
trans-1-2-Dichloroethene	ug/l	<LOD	<LOD	9	LOD	LOD	
Dichloromethane (DCM)	ug/l	<LOD	<LOD	9	LOD	LOD	
Trichlorofluoromethane	ug/l	<LOD	<LOD	9	LOD	LOD	
1,2,3-Trichlorobenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	7 ug/l	
1,2,4-Trichlorobenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	1.1 ug/l	
1,2-Dibromo-3-chloropropane	ug/l	<LOD	<LOD	9	WHO DWG 2011	1 ug/l	
n-Butylbenzene	ug/l	<LOD	<LOD	9	LOD	LOD	
Dibromochloromethane	ug/l	<LOD	<LOD	9	LOD	LOD	
Propylbenzene	ug/l	<LOD	<LOD	9	USEPA RSL (tapwater)	660 ug/l	
1,2-Dibromo-3-chloropropane	ug/l	<LOD	<LOD	9			
1-naphthol	ug/l	<LOD	<LOD	9	LOD	LOD	
2-isopropylphenol	ug/l	<LOD	<LOD	9	LOD	LOD	
Catechol	ug/l	<LOD	<LOD	9	LOD	LOD	
Resorcinol	ug/l	<LOD	<LOD	9	LOD	LOD	
Xylenols	ug/l	<LOD	<LOD	9	LOD	LOD	
m/p-cresol	ug/l	<LOD	<LOD	47	LOD	LOD	
o-cresol	ug/l	<LOD	<LOD	47	LOD	LOD	
Total cresols	ug/l	<LOD	<LOD	47	LOD	LOD	
2,3,5-trimethyl phenol	ug/l	<LOD	<LOD	47	LOD	LOD	

Appendix C

WSP METHODOLOGY FOR THE DERIVATION OF GENERIC ASSESSMENT CRITERIA

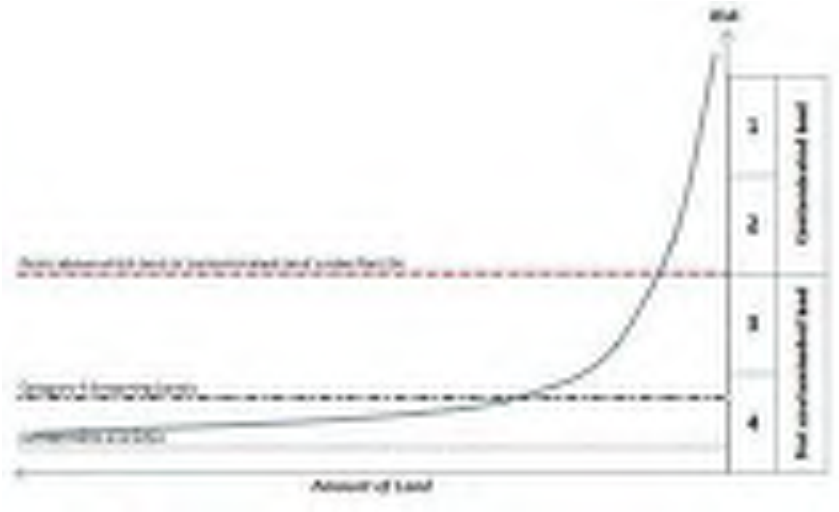
METHODOLOGY FOR THE DERIVATION OF GENERIC QUANTITATIVE ASSESSMENT CRITERIA TO EVALUATE RISKS TO HUMAN HEALTH FROM SOIL & GROUNDWATER CONTAMINATION

UK APPROACH

In the UK, the potential risks to human health from contamination in the ground are usually evaluated through a generic quantitative risk assessment (GQRA) approach. This allows generic and conservative exposure assumptions to be readily applied to risk assessments, and can be a useful tool for rapidly screening data and to identify those contaminants or scenarios that could benefit from further investigation and/or site-specific detailed quantitative risk assessment (DQRA). Current industry good practice is to use the approach presented in the Environment Agency (EA) publications SR2[1] and SR3[2]. This approach allows the derivation of Generic Assessment Criteria (GACs), primarily for chronic exposure.

In April 2012, the Department of Environment, Food and Rural Affairs (Defra) published updated statutory guidance[3] which introduced a four category approach to determining whether land in England and Wales is contaminated or not on the grounds of significant possibility of significant harm (SPOSH). **Figure 1** presents a graphical representation of the categories.

Figure 1: Four Categories for Determining if Land Represent a SPOSH



Cases classified as Category 1 are considered to be SPOSH based on actual evidence or an unacceptably high probability of harm existing. Category 4 cases are those where there is no risk, or a low risk of SPOSH.

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[1] Environment Agency '*Human Health Toxicological Assessment of Contaminants in Soil',* Report SC050021/SR2. January 2009.
[2] Environment Agency '*Updated Technical Background to the CLEA Model*,' Report SC050021/SR3. January 2009.
[3] Defra '*Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance'.* April 2012.

GACs represent a minimal risk level, well within Category 4. A 2014 publication by Contaminated Land: Applicatons in Real Environments (CL:AIRE),SP1010[4] and endorsed by Defra[5] provided an approach to determine Category 4 Screening Levels (C4SLs) which are higher than the GACs whilst being "more pragmatic but still strongly precautionary". It also provided C4SLs for six contaminants of concern. Although the C4SLs were designed to support Part 2A assessments to determine 'contaminated land' they are specifically mentioned, along with reference to the Part 2A statutory guidance, by the Department for Communities and Local Government (DCLG) for use in a planning context[6].

An updated version the Contaminated Land Exposure Assessment (CLEA) Workbook (v1.071) was released by the EA in September 2015 to take into account the publication of SP1010. The updates comprised: additional toxicity data for the six chemicals for which C4SLs were derived; two new public open space land use scenarios; updated exposure parameters; options to run the model using C4SL exposure assumptions; and increased functionality. There were no changes to algorithms, so it is still possible to replicate the withdrawn SGVs using the input parameters held within v1.071.

It should be noted that the four category approach has not been adopted in Scotland under Part 2A or the planning regime. The Part 2A statutory guidance applicable in Scotland (Paper SE/2006/44 dated May 2006) does not reflect the changes introduced by Defra in April 2012 which allow for the use of C4SLs within Part 2A risk assessments. Additionally, it is considered that the principal of 'minimal risk' should still apply under planning in Scotland, based on current guidance.

WSP APPROACH

Following the withdrawal of the SGVs, and in the absence of an industry-wide, accepted set of GACs it is down to individual practitioners to derive their own soil assessment criteria. WSP has used the approach provided within SR2, SR3, SP1010, CLEA Workbook v1.071and SR4[7] to produce a set of minimal risk GACs. The chemical-specific data within two key publications were considered during their production: CL:AIRE 2010[8] and LQM 2015[9]. Both documents provide comprehensive sets of GACs for different contaminants of concern.

The LQM Suitable For Use Levels (S4ULs) have selected exposure parameters consistent with the C4SL exposure scenarios. This approach was rejected by WSP as not representing minimal risk. However, the LQM S4UL document was critically reviewed and the approach and chemical input parameters were utilised where considered to be appropriate.

An industry-led C4SL Working Group is in the process of deriving a larger set of C4SLs in the near future, for approximately 20 contaminants. This will include a critical review of the chemical input data for all selected substances, and may therefore lead to further amendments to the chemical input data used in the WSP in-house screening values. It is considered likely that the contaminant list will

[4] CL:AIRE *'Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination'* SP1010, Final Project Report (Revision 2). September 2014.
[5] Defra 'SP1010: *Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination – Policy Companion Document'*. December 2014.
[6] DCLG Planning Practice Guidance '*Land Affected by Contamination'*, particularly Paragraphs 001 and 007. Ref IDs: 33-001-20140306 & 33-007-20140612.
[7] Environment Agency '*CLEA Software (Version 1.05) Handbook (and Software)',* Report SC050021/SR4. September 2009.
[8] CL:AIRE 'The EIC/AGS/CL:AIRE *Soil Generic Assessment Criteria for Human Health Risk Assessment'.* ISBN 978-1-05046-20-1. January 2010.
[9] Nathanail et al '*The LQM/CIEH S4ULs for Human Health Risk Assessment'*, Land Quality Press, ISBN 978-0-9931084-0-2. 2015.

crossover with the 2009 EIC/AGS/CL:AIRE GACs. As such, this document was not critically reviewed by WSP.

WSP's current approach to the assessment of risks to human health is to continue to evaluate minimal risk through the use of in-house derived GACs, and to use the published C4SLs as a secondary tier of assessment until such time as additional C4SLs are published and/or in-house values are derived.

EXPOSURE MODELS

LAND USES

WSP has largely adopted the exposure assumptions of the generic land use scenarios included within SR3, with two additional public open space scenarios included from within SP1010:

- à Residential with homegrown produce consumption;
- à Residential without homegrown produce consumption;
- à Allotments;
- à Commercial;
- à Public open space near residential housing (POS_{resi}); and
- à Public park (POS_{park}).

Exceptions are described in the following Sections.

SOIL PROPERTIES

SR3 assumes a sandy loam soil with a pH of 7 and a Soil Organic Matter (SOM) content of 6% for its generic land uses, based on the geographical spread of topsoils in the UK. WSP has adopted these default values. In addition, GACs based on an SOM of 1% and 2.5% have been derived, based on common experience of the nature of Made Ground and lack of topsoil on many brownfield sites.

RECEPTOR CHARACTERISTICS AND BEHAVIOURS

SP1010 provides some updated exposure parameters for long-term inhalation rates[10] and the consumption rates for homegrown produce[11] compared to those provided in SR3. This data was used to derived WSP's GACs.

The changes in inhalation rates do not apply to the allotment generic land use scenario, as these are based on the breathing rates for short-term exposure of light to moderate intensity activity which were derived from a study that was not updated in USEPA 2011, so the SR3 rates were retained.

[10] USEPA, National Centre for Environmental Assessment '*Exposure Factors Handbook: 2011 Edition*' EPA/600/R-09/052F. September 2011.
[11] National Diet and Nutrition Survey 2008/2009 to 2010/2011.

CHEMICAL DATA

PHYSICO-CHEMICAL PARAMETERS

Physico-chemical properties for the contaminants for which GACs have been derived have been obtained following critical review of the following hierarchy of data sources:

1. Environment Agency/Defra SGV reports where available;
2. Environment Agency '*Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values*', Report SC050021/SR7, November 2008; and
3. Published fate and transport reviews within Nathanail et. al 2015 and CL:AIRE 2010.

Where appropriate, and where sufficient data is available, values were adjusted to reflect a UK soil temperature of 10ºC (e.g. K_{aw}).

TOXICOLOGICAL DATA

Toxicological data for the derivation of minimal risk Health Criteria Values (HCV) for each contaminant was selected with due regard to the approach presented in SR2. Where appropriate, the following hierarchy of data sources was used:

1. UK toxicity reviews published by authoritative bodies including:
   - EA;
   - Public Health England (PHE);
   - Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT); and
   - Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment (COC).
2. Authoritative European sources such as European Food Standards Agency (EFSA)
3. International organisations including:
   - World Health Organisation (WHO); and
   - Joint FAO/WHO Expert Committee on Food Additives (JECFA).
4. Authoritative country-specific sources including:
   - United States Environmental Protection Agency (USEPA);
   - US Agency for Toxic Substances and Disease Registry (ATSDR);
   - US Integrated Risk Information System (IRIS); and
   - Netherlands National Institute for Public Health and the Environment (RIVM).

Factors such as the applicability of the data to human health (e.g. epidemiological vs. animal studies), the quality of the data, the level of uncertainty in the results and the age of the data were also taken into account in the final selection. Details for specific substances are available on request.

MEAN DAILY INTAKES

Estimations of background exposure for each threshold substance have been updated. In line with the SR2 approach, the exposure from non-threshold substances in the soil does not take into account exposure from other sources, and as such GACs were derived without consideration of the Mean Daily Intake (MDI) for those substances.

The data published by the EA in its series of TOX reports between 2002 and 2009 was evaluated to determine whether the values were considered to remain valid today. Values from these current UK published sources were not amended unless they were considered to be significantly different so that the GACs remained as comparable as possible with the revoked SGVs.

ORAL MEAN DAILY INTAKES

Oral MDI were generally estimated as the sum of exposure via the ingestion of food and drinking water using the default adult physiological parameters presented in Table 3.3 of SR2.

Data on the exposure of substances from food ingestion was generally obtained from UK Total Diet Studies (TDS) published by the Food Standards Agency (FSA) and its predecessor the Ministry of Agriculture, Fisheries and Food (MAFF) and from studies commissioned by COT. Where no UK-specific data was available, MDI were derived from the European Food Safety Authority (EFSA), Health Canada and US sources. This was a rare occurrence, and in these instances, the data was evaluated to determine its applicability to the UK.

Data on the concentrations of substances in tap water was obtained from a variety of sources. UK data was used where available, with preference given to Drinking Water Inspectorate (DWI) 2014 data from water company tap water testing (LOD, 1st and 99th percentile data is available). Where the substance was not included in tap water testing, other UK sources of information were considered including:

- à DWI data from water company tap water testing from previous years;
- à COT; and
- à FSA.

Where UK data was not available, a number of other data sources were considered, largely WHO International Programme on Chemical Safety (IPCS) Concise International Chemical Assessment Documents (CICADs) and background documents for the development of Guidelines for Drinking Water Quality, using professional judgement on the relevance of the data to the UK. The final decision on the MDI from drinking water was made using professional judgement on the balance of relevance and probability, taking into account the detection limit where not detected, Koc and solubility, reduction in use of the substance, banned substances, tight controls (e.g. on explosives) and with due consideration to the SR2 instruction that “if no data or information in background exposure are available, background exposure should be assumed to be negligible and the MDI set to zero….”.

Data from other countries was generally not used because it was considered that the hydrogeology of these countries along with industrial practices were unlikely to be reflective of the UK.

INHALATION MEAN DAILY INTAKES

Inhalation MDIs were based on estimates of average daily exposure by the inhalation pathway and calculated using the default adult physiological parameters presented in Table 3.3 of SR2.

The inhalation MDIs were generally estimated using background exposure data from the UK, derived from Defra's UK-AIR: Air Information Resource[12], which provides ambient air quality data from a number of sites forming a UK-wide monitoring network. The MDIs for heavy metals were based on rolling annual average metal mass concentration data from Defra's UK Heavy Metals Monitoring Network from the period October 2009 to September 2010[13].

Information for some substances was obtained from UK sources including Environment Agency TOX reports and data from the UK Expert Panel on Air Quality Standards (EPAQS). Where recent UK data was not available, data was sourced from the International Programme on Chemical Safety (IPCS), the World Health Organisation (WHO), the Agency for Toxic Substances and Diseases Registry (ATSDR), Health Canada, and various other peer-reviewed sources summarised by LQM/CIEH[14].

For other substances, where no data or information on background exposure was available, background exposure was assumed to be negligible and the MDI set at 0.5*TDI in accordance with guidance in SR2.

PLANT UPTAKE

Soil to plant concentration factors are available in CLEA v1.071 for arsenic, cadmium, hexavalent chromium, lead, mercury, nickel and selenium. For all remaining inorganic chemicals, concentration factors were obtained using the PRISM model. Substance-specific correction factors have been selected in accordance with the guidance established within SR3. This is consistent to the approach utilised in the derivation of the LQM S4UL and the EIC/AGS/CL:AIRE GAC.

Where there is a lack of appropriate data to enable the derivation of specific soil to plant concentrations factors for organic chemicals, plant uptake was modelled within CLEA v1.071 using the generic equations recommended within SR3, as follows:

- Green Vegetables – Ryan et al. (1988);
- Root Vegetables – Trapp (2002);
- Tuber Vegetables – Trapp et al. (2007); and
- Tree Fruit – Trapp et al. (2003).

There are no suitable models available for modelling uptake for herbaceous fruit or shrub fruit. Exposure is considered negligible.

[12] Crown 2016 copyright Defra via uk-air.defra.gov.uk, licenced under the Open Government Licence (OGL).
[13] Defra, 2013 Spreadsheet of historic data for multiple years for the Metals network. Available online at: http://uk-air.defra.gov.uk/data/metals-data. [Accessed 13/03/2016].
[14] LQM/CIEH, 2015. The LQM/CIEH S4ULs for Human Health Risk Assessment.

SOIL SATURATION LIMITS

GACs are not limited to their theoretical soil saturation within CLEA, although where either the aqueous or the vapour-based saturation is exceeded, this is highlighted within the Workbook (compared with the lower of the two values). This affects pathways which depend on partitioning calculations so in reality this only affects the vapour pathways and is relevant to organic substances and other substances, such as elemental mercury, that have a significant volatile component. However, the Workbook highlights saturation for direct contact pathways to indicate to the user where further qualitative consideration of free phase contamination at the surface may be required.

Where the lower of the two saturation limits is exceeded and the vapour pathway is the only exposure route being considered, the chronic risks to human health are likely to be negligible. Further evaluation could be undertaken using an alternative model suitable for evaluating non-aqueous phase liquids (NAPLs), such as the Johnson & Ettinger (J&E) approach described in USEPA 2003. However, WSP considers that if NAPLs are suspected, given the known limitations and over-simplifications of J&E, soil vapour monitoring is a more accurate way of assessing potential risks.

Where the lower saturation limit is exceeded for the vapour pathway and a number of exposure routes are being considered, then the contribution from the NAPL via vapour inhalation to the overall exposure can be evaluated using the procedure provided in SR4. WSP would evaluate this as part of a DQRA process or through soil vapour monitoring on-site to determine site-specific soil vapour concentrations.

CHEMICAL SPECIFIC ASSUMPTIONS

CYANIDES

Cyanide has high acute toxicity, and short term exposure is an important consideration when assessing the risks from soils contaminated with cyanide. The primary risk to human receptors from free cyanide in soils is an acute risk.

There is no current UK guidance available for calculating acute risks from free cyanide. Consequently, GAC for acute exposure were derived using the algorithms presented in MADEP 1992[15] and assuming a one-off ingestion of 10g of soil (this conservative value has been taken as an upper bound estimate for a one-off soil ingestion rate amongst children). Receptor body weights have been selected according to the critical receptor for each exposure scenario. The lowest of the chronic and acute GAC for each land use scenario were adopted by WSP. Brinckerhoff.

LEAD

The SGV for lead was withdrawn by the EA in 2009, and in 2011 the EA withdrew their published TOX report in light of new scientific evidence. The C4SL for lead was derived using the latest scientific evidence from a large human dataset. As such, no chemical-specific margin was applied in the derivation of the C4SL for lead. It may be possible for WSP to derive a GAC for lead using the same dataset and applying a chemical-specific margin, but the value is likely to be lower than UK natural background concentrations. Therefore, WSP has adopted the toxicological data used to derive the C4SLs in deriving the GAC for lead until such time as alternative GACs are published by an authoritative body. The relative bioavailability was set at 100% in line with the approach taken for other GACs, whereas the C4SL assumes 60% for soil and 64% for airborne dust. Thus, the WSP GAC are lower than the C4SLs.

[15] MADEP '*Background Documentation for the Development of an "Available Cyanide" Benchmark Concentration'* 1992. http://www.mass.gov/dep/toxics/cn_soil.htm

POLYCYCLIC AROMATIC HYDROCARBONS

WSP's approach to the assessment of polycyclic aromatic hydrocarbons (PAHs) uses the surrogate marker approach. BaP was used as a surrogate marker for all genotoxic PAHs in line with the Health Protection Agency 2010[16] recommendations and SP1010. This assumes that the PAH profile of the data is similar to that of the coal tars used in the Culp *et al* oral carcinogenicity study from which the toxicity data for BaP was produced. In reality, this profile has been shown by HPA to be applicable on the majority of contaminated sites based on assessment of sites across the country.

The alternative is the Toxic Equivalency Factor (TEF) approach which uses a reference compound and assigns TEFs for other compounds based on estimates of potency. Key uncertainties with this approach include the assumption that all compounds have the same toxic mechanism of action within the body and that no compounds with a greater potency than the reference compound are present. It is considered by the HPA that the TEF approach is likely to under predict the true carcinogenicity of PAHs and therefore favours the surrogate marker approach.

For these reasons, WSP considers that the adoption of BaP as a surrogate marker for genotoxic PAHs, as opposed to the TEF approach, is reasonable. In rare cases where the PAH profile may differ from the wide definitions of the Culp *et al* study the user should discuss their project with an experienced risk assessor. In addition, WSP has derived a GAC for naphthalene, which is commonly a risk driver due to its high volatility, relative to other PAH compounds.

TRIMETHYLBENZENES

The GAC for trimethylbenzenes can be used for the assessment of any individual isomer (1,2,3-trimethylbenzene, 1,2,4-trimethylbenzene or 1,3,5-trimethylbenzene), or a mixture of the three isomers.

CHEMICAL GROUPS

For a number of chemical groups, the available toxicity data is for combinations of chemicals. Given that the physico-chemical parameters may differ between the chemicals, the GACs for the chemicals within the groups have been calculated and then the lowest GAC selected to represent the entire group. This was the approach taken by the EA for m-, o- and p-xylenes, and has also been adopted by WSP for:

- 2-chlorophenol, 2,4-dichlorophenol, 2,4,6-trichlorophenol and 2,3,4,6-tetrachlorophenol;
- 2-, 3- and 4-methylphenol (total cresols);
- aldrin and dieldrin; and
- α- and β-endosulphan.

[16] HPA Contaminated Land Information Sheet '*Risk Assessment Approaches for Polycyclic Aromatic Hydrocarbons (PAHs)* 2010

EXPOSURE TO VAPOURS

INHALATION OF MEASURED VAPOURS

WSP has derived a set of soil vapour GACs (GAC_{sv}) that allow for the assessment of measured site soil vapour concentrations, using J&E, in order to establish potential risks via indoor inhalation of vapours. This methodology enables a more robust assessment of exposure via the inhalation of soil vapours indoors than using CLEA-derived soil GAC, as it is based upon measured soil vapour concentrations beneath the site. It also allows for the assessment of vapours from all source terms (i.e. groundwater, soil or NAPL). Outdoor inhalation was not included. WSP considers that the indoor inhalation pathway is the significantly dominant risk-driver.

The generic land use scenarios within CLEA (residential and commercial) that were used to derive the soil GAC were used to define the receptor and building characteristics for the soil vapour GAC. Only residential and commercial generic land use scenarios include the indoor inhalation of vapours pathway.

The GAC_{sv} were derived for three different soil types; sand, sandy loam and clay, reflecting the importance of this parameter within the J&E model. A depth to contamination of 0.85 m below the base of the building foundation was assumed (i.e. 1 m below ground level). This differs from the depth assumed for the soil GAC (0.5 m bgl), but was selected by WSP as a reasonable worst case scenario.

It is acknowledged that the J&E commonly over-predicts indoor vapour concentrations. In particular, it will significantly over-predict vapour concentrations for suspended floor slabs, which many new builds are constructed with, it does not take into account lateral migration and assumes an infinite source of contamination at steady state conditions. In addition, it is common for soil gas/vapour wells to be installed with at least 1 m of plain riser at the surface and this equates to a total depth of 0.85 m below the building foundation plus a 0.15 m thick foundation, and so is more representative of the depth that samples will be taken from.

The TDSIs and IDs for each substance were converted from $\mu gkg^{-1}{}_{bw}day^{-1}$ to μgm^{-3} using the standard conversions quoted in Table 3.3 of SR2, thereby replacing the need to model C_{air} in the equation:

$$C_{air} = \alpha . C_{vap} . 1{,}000{,}000 cm^3 m^{-3}$$

Where:

C_{air} is the concentration of vapours within the building, mg^{-3}

α is the steady state attenuation coefficient between soil and indoor air, dimensionless

C_{vap} is the soil vapour concentration, $mgcm^{-3}$

The target concentrations within indoor air for each substance (C_{air}) are a function of receptor inhalation rates and occupancy periods, as defined by the site conceptual exposure model (assuming standard CLEA occupancy periods and receptors).

The attenuation factor was calculated using J&E (Equation 10.4 in SR3) and the resulting C_{vap} is equivalent to the GAC_{sv} for the modelled exposure scenario.

Where reported soil vapour concentrations exceed the relevant saturated vapour concentration, free product may occur, and the user should discuss their project with an experienced risk assessor.

INHALATION OF GROUNDWATER-DERIVED VAPOURS

WSP has derived a set of groundwater GACs (GAC_{gw}) to evaluate the potential risks through the indoor inhalation of groundwater-derived vapours by first applying the approach described above for the derivation of the WSP GAC_{sv} to determine the acceptable concentration in soil vapour directly above the water table.

The depth to groundwater was assumed to be 1 m bgl (i.e. 0.85 m below the base of the building foundation). This depth was considered to be more representative of commonly encountered groundwater conditions than the 0.5 m below the base of the building foundation (i.e. 0.65 m bgl) that is used by CLEA for an unsaturated source present in the overlying soil.

The GAC_{gw} was then back-calculated from the GAC_{sv} using the air-water partition coefficient (K_{aw}) for each substance.

The WSP Groundwater Vapour GAC are protective against a dissolved phase contaminant source only. If the presence of NAPL is suspected, the risks from this source will need to be assessed. Where reported groundwater concentrations exceed the relevant solubility limit, free product may occur, and the user should discuss their project with an experienced risk assessor.

Appendix D

GROUND GAS RISK ASSESSMENT

2018

70031899-11057

2 October 2018

Stage 2 Advanced Works, Stockport Interchange - Ground Gas Risk Assessment

1.0 INTRODUCTION

Transport for Greater Manchester (TfGM) has commissioned WSP UK Limited (WSP) to undertake a ground gas risk assessment as part of a wider Stage 2 Contaminated Land Assessment at the Stockport Bus Interchange site located on Swaine Street, Stockport, SK3 0EH. A site location plan is presented as Figure 1 attached.

2.0 BACKGROUND

WSP is currently providing multidisciplinary design services for the re-development of Stockport Bus Interchange. A Pre-Stage 2 Contaminated Land Report[1] was issued by WSP in December 2017 which summarised potential site constraints associated with contaminated land based on the review of previous ground investigation works (AECOM, 2016[2]). The 2016 investigation included exploratory locations to assess potential soil and groundwater contamination and to provide geotechnical information to support preliminary design. The WSP summary review identified a number of contamination constraints which included the ground gas risk assessment. AECOM's assessment classified the site as Characteristic Situation 2 (CIRIA C665[3]) and indicated ground gas protection measures would be required in the new development.

3.0 OBJECTIVE

This letter report presents our review of the 2016 ground gas risk assessment and supplementary ground gas monitoring completed by WSP to update advice on the suitable ground gas classification and exercise professional judgement, if appropriate. A borehole location plan (AECOM, 2016) is attached.

4.0 DEVELOPMENT PROPOSAL

The site forms part of a wider development and includes the re-design and construction of a bus interchange at ground level with a multi-storey residential building and external landscaped public space above the interchange.

5.0 SOURCES OF GROUND GAS ON SITE

Based on the findings of the previous ground investigation report (AECOM, 2016) and publicly available information, the potential sources of ground gas at the site are considered to include the following.

---

[1] Advanced Works to Stage 2 Preliminary Contaminated Land report, Stockport Interchange, WSP, December 2017 (ref: 70031899-10952).
[2] Stockport Interchange - Ground Investigation Report, AECOM, April 2016, (ref: 60340298/GEO/02).
[3] CIRIA C665, Assessing risks posed by hazardous ground gases to buildings, 2007.

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wsp.com

Table 1 - **Potential Sources of Ground Gas on Site**

Potential Source of Ground Gas	Comment	Ground Gas Generation Potential
Anthropogenic		
Made Ground	A review of historical maps indicates the site was occupied by residential and industrial land use from 1872 before becoming a bus station in 1985. The previous and current site history indicate the likely presence of Made Ground of various composition and depth at the site. The 2016 investigation identified Made Ground comprising sandy gravelly clay or black sandy gravel of brick and concrete to a maximum depth of 2.6m below ground level (bgl). In general, degradable material such as wood, rags, paper and vegetation was generally absent from the logs with the following exceptions: § WS224, some wood was noted in Made Ground between ground level and 1.2m bgl § Organic matter was observed locally within Made Ground in the northeast (WS211 and WS212) and west (WS220) to between 1.20m and 1.80m bgl.	Low
Organic Matter Content	The soil organic matter (SOM) content within the Made Ground was below 10% in the majority of the samples analysed. A total of 9 out of 36 locations reported Made Ground SOM contents greater than 10%. The highest SOM content reported was 56.6% which was from an organic Made Ground layer located northeast of the bus station (WS212), consistent with the field observations. The average SOM content in the Made Ground was 10.2%. WSP note the general absence of organic material recorded on the logs.	Moderate
Landfill sites	There are no known landfills within 500m of the site. The closest is located approximately 600m north which is not considered to be a potential source of ground gas at the site.	Very Low
Natural		
Geology	Published geological mapping[4] indicates the south of the site is underlain by Till whilst in the north, Glaciofluvial sheet deposits are present associated with The River Mersey. Bedrock is indicated to comprise the Sherwood Sandstone. No peat or volcanic rocks are indicated to be present. The geological profile described above was generally encountered within the 2016 investigation: glacial sand and gravels were recorded in all positions encountered from 0.50m and 3.20m bgl; Till (clay) was encountered locally within the northwest (WS208, WS211, WS212) and south (BH101 and WS201); and deposits considered to represent alluvium were encountered in two positions in the south (BH112 and WS223). Sherwood Sandstone was encountered from 0.85m and 5.0m bgl.	Very Low

[4] British Geological Society (BGS) 1:50,000 series Geological Map Sheet 98 Stockport (Solid and Drift editions).

Potential Source of Ground Gas	Comment	Ground Gas Generation Potential
Coal measures strata	The Coal Authority website[5] indicates the site is not within a Coal Mining Reporting Area.	Very Low
Organic rich sediments	The 2016 investigation identified alluvial clay with organic material locally in the south (BH112 and WS223). The thickness of the organic rich sediment is considered to be limited (between 0.4m and 0.6m thick). One sample of the alluvial clay was tested for SOM, which was reported to be 21.7% whilst for glacial sands and gravels, 6 samples were tested and the average SOM content was 1.6%	Low

Based on the above, the overall ground gas generation potential on site is considered to be Low.

6.0 POTENTIAL POLLUTANT LINKAGES

A conceptual site model for the site is presented within the Pre-Stage 2 Contaminated Land Report (WSP, 2017). With respect to ground gas, the following contaminant linkages are potentially viable at the site.

- Inhalation of ground gases by commercial workers at interchange level and construction and maintenance workers; and,
- Accumulation of ground gases and generation of explosive atmospheres.

Given the multi-storey residential building is located at an elevation above the bus interchange (i.e. over-site level), future residential occupants are not considered to be viable receptors.

Other potential pollutant linkages identified in the Pre-Stage 2 Contaminated Land Report (WSP, 2017) are not discussed in the report presented herein.

7.0 THIRD PARTY GROUND GAS RISK ASSESSMENT REVIEW

The 2016 investigation included 24 ground gas wells which were monitored three times over a 4-week period in 2016. The ground gas monitoring results were used to generate a worst-case gas screening value (GSV) for the site based on CIRIA C665. The GSV is the maximum volume of methane or carbon dioxide gas that could be produced each hour and is calculated as follows:

- GSV = Maximum steady concentration (%) of carbon dioxide (CO_2) or methane (CH_4) / 100 x maximum steady flow rate (or limit of detection if no flow rate detected) (l/hr).

The 2016 assessment classified the site as Characteristic Situation 2 (CS2) with gas protection measures required to be implemented, based on peak carbon dioxide concentrations identified in four wells during one out of the three rounds undertaken, as summarised in Table 2 below.

Table 2 - Summary of CS2 Ground Gas Results

Location	Monitoring Date	Barometric Pressure (mb)	Flow Rate (l/hr)	Peak CO_2 (%v/v)	GSV (l/hr)	Response Zone (m bgl)	Strata Targeted
BH101	09/02/2016	969	-2.1	3.8	0.0798	5.0 – 7.0	Sandstone
WS201	09/02/2016	969	0.1	6.1	0.0061	3.5 – 4.0	Sandstone

[5] The Coal Authority Interactive Map Viewer available online.

Location	Monitoring Date	Barometric Pressure (mb)	Flow Rate (l/hr)	Peak CO_2 (%v/v)	GSV (l/hr)	Response Zone (m bgl)	Strata Targeted
WS204	11/01/2016	969	0.1	7.1	0.0071	1.5 – 2.45	Made Ground (0.05m) / Sandstone
WS217	25/01/2016	1001	0.1	19.4	0.0194	1.50 – 2.50	Sand and Gravel

Based on the ground gas information provided within the 2016 report, WSP makes the following observations.

- The GSV for three out of the four locations of concern was <0.07 l/hr (CS1), however the risk classification was increased to CS2 based on the CO_2 concentration, which was recorded higher than 5% on one occasion only.
  - The highest carbon dioxide concentration (19.4%v/v) was recorded in WS217; with the other two monitoring events recording carbon dioxide concentrations <5%v/v.
  - WS217 is located in the bus station where traffic is considered to be dense and therefore the high reading might be associated with an anomaly.
  - Elevated carbon dioxide readings above 5%v/v were recorded in WS201 and WS204.
- A negative flow rate (-2.1 l/hr) was used to derive the GSV for BH101, which is considered to be overly conservative. The limit of detection is considered to be more appropriate, which would result in a GSV of 0.0038 l/hr (CS1).
- The response zones in the four wells above are screened predominantly in natural strata (medium dense sand or weathered sandstone).
- No methane concentrations were reported above the limit of detection in any of the wells.
- Generally, the flow rate of boreholes serviceable for ground gas monitoring (without fully or significantly flooded response zones) was consistently <0.1l/h.
- The monitoring was undertaken over a range of atmospheric and climatic conditions.

Based on the above, WSP considers that the ground model for the site and the monitoring dataset indicates that significant ground gas sources are not present at the site and that it is appropriate to undertake further professional appraisal (as recommended in CIRIA C665) to avoid overly conservative recommendations with respect to ground gas protection measures.

8.0 SUPPLEMENTARY GAS MONITORING DATA

6.1 FIELDWORK

WSP has undertaken two further ground gas monitoring visits at the site, in April 2018 and September 2018. This improves the overall dataset to 5 occasions to comply with the frequency in CIRIA C665 specified for sites likely to have very low gas generation potential and a low sensitivity development (commercial). It is noted that whist the site development includes a residential tower, this is located above the bus interchange and future residential occupants are not considered to be receptors of potential ground gas sources on site.

Groundwater depths were gauged and ground gas concentrations and flow rates were measured using an infra-red gas analyser (GFM435). Initial and steady concentrations of methane (CH_4), carbon dioxide (CO_2), oxygen (O_2) and trace gases (including carbon monoxide and hydrogen sulphide) were recorded along with initial and steady gas flow rates.

8.2 RESULTS

Atmospheric pressure was recorded to be 1002mb and rising during the first monitoring visit (April 2018) and 1009mb and falling (September 2018) during the second visit. During the monitoring five wells were not serviceable on one or more occasions due to them being either located within a construction site compound or covered with standing water or stockpiles. The headworks of WS201 are now partially covered in tarmac.

In addition, four wells during the first monitoring visit and 4 wells during the second visit had fully flooded response zones during the monitoring although this is not considered to be detrimental to the ground gas assessment.

A summary of the ground gas monitoring results is presented in Table 3; the ground gas monitoring record sheets are attached.

Table 3 – Summary of Additional Ground Gas Results

Parameter	Initial Reading		Steady Reading	
	Min	Max	Min	Max
Methane (% v/v)	0.0	0.0	0.0	0.0
Carbon Dioxide (% (v/v)	0.0	1.4	0.0	4.8
Oxygen (% v/v)	16.4	20.7	12.4	20.7
Flow (l/hr)	<0.1	<0.1	<0.1	<0.1

The maximum steady carbon dioxide concentration recorded was 4.8%v/v (WS209). An initial peak carbon dioxide concentration of 1.4%v/v was recorded in WS214 during visit 2 which increased to 4.5%v/v for a steady reading. No initial or steady readings of methane above 0.1%v/v has been recorded. Flow rates during the monitoring were all <0.1l/hr. Within WS204 and WS217 which previously recorded elevated carbon dioxide readings, recorded carbon dioxide concentrations were below 5%v/v.

8.3 GROUND GAS RISK ASSESSMENT

Using the highest gas concentration recorded during the additional two ground gas monitoring events and a maximum flow rate recorded in boreholes, the GSV is as follows:

- Carbon dioxide – (4.8/100 x 0.1) = 0.0048l/h

Based on the two ground gas monitoring rounds conducted by WSP, the GSV indicates the site is characterised as CS1 (very low risk), with no ground gas protection measures required.

9.0 CONCLUSIONS

Based on our review of the extended ground gas monitoring dataset and the ground model, it is recommended that an appropriate classification of risk for the development with respect to ground gas is Characteristic Situation 1 i.e. no special ground gas precautions are required.

The observations to support this professional judgement are:

- The proposed development is considered to be of low sensitivity (parts of the development are not directly on the ground);
- Ground gas generation potential of the site is low (sources are restricted to natural soils and Made Ground);
- Concentrations of carbon dioxide in the ground that exceed the 5% threshold are sporadic and in installations within natural, non-organic soil/rock.

Jessica Kinchington
Environmental Consultant

Paloma Montes
Principal Risk Assessor

Attachments :
Figure 1 – Site location plan
Borehole Location Plan (AECOM, 2016)
WSP Ground Gas Monitoring Field Sheets – April and September 2018

File: Created using iGIS, WSP's Online Mapping System
Drawn By: UKJXK032
Date Modified: 12/09/2018 14:21

wsp

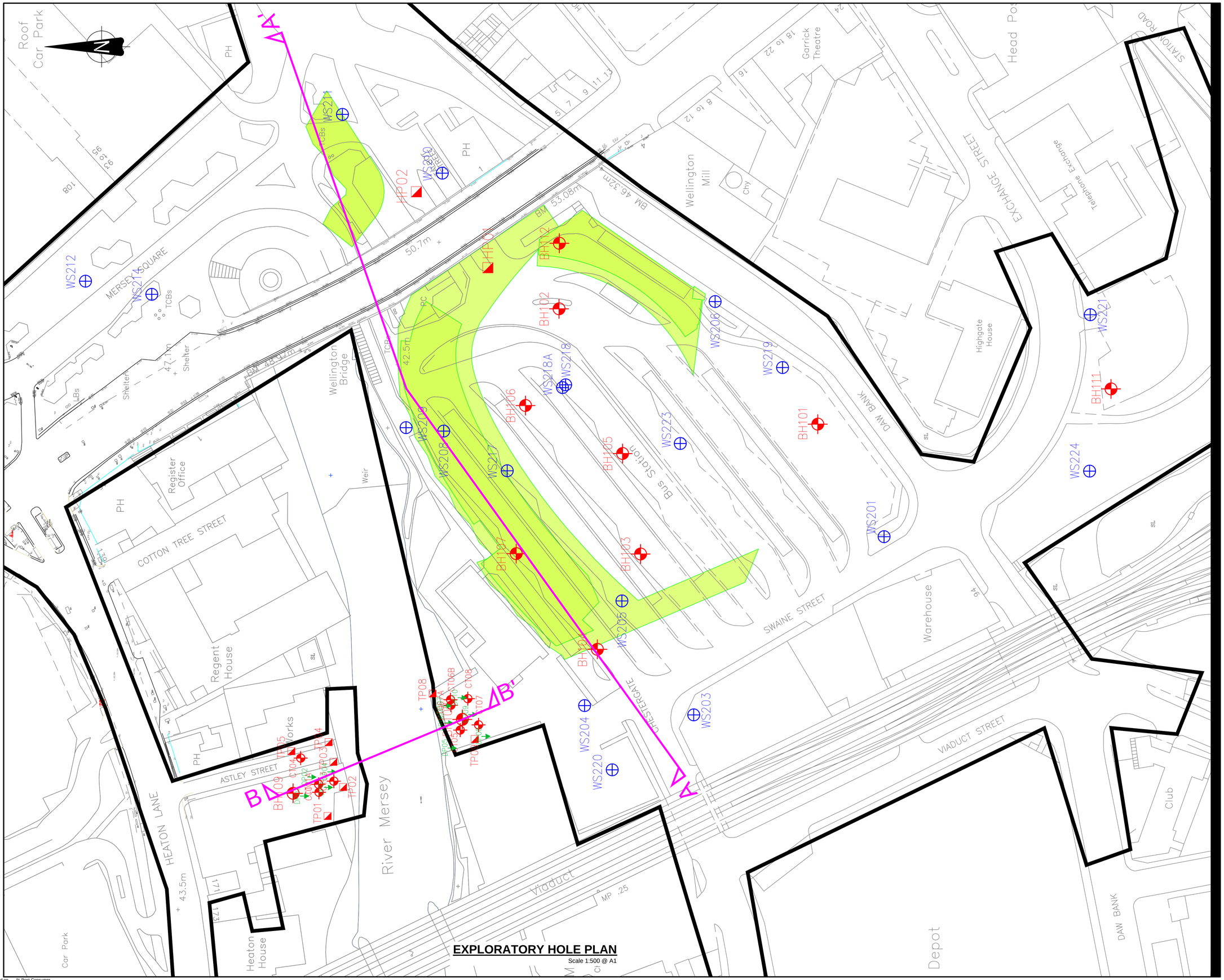
TITLE:

Stockport Bus Interchange, Ground Gas Risk Assessment

FIGURE No:

Figure 1 - Site Location Plan

Project Management Initials: Designer: RPA Checked: DCG Approved: MdK ISO A1 594mm x 841mm



EXPLORATORY HOLE PLAN

Scale 1:500 @ A1

AECOM

PROJECT

Stockport Interchange

CLIENT

Transport for Greater Manchester

CONSULTANT

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ARCHITECTS

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NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS, ANY DISCREPANCIES, ERRORS OR OMISSIONS TO BE BROUGHT TO THE ATTENTION OF OVERSEEING ORGANISATION.
2. ALL DIMENSIONS TO BE CHECKED BEFORE COMMENCEMENT OF WORK ON SITE.
3. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
4. THE DETAILED DESIGN IS SUBJECT TO APPROVAL OF STOCKPORT METROPOLITAN BOROUGH COUNCIL.
5. DRAWING BASED ON TOPOGRAPHICAL SURVEY PAS128 25915_T SITE SURVEY PROVIDED BY SUBSCAN.
6. EXPLORATORY HOLE LOCATIONS TAKEN FROM DRAFT FACTUAL REPORT PREPARED BY GEOTECHNICS LTD ON STOCKPORT BUS STATION, REF PN153428, DATED FEBRUARY 2016.

KEY

- BH104 — BOREHOLE
- WS220 — WINDOW SAMPLE
- TP09 — TRIAL PIT
- HP02 — HAND DUG PIT
- DP08 — DYNAMIC PROBE
- EXTENTS OF PROPOSED BUILDING
- EXTENTS OF PROPOSED ROOF
- A A' — GEOLOGICAL SECTIONLINE

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P01	MAR 2016	FIRST ISSUE

PROJECT NUMBER

60340298

SHEET TITLE

EXPLORATORY HOLE LOCATION PLAN

SHEET NUMBER

60340298-ACM-00-GEO-DR-0001 P01

Last saved by: ADDISONRP(2016-03-10) Last Plotted: 2016-03-10
Filename: F:\PROJECTS\GEOTECHNICS\STOCKPORT INTERCHANGE\02-SHEETS\60340298-001 - GI LOCATIONS AS BUILT.DWG

PRE-REPORT DATA CHECK

 All Response Zone depths are complete.

 All visit dates match in the Monitoring Results and Monitoring Visit tables.

 All visit dates match in the Dip and Monitoring Visit tables.

 All event names match in the Monitoring Point and Dips tables

Stockport Interchange

Key:

Depth to water	Methane	Carbon Dioxide	Gas Flow
Response zone *fully* flooded during sampling	> 1% v/v	> 5% v/v	> 70 l/hr
Response zone *significantly* flooded during sampling			
Datum or reponse zone information missing. Response zone flooding cannot be calculated			

Visit 1, Event: Visit 1, Date: 16/04/2018

Engineer	J Kinchington
Start/End Time	08:30 - 16:00
Pressure Start/End (mB)	1000 - 1002
Temperature (Deg C)	15.00
Weather Conditions	Cloudy

Equipment	SerialNo	Calibrated
GFM 11942	WSP 000239	Yes
Dip Meter	WSP 000163	Yes

Comments and Ground Conditions: WS214 - unable to obtain representative ground gas data due to broken gas tap. WS205 unable to obtain gas data due to bentonite within gas tap. WS211 not servicable due to tarmac partially over cover.

Borehole	Response Zone (m)		Gas Flow (l/hr)		Borehole Differential Pressure	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Other Gases (ppmV)			Depth to Water	Depth to Base	Thickness of product	Sampled ?
	Top	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	CO	m	m	mm	Y/N
BH101	5.00	7.00	0.00	0.00		0.00	0.00	0.00	0.00	20.10	20.20	1.00	0.00	0.00	5.25	7.20	N/A	No
BH102	8.00	10.00	0.00	0.00		0.00	0.00	0.00	0.00	19.80	20.70	1.00	0.00	0.00	5.48	10.05	N/A	No
BH103	11.00	14.00	0.00	0.00		0.00	0.00	0.00	0.00	20.40	20.30	1.00	0.00	0.00	6.10	7.22	N/A	No
BH104	1.00	3.50	0.00	0.00		0.00	0.00	0.00	0.00	20.20	20.70	1.00	0.00	0.00		2.71	N/A	No
BH105	9.50	12.00	0.00	0.00		0.00	0.00	0.00	0.00	20.20	20.50	1.00	0.00	0.00	6.64	12.20	N/A	No
BH106	5.00	7.00	0.00	0.00		0.00	0.00	0.00	0.00	20.10	20.20	1.00	0.00	0.00		7.31	N/A	No
BH112	12.80	14.80	0.00	0.00		0.00	0.00	0.10	0.00	20.10	20.20	1.00	0.00	0.00	5.09	14.81	N/A	No
WS203	2.00	3.00	0.00	0.00		0.00	0.00	0.00	0.00	20.20	20.50	1.00	0.00	0.00	2.68	2.76	N/A	No
WS204	1.50	2.45	0.00	0.00		0.00	0.00	0.00	0.00	20.60	20.50	1.00	0.00	0.00		2.43	N/A	No
WS205	1.50	2.00													5.20	1.95	N/A	No
WS206	1.00	2.00	0.00	0.00		0.00	0.00	0.00	0.00	20.10	20.60	1.00	0.00	0.00		1.85	N/A	No
WS208	1.70	2.80	0.00	0.00		0.00	0.00	0.00	0.00	20.70	20.60	1.00	0.00	0.00		2.76	N/A	No
WS209	1.00	3.00	0.00	0.00		0.00	0.00	0.00	0.00	20.40	20.60	1.00	0.00	0.00		1.95	N/A	No
WS211	1.00	2.00	0.00	0.00		0.00	0.00	0.00	0.00	19.90	20.50	1.00	0.00	0.00			N/A	No

Stockport Interchange

Key:

Depth to water

- Response zone *fully* flooded during sampling
- Response zone *significantly* flooded during sampling
- Datum or reponse zone information missing. Response zone flooding cannot be calculated

Methane	Carbon Dioxide	Gas Flow
> 1% v/v	> 5% v/v	> 70 l/hr

Visit 1, Event: Visit 1, Date: 16/04/2018

Engineer	J Kinchington
Start/End Time	08:30 - 16:00
Pressure Start/End (mB)	1000 - 1002
Temperature (Deg C)	15.00
Weather Conditions	Cloudy

Equipment	SerialNo	Calibrated
GFM 11942	WSP 000239	Yes
Dip Meter	WSP 000163	Yes

Comments and Ground Conditions: WS214 - unable to obtain representative ground gas data due to broken gas tap. WS205 unable to obtain gas data due to bentonite within gas tap. WS211 not servicable due to tarmac partially over cover.

Borehole	Response Zone (m)		Gas Flow (l/hr)		Borehole Differential Pressure	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Other Gases (ppmV)			Depth to Water	Depth to Base	Thickness of product	Sampled ?
	Top	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	CO	m	m	mm	Y/N
WS212	2.50	3.50	0.00	0.00		0.00	0.00	0.00	0.00	20.00	20.50	1.00	0.00	0.00	2.90	3.52	N/A	No
WS214	0.50	1.00														0.95	N/A	No
WS217	1.50	2.50	0.00	0.00		0.00	0.00	0.00	0.00	20.70	20.70	1.00	0.00	0.00		2.23	N/A	No
WS218	1.00	2.50	0.00	0.00		0.00	0.00	0.00	0.00	20.10	20.20	1.00	0.00	0.00		2.39	N/A	No
WS220	1.20	1.70	0.00	0.00		0.00	0.00	0.00	0.00	20.30	20.50	1.00	0.00	0.00		1.70	N/A	No
WS223	0.50	1.40	0.00	0.00		0.00	0.00	0.00	0.00	20.20	20.70	1.00	0.00	0.00		1.62	N/A	No

Stockport Interchange

Key:

Depth to water

- Response zone *fully* flooded during sampling
- Response zone *significantly* flooded during sampling
- Datum or reponse zone information missing. Response zone flooding cannot be calculated

Methane	Carbon Dioxide	Gas Flow
> 1% v/v	> 5% v/v	> 70 l/hr

Visit 2, Event: September 2018, Date: 07/09/2018

Engineer	Jess Kinchington
Start/End Time	09:23 - 16:30
Pressure Start/End (mB)	1009 - 1007
Temperature (Deg C)	12.00
Weather Conditions	Overcast

Equipment	SerialNo	Calibrated
Gas Analyser	11941	Yes
Interface Probe	WPS000116	Yes

Comments and Ground Conditions: BH112- Bentonite in gas tap, gas reading taken after gas tap cleared. WS220 inaccessible due to stockpile. WS204 lost in thirdy party compound. BH104 underneath puddle in carriage way.

Borehole	Response Zone (m)		Gas Flow (l/hr)		Borehole Differential Pressure	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Other Gases (ppmV)			Depth to Water	Depth to Base	Thickness of product	Sampled ?
	Top	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	CO	m	m	mm	Y/N
BH101	5.00	7.00	0.00	0.00		0.00	0.00	0.00	0.30	19.90	20.10	1.00	0.00	0.00	6.25	7.15	N/A	No
BH102	8.00	10.00	0.00	0.00		0.00	0.00	0.00	0.10	19.80	20.20	1.00	0.00	0.00	5.58	10.04	N/A	No
BH103	11.00	14.00	0.00	0.00		0.00	0.00	0.20	0.30	19.20	19.90	1.00	0.00	0.00	5.10	7.28	N/A	No
BH104	1.00	3.50	0.00	0.00		0.00	0.00	0.80	1.20	18.70	19.20	1.00	0.00	0.00	3.67	3.75	N/A	No
BH105	9.50	12.00	0.00	0.00		0.00	0.00	0.10	0.70	20.10	20.10	1.00	0.00	0.00	6.77	12.78	N/A	No
BH106	5.00	7.00	0.00	0.00		0.00	0.00	0.00	0.10	20.10	19.80	1.00	0.00	0.00	5.21	7.20	N/A	No
BH112	12.80	14.80	0.00	0.00		0.00	0.00	0.00	0.00	20.10	20.10	1.00	0.00	0.00	5.12	11.54	N/A	No
WS203	2.00	3.00	0.00	0.00		0.00	0.00	0.10	0.40	19.20	20.10	1.00	0.00	0.00	2.80	2.95	N/A	No
WS206	1.00	2.00	0.00	0.00		0.00	0.00	0.10	0.30	19.90	20.10	1.00	0.00	0.00	1.72	1.83	N/A	No
WS208	1.70	2.80	0.00	0.00		0.00	0.00	0.10	1.30	19.80	19.60	1.00	0.00	0.00		2.75	N/A	No
WS209	1.00	3.00	0.00	0.00		0.00	0.00	2.00	4.80	18.60	15.60	1.00	0.00	0.00		2.92	N/A	No
WS211	1.00	2.00	0.00	0.00		0.00	0.00	0.50	2.70	18.40	16.10	1.00	0.00	0.00	1.90	2.00	N/A	No
WS212	2.50	3.50	0.00	0.00		0.00	0.00	1.20	3.60	16.40	15.00	1.00	0.00	0.00		3.04	N/A	No
WS214	0.50	1.00	0.00	0.00		0.00	0.00	1.40	4.50	17.20	12.40	1.00	0.00	0.00		0.96	N/A	No

Stockport Interchange

Key:

Depth to water

- Response zone *fully* flooded during sampling
- Response zone *significantly* flooded during sampling
- Datum or reponse zone information missing. Response zone flooding cannot be calculated

Methane	Carbon Dioxide	Gas Flow
> 1% v/v	> 5% v/v	> 70 l/hr

Visit 2, Event: September 2018, Date: 07/09/2018 — Sheet 2 of 2

Engineer	Jess Kinchington
Start/End Time	09:23 - 16:30
Pressure Start/End (mB)	1009 - 1007
Temperature (Deg C)	12.00
Weather Conditions	Overcast

Equipment	SerialNo	Calibrated
Gas Analyser	11941	Yes
Interface Probe	WPS000116	Yes

Comments and Ground Conditions: BH112- Bentonite in gas tap, gas reading taken after gas tap cleared. WS220 inaccessible due to stockpile. WS204 lost in thirdy party compound. BH104 underneath puddle in carriage way.

Borehole	Response Zone (m)		Gas Flow (l/hr)		Borehole Differential Pressure	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Other Gases (ppmV)			Depth to Water	Depth to Base	Thickness of product	Sampled ?
	Top	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	CO	m	m	mm	Y/N
WS218	1.00	2.50	0.00	0.00		0.00	0.00	0.30	2.00	19.70	16.60	1.00	0.00	0.00		2.35	N/A	No
WS217	1.00	2.50	0.00	0.00		0.00	0.00	1.20	3.60	19.80	16.40	1.00	0.00	0.00		2.25	N/A	No

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