STOCKPORT BUS STATION Project:

WS204 Hole

Sample Depth 1.20-2.00m

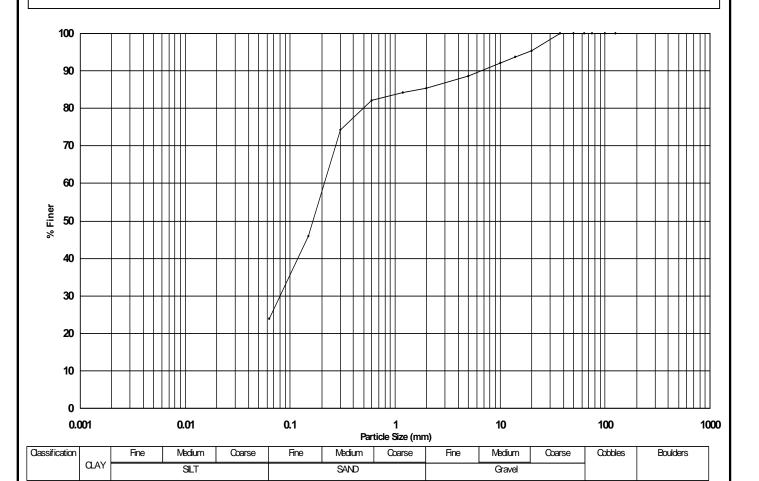
Sample Type Sample Ref

В N61795

Sample Description

Project No: PN153428

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



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	



STOCKPORT BUS STATION Project:

WS208 Hole

Sample Depth 2.40-2.80m

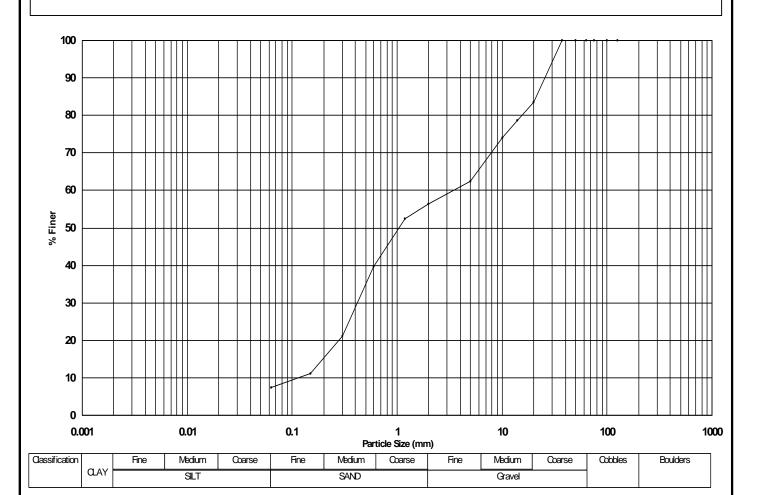
Sample Type Sample Ref

В N61672

Sample Description

Project No: PN153428

Light brown and reddish brown silty SAND and GRAVEL.



CI	assification	% of each
	ILT (including LAY)	7
S	AND	49
G	RAVEL	44
С	OBBLES	0
В	OULDERS	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	



STOCKPORT BUS STATION Project:

WS210 Hole

Sample Depth 2.00-3.00m

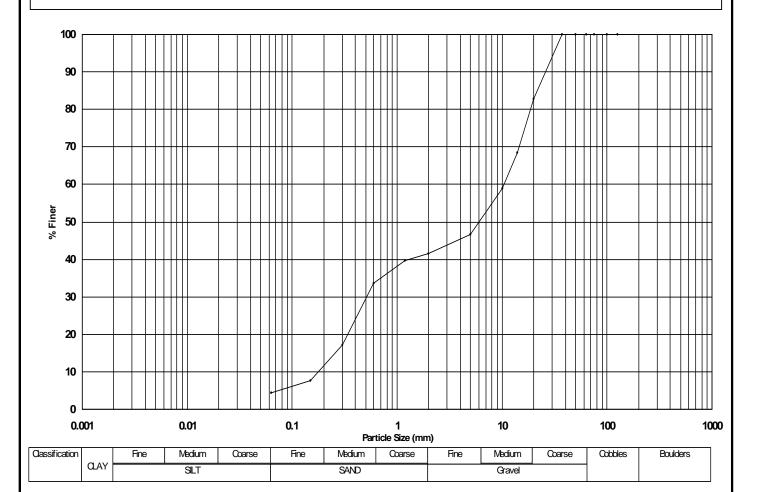
Sample Type Sample Ref

В N61794

Project No: PN153428

Sample Description

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



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	



STOCKPORT BUS STATION Project:

WS210 Hole

Sample Depth 4.00-5.00m

Sample Type Sample Ref

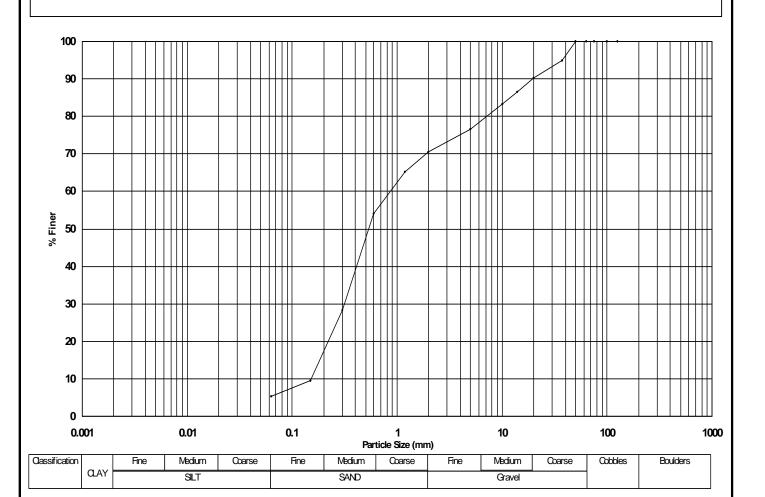
N61668

В

Sample Description

Project No: PN153428

Greyish orange silty very gravelly fine to coarse SAND.



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		



STOCKPORT BUS STATION Project:

WS214 Hole

Sample Depth 2.40-3.00m

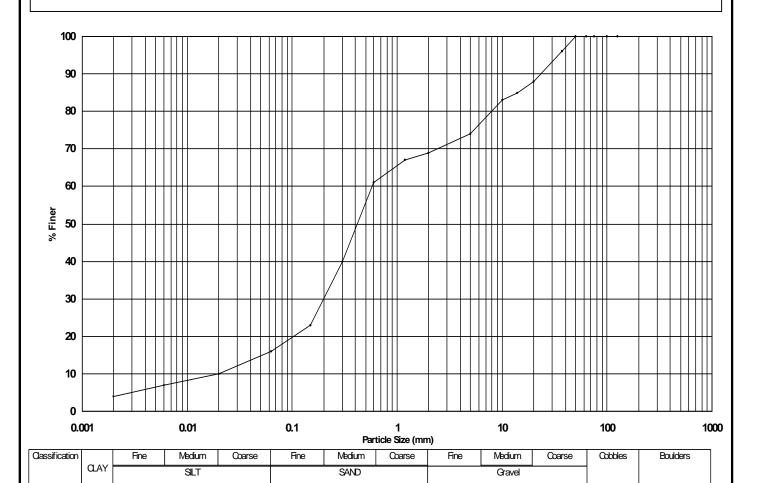
Sample Type В

Project No: PN153428

N61710 Sample Ref

Sample Description

Reddish brown clayey very gravelly fine to coarse SAND.



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)



STOCKPORT BUS STATION Project:

WS223 Hole

Sample Depth 2.50-3.00m

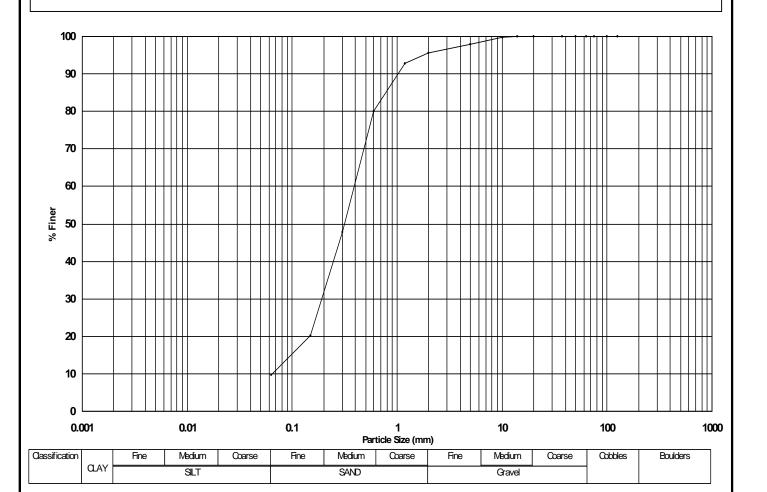
Sample Type Sample Ref

В N61705

Sample Description

Project No: PN153428

Greyish orange silty slightly gravelly fine to coarse SAND.



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	



Project STOCKPORT BUS STATION PN153428

Sampl	е				МС	:V	Con	npact	ion			СВІ	₹			
Hole	Depth	Туре	Sample	Description	MCV	w	Туре	w		^,	0.4	Туре	1	ор	Botte	om
	(Specimer Depth) m		Ref		INIOV	VV	Турс	(Opt)	ρ_{d}	γ_{b}	γ_{d} (Max)	Турс	CBR	w	CBR	w
						%		%		Mg/m³			%	%	%	%
BH106	1.20-		N61702	Yellowish brown sandy fine to			2.5kg		2.65a		(2.10)					
	1.70 (1.20-	I		coarse GRAVEL.				6.4* 2.8		*2.20 2.05	*2.07 2.00					
	1.70)	1						5.1		2.19	2.09					
								8.6		2.02	1.86					
	-							11.2		1.95	1.75					

Remarks 🖽

Particle Density - a=assumed, m=measured

NST - Not suitable for Test

Water Content Test performed in accordance with BS EN ISO 17892 - 1: 2014

* = at natural moisture content

All other Tests performed in accordance with BS1377: 1990



LABORATORY RESULTS - Compaction

Project: STOCKPORT BUS STATION Hole

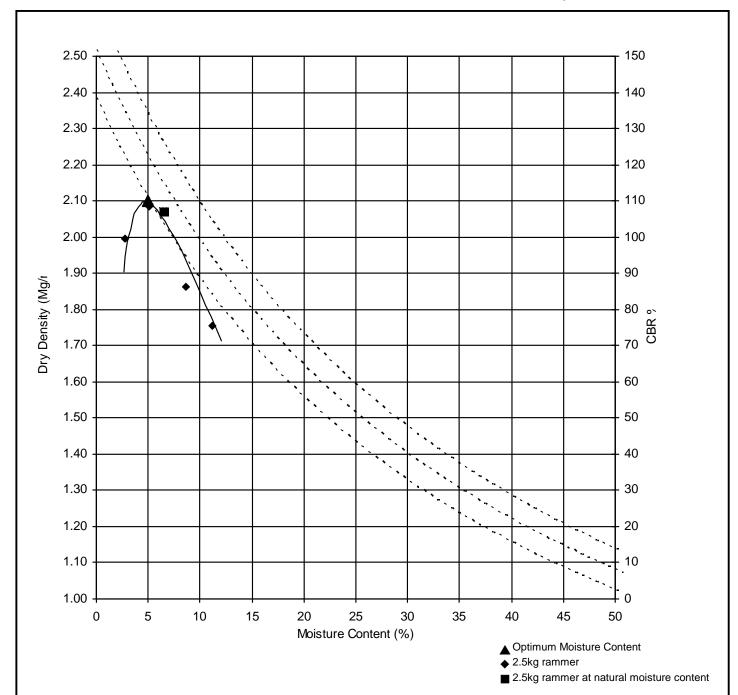
Project No: PN153428 Sample Type
Sample Ref

Sample Type B
Sample Ref N61702

Sample Depth

BH106

1.20-1.70m



Optimum Mo	isture Content	5.0
Maximum Dr	y Density	2.10 Mg/m ³
Gravel retaine	ed on	
	37.5mm sieve	10 %

20mm sieve

Particle Density 2.65 (Assumed)

Preparation 2.5kg

Description Yellowish brown sandy fine to coarse GRAVEL.

Remarks

1

BS1377 Part 4 1990 : Clause 3.3 and 3.4

18 %



Project STOCKPORT BUS STATION

Sample	е													
Hole	Depth (Specimen Depth) m		Sample Ref	Description	w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ² mm ²	Is MN/m ²	F	Is 50 MN/m²
BH101	6.40- 6.55 (6.40- 6.55)	С	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)	С	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)	С	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)	l	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	
BH103	6.70- 6.86 (6.70- 6.86)	l	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)	С	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)	С	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)	l	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	1
BH104	12.10- 12.20 (12.10- 12.20)	l	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	
BH105	7.10- 7.29 (7.10- 7.29)	l	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)	ı	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	0.150

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



Project No: PN153428

Project STOCKPORT BUS STATION Project No: PN153428

Sample	е													
Hole	Depth (Specimen Depth) m	Туре	Sample Ref	Description	w %	W mm	D mm	Fail Load kN	Test Type/ Direction	De mm	De ²	Is MN/m ²	F	Is ₅₀ MN/m ²
BH106	3.70- 3.80 (3.70- 3.80)	С	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)	С	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)	С	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)	С	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)	С	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)	С	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)	С	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)	С	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)	С	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)	С	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	
BH109	19.70- 19.90 (19.70- 19.90)	С	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	0.129

Remarks 📊

Test Type

D-Diametral, A-Axial, I-Lump or Irregular Test

Direction PL-parallel to planes of weakness, PD - perpendicular to planes of weakness,

R-Random or unknown orientation

Fail Load UF-unacceptable failure



LABORATORY RESULTS - ISRM Suggested Method for Point Load Strength Determination

Project STOCKPORT BUS STATION PN153428

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

Remarks 📊

Test Type

D-Diametral, A-Axial, I-Lump or Irregular Test

Direction PL-parallel to planes of weakness, PD - perpendicular to planes of weakness,

R-Random or unknown orientation

Fail Load UF-unacceptable failure



LABORATORY RESULTS - Test Remarks

Project STOCKPORT BUS STATION Project No: PN153428

WS220	Depth T (1.30-1.70)		Ref	Laboratory Remark Atterberg Limit Test - 1-point cone	
	1.70 (1.30-	D	N61793	Atterberg Limit Test - 1-point cone	



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

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

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







Attention: Jon Hutchinson

Date: 14th January, 2016

Your reference : PN153428

Our reference: Test Report 16/3162 Batch 1

Location : Stockport Bus Station

Date samples received: 8th January, 2016

Status: Final report

Issue:

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

Geotechnics Client Name: PN153428 Reference:

Stockport Bus Station Location:

Contact: Jon Hutchinson Report : Solid

JE Job No.:	16/3162												
J E Sample No.	1	2	3	4	5	6	7	8	9	10			
Sample ID	103	106	107	109	111	BH108	BH108	BH112	CT4	CT5			
Depth		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		e attached neations and ac	
COC No / misc		_	_	_	_	_	_	_	_				•
Containers	В	В	В	В	В	В	В	В	В	В			
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	LOD/LOR	Units	Method No.
Date of Receipt		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
		40			a : -					0 = :	0		
pH ^{#M} Sample Type	9.09 Clayey Sand	10.93 Sand	11.98 Sand	8.49 Sand	8.16 Clay	8.41 Clayey Sand	9.16 Sand	11.44 Sand	8.41 Clayey Sand	8.71 Clay	<0.01	pH units None	TM73/PM11 PM13/PM0
Sample Colour	Medium Brown			Medium Brown					Medium Brown	Dark Brown		None	PM13/PM0
Other Items	stones, loam	stones	stones		stones, brick		brick, stones	stones	stones	stones, sand		None	PM13/PM0
											ļ		

Client Name: Geotechnics Reference: PN153428

Reference: PN153428
Location: Stockport Bus Station

Contact: Jon Hutchinson

JE Job No.: 16/3162

Report : Solid

JE Job No.:	16/3162												
J E Sample No.	11	12	13	14	15	16	17	18	19	20			
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		e attached n	
COC No / misc											abbrevi	ations and a	cronyms
Containers	В	В	В	В	В	В	В	В	В	В			
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	LOD/LOR	Units	Method
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		Office	No.
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/PM2
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/PM2
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/PM1
Sample Type	Sand	Clay	Clayey Sand		Clay	Clay	Sand	Clayey Loam		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

Client Name: Geotechnics Reference: PN153428

Location:Stockport Bus StationContact:Jon Hutchinson

JE Job No.: 16/3162

Report : Solid

JE JOD NO.:	16/3162		 	 	 	 	-		
J E Sample No.	21	22							
Sample ID	WS217	WS218A							
Depth	1.20-1.30	1.20-1.65					Diagon		-t f!!
COC No / misc							abbrevi	e attached no ations and ac	otes for all cronyms
Containers	В	В							
Sample Date	<>	<>							
Sample Type	Soil	Soil							
Batch Number	1	1							Method
Date of Receipt	08/01/2016	08/01/2016					LOD/LOR	Units	No.
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					5.01	None	PM13/PM0
	Medium Brown	Medium Brown						None	PM13/PM0
Other Items	stones	NA						None	PM13/PM0

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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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.

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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.

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DEVIATING SAMPLES

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

SURROGATES

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

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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

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



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

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

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





Attention : Jon Hutchinson

Date: 14th January, 2016

Your reference : PN153428

Our reference : Test Report 16/3162 Batch 2

Location : Stockport Bus Station

Date samples received: 11th January, 2016

Status: Final report

Issue:

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

JE Job No.:	16/3162												
J E Sample No.	23	24	25	26	27	28	29	30	31	32			
Sample ID	BH102	BH105	WS203	WS204	WS206	WS209	WS211	WS214	WS214	WS219			
Depth		0.70-0.80	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		e attached n ations and a	
COC No / misc		_	_	_	_	_	_	LIGHT	DARK				•
Containers	В	В	В	В	В	В	В	В	В	В			
Sample Date		<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	2	2	2	2	2	2	2	2	2	2	LOD/LOR	Units	Method No.
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
#M	40.40	40.40	07:	0.00	0.00	0.41	0.40	0.70	07:	44.4-	-0.0°	_11 ···· "	TM70/0:00
pH *** Sample Type	12.13 Sand	12.40 Sand	8.74 Loamy Sand	8.68 Loamy Sand	8.66 Loamy Sand	9.14 Loamy Sand	8.43 Loamy Sand	8.79 Loamy Sand	8.74 Loamy Sand	11.47 Sand	<0.01	pH units None	TM73/PM11 PM13/PM0
Sample Colour		Light Brown	Dark Brown		-			Dark Brown	Dark Brown			None	PM13/PM0
Other Items	stones	stones	stones	stones	stones	stones	stones	stones	stones	stones		None	PM13/PM0

Geotechnics Client Name: PN153428 Reference:

Stockport Bus Station Location: Jon Hutchinson

Contact: JE Job No.: 16/3162 Report : Solid

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				Please se	e attached n	otes for all
COC No / misc							abbrevi	ations and ad	cronyms
Containers	В	В	В						
Sample Date	<>	<>	<>						
Sample Type	Soil	Soil	Soil						
Batch Number	2	2	2				LOD/LOR	Units	Method
Date of Receipt	11/01/2016	11/01/2016	11/01/2016						No.
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 Loamy Sand	12.26 Sand	8.52				<0.01		TM73/PM11 PM13/PM0
Sample Type Sample Colour	Dark Brown		Loam Dark Brown					None None	PM13/PM0
Other Items	stones	stones	stones					None	PM13/PM0
									ļ į

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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

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DEVIATING SAMPLES

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SURROGATES

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

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ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS) accredited - UK.
В	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
СО	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
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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
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Registered Address: Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA. UK

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Zone 3

Deeside Industrial Park

Deeside CH5 2UA

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

Tel: +44 (0) 1244 833780

Fax: +44 (0) 1244 833781

Attention: Jon Hutchinson

Date: 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:

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

02 00D NO.:	10/0102	 		 			 			
J E Sample No.	76									
Sample ID	BH112									
Depth	1.80							Please se	e attached n	otes for all
COC No / misc								abbreviations and acronyms		
Containers										
Sample Date	27/01/2016									
Sample Type										
Batch Number								LOD/LOR	Units	Method No.
Date of Receipt								40.0	0/	TM21/PM24
Organic Matter	21.7							<0.2	%	TMZT/PMZ4
Sample Type	Clay								None	PM13/PM0
Sample Colour	Dark Brown								None	PM13/PM0
Other Items	vegetation, sand								None	PM13/PM0
		 ·	·	 · <u> </u>	·	·	 ·		· <u> </u>	

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Jon Hutchinson

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

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

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

JE Job No.: 16/3162

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JE Job No: 16/3162

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

The Geotechnical Centre,

Date: 12 February 2016

Test Report Ref: STR 447282

Unit 1 Borders Ind. Est River Lane, SALTNEY,

Chester, Order No: AUTH-ON14007

CH4 8RJ Page 1 of 2

Contract: PN153428 - Stockport Bus Staion

LABORATORY TEST REPORT

Rock Core

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:

Date of Receipt at Lab:

Date of Start of Test:

Sampling Location:

Name of Source:

Method of Sampling:

Sampled By:

Unknown

Unknown

Client

Target Specification: N/A

RESULTS:

See attached

Material Description:

Certificate
Prepared by:-

Neil Hughes

Job Coordinator

Approved by: -

Eric Goulden

Technical Manager



Test Report Ref: STR 447282 - Page 2 of 2

ВН	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	2:1 12		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.

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

Page 1 of 2

Order No:

LABORATORY TEST REPORT

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

ISRM Guidelines

SAMPLE DETAILS:

Certificate of sampling received: No Laboratory Ref. No.: S56

Laboratory Ref. No.: **\$56524**Client Ref. No.: **BH103 - 13.2-13.39**

Date and Time of Sampling:

Date of Receipt at Lab.:

Date of Start of Test.:

Unknown
13/1/2016
13/1/2016

Sampling Location: BH103 - 13.2-13.39

Name of Source:

Method of Sampling:

Sampled By:

Material Description:

Unknown

Client

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



STR: 447280 - Page 2 of 2

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

										Is	
Sample	Sample	Test	D	W	Р	Α	D*D	Is	F	(50)	Approx. Compressive
no	type	type	mm	mm	KN	=W*D					Strength (MPa)
*	*	*	*	*	*						
Axial, Block o	r Lump Tests										
_	_										
1	Core	а	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
										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

Page 1 of 2

Order No:

LABORATORY TEST REPORT

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

ISRM Guidelines

SAMPLE DETAILS:

Certificate of sampling received: No Laboratory Ref. No.: S56524

Client Ref. No.: BH105 - 7.1-7.29

Date and Time of Sampling:

Date of Receipt at Lab.:

Date of Start of Test.:

Unknown
13/1/2016
13/1/2016

Sampling Location: BH105 - 7.1-7.29

Name of Source:

Method of Sampling:

Sampled By:

Material Description:

Unknown

Client

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



STR: 447281 - Page 2 of 2

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	Р	Load failure in KN
	ie core diameter for axial tests.	Is	Uncorrected strength index
	W =(W1 + W2)/2 for irregular blocks.	ls (50)	Point load strength index
Α	W*D minimum x-sectional area For axial or irregular block test 0.3W < D	F	Size correction factor
	< W	#	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	r Lump Tests										
1	Core	а	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



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

 Geotechnics
 Tel: +44 (0) 1244 833780

 Unit 1B
 Tel: +44 (0) 1244 833780

 Borders Industrial Park
 Fax: +44 (0) 1244 833781

 River Lane
 Fax: +44 (0) 1244 833781





Attention : Sarah Burt

Cheshire CH4 8RJ

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:

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

Report : Solid

JE Job No.:	15/17326
Contact.	Garan Dui

J E Sample No. Sample ID	4-6	19-21	25-27	31-33	40-42	49-51	50 E4		64.00			
Sample ID				0.00	40-42	49-31	52-54	55-57	64-66			
	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	Diagon on	e attached n	otoo for all
COC No / misc											e attached nations and ac	
Containers	VJT	VJT	VJT	VJT	VJT	VJT	VJT	VJT	VJT			
Sample Date 3												
•												
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method
Date of Receipt 0	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			No.
Arsenic #M	1.5	1.9	1.2	NDP	5.3	1.2	NDP	2.5	NDP	<0.5	mg/kg	TM30/PM15
Arsenic	-	-	-	8.7	-	-	13.4	-	9.2	<0.5	mg/kg	TM30/PM62
Cadmium **M	25.0	4.2	9.6	NDP	0.4	5.7	NDP	0.4	NDP	<0.1	mg/kg	TM30/PM15
Cadmium	-	-	-	1.7	-	-	2.5	-	2.8	<0.1	mg/kg	TM30/PM62
Chromium *M	11.5	31.8	10.7	NDP	62.0	15.3	NDP	16.9	NDP	<0.5	mg/kg	TM30/PM15
Chromium #M	-	-	-	11.6	-	-	15.5 NDD	- 42	11.2 NDD	<0.5	mg/kg	TM30/PM62
Copper #M	17 -	13	13	NDP 45	15	13	NDP 41	13	NDP 61	<1 <1	mg/kg	TM30/PM15 TM30/PM62
Copper Lead **M	73	39	40	45 NDP	28	29	NDP	23	NDP	<5	mg/kg mg/kg	TM30/PM62
Lead	-	-	-	106	-	-	89	-	128	<5 <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 ***	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
DALLAG												
PAH MS Naphthalene #M	<0.04	_	<0.04	12.00	11 56	-	_	0.87	_	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.04		<0.04	13.80 _{AA} 8.02 _{AA}	11.56 _{AA}			0.50		<0.04	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 <0.05	-	<0.6 <0.05	509.4 _{AA}	334.2 _{AA}	-	-	73.6 6.18	-	<0.6 <0.05	mg/kg	TM4/PM8 TM4/PM8
Benzo(b)fluoranthene Benzo(k)fluoranthene	<0.05	-	<0.05	38.17 _{AA}	19.56 _{AA}	-	-	2.41	-	<0.05	mg/kg mg/kg	TM4/PM8
PAH Surrogate % Recovery	112	-	114	14.84 _{AA}	7.61 _{AA}		-	103	-	<0.02	mg/kg %	TM4/PM8
Surrogate // Necovery	112	-		· · · · · · · · · · · · ·	····	•	-	100	-	-0	70	TIVI-VII IVIO

Geotechnics Client Name: PN153428 Reference:

Stockport Bus Station Location:

Contact: Sarah Burt Report : Solid

JE Job No.:	15/17326		
J E Sample No.	4-6	19-21	25

JE JOD NO.:	15/1/326											
J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66			
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206			
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50	Diagon or	e attached n	otoo for all
COC No / misc											ations and a	
Containers	VJT	VJT	\/ IT	VJT	VJT	VJT	VJT	VJT	VJT			
			VJT									
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											
Batch Number	1	1	1	1	1	1	1	1	1	LOD/LOR	Units	Method
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	LOD/LOR	Offics	No.
Methyl Tertiary Butyl Ether #M	-	<6	-	-	-	<6	<6	-	<6	<6	ug/kg	TM15/PM10
Benzene #M	-	<5	-	-	-	<5	<5	-	<5	<5	ug/kg	TM15/PM10
Toluene #M	-	<3	-	-	-	<3	<3	-	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #M	-	<3	-	-	-	<3	<3	-	<3	<3	ug/kg	TM15/PM10
p/m-Xylene *M	-	<4	-	-	-	<4	<4	-	<4	<4	ug/kg	TM15/PM10
o-Xylene *M	-	<4	-	-	-	<4	<4	-	<4	<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	-	112	-	-	-	115	105	-	97	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	-	127	-	-	-	136	95	-	97	<0	%	TM15/PM10
TPH CWG												
Aliphatics												
>C5-C6 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 **M	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM16
>C12-C16 **M	<4	<4	<4	<4	<4	<4	<4	6	<4	<4	mg/kg	TM5/PM16
>C16-C21 #M	<7	<7	<7	10	<7	<7	<7	19	<7	<7	mg/kg	TM5/PM16
>C21-C35 **M	<7	<7	<7	42	<7	<7	<7	105	42	<7	mg/kg	TM5/PM16
>C35-C44 Total aliphatics C5-44	<7 <26	<7 <26	<7 <26	<7 52	<7 <26	<7 <26	<7 <26	11 141	<7 42	<7 <26	mg/kg mg/kg	TM5/PM16 TM5/TM36/PM16
Aromatics	120	120	120	32	120	120	120	141	72	120	mg/kg	THIS THIS STATE
>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 Total aromatics C5-44	<7 <26	<7 <26	<7 <26	92 1317	11 177	<7 31	9 124	32 437	34 501	<7 <26	mg/kg	TM5/PM16 TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	<52	<52	<52	1369	177	<52	124	578	543	<52	mg/kg mg/kg	TM5/TM36/PM16
rotal alphatics and aromatics(co 11)	102	102	102	1505	177	102	124	370	343	132	mg/kg	THIS THIS STITLE
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

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE JOD NO.:	15/1/320											
J E Sample No.	4-6	19-21	25-27	31-33	40-42	49-51	52-54	55-57	64-66			
Sample ID	BH101	BH102	WS219	WS201	BH104	BH112	BH112	WS208	WS206			
Depth	0.50-0.70	2.00	1.00	0.50	1.00-1.20	0.50	1.00	0.50	0.50	Please se	e attached n	otes for all
COC No / misc											ations and a	
Containers	VJT	VJT	VJT	VJT	VJT	VJT	VJT	VJT	VJT			
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			Method
Date of Receipt	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	03/12/2015	LOD/LOR	Units	No.
PCB 153 #	_	_	_	-	_	_	<5	_	<50 _{AB}	<5	ug/kg	TM17/PM8
PCB 180 #	_	_	_	_	_	_	<5	_	<50 _{AB}	<5	ug/kg	TM17/PM8
Total 7 PCBs*	_	_	-	-	_	_	<35	_	<350 _{AB}	<35	ug/kg	TM17/PM8
100111000									COOAB		-33	
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
рН #М	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

JE Job No.:	15/17326									
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									e attached no ations and ac	
Containers	VJT	VJT	VJT							
Sample Date	30/11/2015	02/12/2015	02/12/2015							
Sample Type	Soil	Soil	Soil							
Batch Number	1	1	1				,	LOD#LOD	Units	Method
Date of Receipt	03/12/2015	03/12/2015	03/12/2015					LOD/LOR	Units	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 10.2	<3	<3 3.7					<3	ug/l	TM30/PM14 TM30/PM14
Dissolved Vanadium * Dissolved Zinc *	5	4.6	3.7					<1.5 <3	ug/l ug/l	TM30/PM14
Dissolved Zilic	3	3	7					1.5	ugn	110130/110114
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	_	_	_							T1400/D1400
>C5-EC7	<5	<5 -5	<5 -5					<5	ug/l	TM36/PM69
>EC7-EC8 >EC8-EC10	<5 <5	<5 <5	<5 <5					<5 <5	ug/l ug/l	TM36/PM69 TM36/PM69
>EC8-EC10 >EC10-EC12	<5 <5	<5 <5	<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

							ı		
J E Sample No.	19-21	52-54	64-66						
Sample ID	BH102	BH112	WS206						
Depth	2.00	1.00	0.50				Places so	e attached n	otos for all
COC No / misc								ations and a	
Containers		VJT	VJT						
Sample Date	30/11/2015	02/12/2015	02/12/2015						
Sample Type	Soil	Soil	Soil						
Batch Number	1	1	1				LOD/LOR	Haita	Method
Date of Receipt	03/12/2015	03/12/2015	03/12/2015				LOD/LOR	Units	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 Chlorophonol	-0 F	-0 F	-0 F				-0 E	ug/l	TM16/PM30
2-Chlorophenol 2-Methylphenol	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5				<0.5 <0.5	ug/l 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	-	-					ı.g	NONE/PM17
Dissolved Organic Carbon	3	-	-				<2	mg/l	TM60/PM0
рН	9.49	8.26	8.59				<0.01	pH units	TM73/PM0
				I					

Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 SVOC Report : Solid

JE Job No.:	15/17326										
J E Sample No.	19-21	52-54	64-66								
Sample ID	BH102	BH112	WS206								
Depth	2.00	1.00	0.50						Please se	e attached n	otes for all
COC No / misc										ations and a	
Containers	VJT	VJT	VJT								
Sample Date	30/11/2015		02/12/2015								
Sample Type Batch Number	Soil 1	Soil 1	Soil 1								Mathad
Date of Receipt	03/12/2015	03/12/2015							LOD/LOR	Units	Method No.
SVOC MS	00/12/2010	00/12/2010	00/12/2010								
Phenois											
2-Chlorophenol #M	<10	<10	<10						<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10						<10	ug/kg	TM16/PM8
2-Nitrophenol 2,4-Dichlorophenol #M	<10 <10	<10 <10	<10 <10						<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
2,4-Dimethylphenol	<10	<10	<10						<10	ug/kg 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 Pentachlorophenol	<10 <10	<10 <10	<10 <10						<10 <10	ug/kg	TM16/PM8 TM16/PM8
Phenol **M	<10	<10	<10						<10	ug/kg ug/kg	TM16/PM8
PAHs									1.5	-99	
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 Fluorene	<10 <10	495 378	2706 2715						<10 <10	ug/kg ug/kg	TM16/PM8 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 Benzo(bk)fluoranthene	24 60	2446 3725	10683 17494						<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
Benzo(a)pyrene	21	1942	9613						<10	ug/kg 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 Phthalates	17	1043	4898						<10	ug/kg	TM16/PM8
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 Dimethyl phthalate ***	<100 <100	<100	<100 <100						<100	ug/kg	TM16/PM8 TM16/PM8
Dimetnyi pritralate	<100	<100	<100						<100	ug/kg	TIVITO/PIVIO
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Geotechnics SVOC Report : Client Name:

PN153428 Reference:

Location: Stockport Bus Station

Sarah Burt Contact: 15/17326 JE Job No.:

J E Sample No. 52-54 19-21 64-66 Sample ID BH102 BH112 WS206 Depth 2.00 1.00 0.50 Please see attached notes for all COC No / misc abbreviations and acronyms Containers VJT VJT VJT 02/12/201 02/12/2015 Sample Date 30/11/2015 Sample Type Batch Number Method LOD/LOR Units 03/12/2015 Date of Receipt 03/12/2015 03/12/2015 SVOC MS Other SVOCs TM16/PM8 1.2-Dichlorobenzene <10 <10 <10 <10 ug/kg 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 TM16/PM8 <10 <10 <10 ug/kg 2-Nitroaniline TM16/PM8 <10 <10 <10 <10 ug/kg 2,4-Dinitrotoluene <10 <10 <10 <10 ug/kg TM16/PM8 2,6-Dinitrotoluene TM16/PM8 <10 <10 <10 <10 ug/kg TM16/PM8 3-Nitroaniline <10 <10 <10 <10 ug/kg 4-Bromophenylphenylether #M <10 <10 <10 <10 ug/kg TM16/PM8 <10 <10 <10 ug/kg TM16/PM8 4-Chlorophenylphenylether TM16/PM8 <10 <10 <10 <10 ug/kg 4-Nitroaniline <10 <10 <10 <10 ug/kg TM16/PM8 Azobenzene <10 <10 <10 <10 TM16/PM8 ug/kg Bis(2-chloroethoxy)methane <10 <10 <10 <10 ua/ka TM16/PM8 TM16/PM8 Bis(2-chloroethyl)ether <10 <10 <10 <10 ug/kg Carbazole <10 221 1095 <10 ug/kg TM16/PM8 Dibenzofuran #M <10 1770 <10 TM16/PM8 ug/kg TM16/PM8 Hexachlorobenzene <10 <10 <10 <10 ug/kg Hexachlorobutadiene #M <10 <10 <10 <10 ug/kg TM16/PM8 Hexachlorocyclopentadiene <10 <10 <10 <10 ug/kg TM16/PM8 Hexachloroethane <10 TM16/PM8 <10 <10 <10 ua/ka sophorone #M TM16/PM8 <10 <10 <10 <10 ug/kg N-nitrosodi-n-propylamine #M <10 <10 <10 <10 ug/kg TM16/PM8 <10 TM16/PM8 Nitrobenzene #M <10 <10 <10 ug/kg Surrogate Recovery 2-Fluorobiphenyl TM16/PM8 89 96 105 <0 Surrogate Recovery p-Terphenyl-d14 107 112 109 <0 % TM16/PM8

Solid

Client Name: Geotechnics SVOC Report : CEN 10:1 1 Batch

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

JE Job No.:	15/17326								
J E Sample No.	19-21	52-54	64-66				1		
Sample ID	BH102	BH112	WS206						
Depth COC No / misc	2.00	1.00	0.50					e attached r ations and a	
Containers	VJT	VJT	VJT						,
Sample Date	30/11/2015		02/12/2015				i		
Sample Type	Soil	Soil	Soil				i		
Batch Number	1	1	1				1.00/1.00	Llatta	Method
Date of Receipt	03/12/2015	03/12/2015	03/12/2015				LOD/LOR	Units	No.
SVOC MS									
Phenois									
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 TM16/PM30
4-Nitrophenol	<10	<10	<10				<10	ug/l	TM16/PM30 TM16/PM30
Pentachlorophenol Phenol	<1 <1	<1 <1	<1 <1				<1 <1	ug/l ug/l	TM16/PM30
PAHs	` '	`	``				` '	ug/I	TIVITO/F/IVIOU
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
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Client Name: Geotechnics SVOC Report : CEN 10:1 1 Batch

Reference: PN153428
Location: Stockport Bus Station

Location: Stockport Bus Static
Contact: Sarah Burt

Contact: Sarah Burt JE Job No.: 15/17326

Description Sample No. 19-21 52-54 64-86	
Depth COC No / misc Containers Containers Containers Containers Containers Sample Date Soil So	Method No. TM16/PM30
COC No / misc Containers Sample Date Soil	Method No. TM16/PM30
Containers Sample Date Sample Type Soil Soil Soil Soil Date of Receipt D3/12/2015 D3/12/2	Method No. TM16/PM30 TM16/PM30
Sample Date Sample Type Soil	No. TM16/PM30 TM16/PM30
Sample Type Soil Soil Soil 1 1 1 1 1 1 1 1 1	No. TM16/PM30 TM16/PM30
Batch Number Date of Receipt 03/12/2015 03/12/201	No. TM16/PM30 TM16/PM30
Date of Receipt 03/12/2015	No. TM16/PM30 TM16/PM30
1,2-Dichlorobenzene	TM16/PM30
1,2-Dichlorobenzene <1 <1 <1 ug/l 1,2,4-Trichlorobenzene <1 <1 <1 ug/l 1,3-Dichlorobenzene <1 <1 <1 ug/l 1,4-Dichlorobenzene <1 <1 <1 ug/l 2-Nitroaniline <1 <1 <1 ug/l 2,4-Dinitrotoluene <0.5 <0.5 <0.5 ug/l 2,6-Dinitrotoluene <1 <1 <1 ug/l 2,6-Dinitrotoluene <1 <1 <1 ug/l 3-Nitroaniline <1 <1 <1 ug/l 4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 <0.5 <0.5 4-Nitroaniline <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 <	TM16/PM30
1,2,4-Trichlorobenzene <1 <1 <1 ug/l 1,3-Dichlorobenzene <1 <1 <1 ug/l 1,4-Dichlorobenzene <1 <1 <1 ug/l 2-Nitroaniline <1 <1 <1 ug/l 2,4-Dinitrotoluene <0.5 <0.5 <0.5 ug/l 2,6-Dinitrotoluene <1 <1 <1 ug/l 3-Nitroaniline <1 <1 <1 ug/l 4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 <1 ug/l 4-Chlorophenylphenylether <1	TM16/PM30
1,3-Dichlorobenzene <1 <1 <1 ug/l 1,4-Dichlorobenzene <1 <1 <1 ug/l 2-Nitroaniline <1 <1 <1 ug/l 2,4-Dinitrotoluene <0.5 <0.5 <0.5 ug/l 2,6-Dinitrotoluene <1 <1 <1 ug/l 3-Nitroaniline <1 <1 <1 ug/l 4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 <1 ug/l 6-Chlorophenylphenylether <td< th=""><th></th></td<>	
1,4-Dichlorobenzene <1 <1 <1 ug/l 2-Nitroaniline <1 <1 <1 ug/l 2,4-Dinitrotoluene <0.5 <0.5 <0.5 ug/l 2,6-Dinitrotoluene <1 <1 <1 ug/l 3-Nitroaniline <1 <1 <1 ug/l 4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l Azobenzene <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 Dibenzofuran <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	TM16/PM30
2-Nitroaniline	
2,4-Dinitrotoluene <0.5 <0.5 <0.5 ug/l 2,6-Dinitrotoluene <1 <1 <1 ug/l 3-Nitroaniline <1 <1 <1 ug/l 4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l 4-Noteroane <0.5 <0.5 <0.5 ug/l 4-Noteroane <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l <1 ug/l <1 ug/l <0.5 ug/l Carbazole <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 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 </th <td>TM16/PM30</td>	TM16/PM30
2,6-Dinitrotoluene <1 <1 <1 ug/l 3-Nitroaniline <1 <1 <1 ug/l 4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l Azobenzene <0.5 <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <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 <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 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0	TM16/PM30
3-Nitroaniline <1 <1 <1 ug/l 4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l Azobenzene <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 ug/l Dibenzofuran <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 <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 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0	TM16/PM30
4-Bromophenylphenylether <1 <1 <1 ug/l 4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l Azobenzene <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 <0.5 ug/l Dibenzofuran <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 <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 <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 <0.5<	TM16/PM30
4-Chloroaniline <1 <1 <1 ug/l 4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l Azobenzene <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 <0.5 ug/l Dibenzofuran <0.5 <0.5 <0.5 <0.5 ug/l	TM16/PM30
4-Chlorophenylphenylether <1 <1 <1 ug/l 4-Nitroaniline <0.5 <0.5 <0.5 ug/l Azobenzene <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 ug/l Dibenzofuran <0.5 <0.5 <0.5 <0.5 ug/l	TM16/PM30 TM16/PM30
4-Nitroaniline <0.5 <0.5 <0.5 ug/l Azobenzene <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 ug/l Dibenzofuran <0.5 <0.5 <0.5 <0.5 ug/l	TM16/PM30
Azobenzene <0.5 <0.5 <0.5 ug/l Bis(2-chloroethoxy)methane <0.5 <0.5 <0.5 ug/l Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 ug/l Dibenzofuran <0.5 <0.5 <0.5 ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	TM16/PM30
Bis(2-chloroethyl)ether <1 <1 <1 ug/l Carbazole <0.5 <0.5 <0.5 <0.5 ug/l Dibenzofuran <0.5 <0.5 <0.5 ug/l	TM16/PM30
Carbazole < 0.5	TM16/PM30
	TM16/PM30
Hexachlorobenzene <1 <1 ug/l	TM16/PM30
	TM16/PM30
Hexachlorobutadiene <1 <1 <1 ug/l	TM16/PM30
Hexachlorocyclopentadiene <1 <1 ug/l	TM16/PM30
Hexachloroethane <1 <1 <1 ug/l	TM16/PM30
sophorone <0.5 <0.5 ug/l	TM16/PM30
N-nitrosodi-n-propylamine	TM16/PM30 TM16/PM30

Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt

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 se	e attached r	notes for all
COC No / misc								ations and a	
Containers	VJT	VJT	VJT						
•		02/12/2015							
Sample Type	Soil	Soil	Soil						_
Batch Number	1	1 03/12/2015	1				LOD/LOR	Units	Method No.
VOC MS	03/12/2015	03/12/2015	03/12/2015						140.
Dichlorodifluoromethane	<2	<2	<2				<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether **	<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 #M	<1	<1	<1				<1	ug/kg	TM15/PM10
Chloroethane **M Trichlorofluoromethane **M	<6 <3	<6 <3	<6 <3				<6 <3	ug/kg ug/kg	TM15/PM10 TM15/PM10
1,1-Dichloroethene (1,1 DCE) ***	<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 Bromochloromethane **M	<4 <4	<4 <4	<4 <4				<4 <4	ug/kg	TM15/PM10 TM15/PM10
Chloroform **M	<4 <5	<4 <5	<4 <5				<4 <5	ug/kg ug/kg	TM15/PM10
1,1,1-Trichloroethane **M	<5	<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) *** 1,2-Dichloropropane ***	<5 <4	<5 <4	<5 <4				<5 <4	ug/kg ug/kg	TM15/PM10 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 Tetrachloroethene (PCE) **	<4 8	<4 <3	<4 <3				<4 <3	ug/kg ug/kg	TM15/PM10 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 p/m-Xylene **M	<3 <4	<3 <4	<3 <4				<3 <4	ug/kg	TM15/PM10 TM15/PM10
o-Xylene *M	<4	<4	<4				<4	ug/kg 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 1,2,3-Trichloropropane ***	<2 <4	<2 <4	<2 <4				<2 <4	ug/kg	TM15/PM10 TM15/PM10
1,2,3-Trichloropropane **** Propylbenzene #	<4 <4	<4 <4	<4 <4				<4	ug/kg ug/kg	TM15/PM10 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 <4				<6	ug/kg	TM15/PM10
sec-Butylbenzene # 4-Isopropyltoluene #	<4 <4	<4 <4	<4 <4				<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10
1,3-Dichlorobenzene **M	<4	<4	<4				<4	ug/kg 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 * Hexachlorobutadiene	<7 <4	<7 <4	<7 <4				<7 <4	ug/kg	TM15/PM10 TM15/PM10
Hexachlorobutadiene Naphthalene	<4 <27	<4 <27	<4 262				<4 <27	ug/kg ug/kg	TM15/PM10 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

Geotechnics VOC Report : Client Name: CEN 10:1 1 Batch

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact: JE Job No.: 15/17326

JE Job No.:	15/17326										
J E Sample No.	19-21	52-54	64-66								
Sample ID	BH102	BH112	WS206								
Depth COC No / misc	2.00	1.00	0.50							e attached rations and a	
Containers	VJT	VJT	VJT						i		
Sample Date	30/11/2015	02/12/2015	02/12/2015								
Sample Type	Soil	Soil	Soil								
Batch Number	1	1	1						LOD/LOR	Units	Method No.
VOC MS	03/12/2015	03/12/2015	03/12/2015								INO.
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						<3	ug/l	TM15/PM69 TM15/PM69
Dichloromethane (DCM) trans-1-2-Dichloroethene	<3	<3 <3	<3 <3						<3 <3	ug/l 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 Carbon tetrachloride	<3 <2	<3 <2	<3 <2						<3 <2	ug/l	TM15/PM69 TM15/PM69
1,2-Dichloroethane	<2	<2	<2						<2	ug/l 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 trans-1-3-Dichloropropene	<2 <2	<2 <2	<2 <2						<2 <2	ug/l ug/l	TM15/PM69 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 Ethylbenzene	<2 <2	<2 <2	<2 <2						<2 <2	ug/l ug/l	TM15/PM69 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 TM15/PM69
1,2,3-Trichloropropane Propylbenzene	<3 <3	<3 <3	<3 <3						<3 <3	ug/l ug/l	TM15/PM69 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 1,3-Dichlorobenzene	<3 <3	<3 <3	<3 <3						<3 <3	ug/l ug/l	TM15/PM69 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	<3 108	<3 108	<3 109						<3 <0	ug/l %	TM15/PM69 TM15/PM69
Surrogate Recovery Toluene D8 Surrogate Recovery 4-Bromofluorobenzene											
Surrugate Recovery 4-Bromofluorobenzene	88	90	88	l	l	L		l	<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

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

NDP Reason Report

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 HCI (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.
Indicates analyte found in associated method blank.
Dilution required.
MCERTS accredited.
Not applicable
No Asbestos Detected.
None Detected (usually refers to VOC and/SVOC TICs).
No Determination Possible
Calibrated against a single substance
Surrogate recovery outside performance criteria. This may be due to a matrix effect.
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.
Samples are dried at 35°C ±5°C
Suspected carry over
Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
Matrix Effect
No Fibres Detected
AQC Sample
Blank Sample
Client Sample
Trip Blank Sample
Outside Calibration Range
x5 Dilution
x10 Dilution

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

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

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
ТМ30	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
ТМ30	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

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

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	



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

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

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





Attention : Sarah Burt

Date: 21st December, 2015

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 2

Location : Stockport Bus Station

Date samples received: 4th December, 2015

Status: Final report

Issue:

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

JE Job No.:	15/17326			 	 	 			
J E Sample No.	106-108	115-117	121-123						
Sample ID	WS204	WS220	WS220						
Depth	0.20	0.20	1.00						
·	0.20	0.20	1.00					e attached nations and a	
COC No / misc									
Containers	VJT	VJT	VJT						
Sample Date	03/12/2015	03/12/2015	03/12/2015						
Sample Type	Soil	Soil	Soil						
Batch Number	2	2	2						Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015				LOD/LOR	Units	No.
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
D									
PAH MS	0.04	-0.04	0.00				40.04		TM4/DM0
Naphthalene #M	0.61 _{AA}	<0.04	0.09				<0.04	mg/kg	TM4/PM8 TM4/PM8
Acenaphthylene Acenaphthene **M	0.53 _{AA}	<0.03 <0.05	<0.05				<0.03 <0.05	mg/kg mg/kg	TM4/PM8
Fluorene *M	<0.40 _{AA}	<0.04	<0.04				<0.03	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 PAH Surrogate % Recovery	1.61 _{AA}	0.04	0.19 112				<0.02 <0	mg/kg %	TM4/PM8 TM4/PM8
PAH Surrogate % Recovery	122 _{AA}	111	112				<0	70	TIVI4/PIVI8
Methyl Tertiary Butyl Ether ***	<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

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 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 se	e attached n	notes for all
COC No / misc										ations and a	
Containers	VJT	VJT	VJT								
Sample Date	03/12/2015	03/12/2015	03/12/2015								
Sample Type	Soil	Soil	Soil								
Batch Number	2	2	2						LOD/LOR	Units	Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015						LOD/LOR	Offics	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 <7	<4 <7						<4 <7	mg/kg	TM5/PM16 TM5/PM16
>EC16-EC21 >EC21-EC35	68 349	<7	<7						<7	mg/kg mg/kg	TM5/PM16
>EC35-EC44	349	<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 Mothylpherel	4400	-40	-40						-40	pante-	TMAC/DMAC
2-Methylphenol	<100 _{AA}	<10	<10						<10	ug/kg	TM16/PM8
2-Nitrophenol	<100 _{AA}	<10 <10	<10 <10						<10	ug/kg	TM16/PM8 TM16/PM8
2,4-Dichlorophenol 2,4-Dimethylphenol	<100 _{AA}	<10 <10	<10						<10 <10	ug/kg ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<100 _{AA}	<10	<10						<10	ug/kg ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<100 _{AA}	<10	<10						<10	ug/kg 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
	- AA	-10	-10	<u> </u>	-10	49/119	10// 10/0				

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 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 se	e attached n	otes for all
COC No / misc								abbrevi	ations and ad	cronyms
Containers	VJT	VJT	VJT							
Sample Date	03/12/2015	03/12/2015	03/12/2015							
Sample Type	Soil	Soil	Soil							
Batch Number	2	2	2					LOD/LOR	I India	Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015					LOD/LOR	Units	No.
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
										ĺ
			<u> </u>			<u> </u>		<u> </u>		
-										

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						
Sample ID	W3204	W3220	W 5220						
Depth	0.20	0.20	1.00				Please se	e attached n	otes for all
COC No / misc							abbrevi	ations and a	cronyms
Containers	VJT	VJT	VJT						
Sample Date	03/12/2015	03/12/2015	03/12/2015						
Sample Type	Soil	Soil	Soil						
Batch Number	2	2	2				LOD/LOR	Units	Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015				LODILOR	Office	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
n/m Vulono	-2	-2	-2				-2	ug/i	TN445/DN400

p/m-Xylene

o-Xylene

Surrogate Recovery Toluene D8

gate Recovery 4-Bromofluorobenzene

<3

<2

91

103

<3

<2

82

102

<3

<2

84

103

ug/l

ug/l

%

%

<2

<0

<0

TM15/PM69 TM15/PM69

TM15/PM69

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

								ı		
J E Sample No.	106-108	115-117	121-123							
Sample ID	WS204	WS220	WS220							
Depth	0.20	0.20	1.00					Please se	e attached n	notes for all
COC No / misc									ations and a	
Containers	VJT	VJT	VJT							
Sample Date	03/12/2015	03/12/2015	03/12/2015							
Sample Type	Soil	Soil	Soil						1	1
Batch Number	2	2	2					LOD/LOR	Units	Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015					LODILOIT	Office	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 45	<5 -5					<5	ug/l	TM36/PM69
>EC10-EC12	<5 <10	<5 470	<5 <10					<5	ug/l	TM5/PM30
>EC12-EC16 >EC16-EC21	<10	170 790	<10					<10 <10	ug/l	TM5/PM30 TM5/PM30
>EC16-EC21 >EC21-EC35	<10	1330	<10					<10	ug/l 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
	-		-					-	- 3	
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

0E 00B 140	10/1/020			 	 	 		•		
J E Sample No.	106-108	115-117	121-123							
Sample ID	WS204	WS220	WS220							
Depth	0.20	0.20	1.00					Please se	e attached n	otes for all
COC No / misc								abbrevi	ations and ad	cronyms
Containers	VJT	VJT	VJT							
Sample Date	03/12/2015	03/12/2015	03/12/2015							
Sample Type	Soil	Soil	Soil							
Batch Number		2	2					LOD/LOR	Units	Method
Date of Receipt										No.
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						I	NONE/PM17
Discolved Organic Contract	-		-						<i>n</i>	TMCO/DMC
Dissolved Organic Carbon pH	5 8.46	6 8.56	5 8.25					<2 <0.01	mg/l pH units	TM60/PM0 TM73/PM0
									-	
		•	•				•			

Client Name: Geotechnics SVC

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

SVOC Report : Solid

JE JOD NO.:	15/1/320									
J E Sample No.	106-108	115-117	121-123							
Sample ID	WS204	WS220	WS220							
Depth	0.20	0.20	1.00					Please se	e attached n	otes for all
COC No / misc								abbrevia	ations and a	cronyms
Containers	VJT	VJT	VJT							
Sample Date	03/12/2015	03/12/2015	03/12/2015							
Sample Type	Soil	Soil	Soil							
Batch Number	2	2	2					LOD/LOR	Units	Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015							No.
SVOC MS										
Phenois	.400	.40	.40					-40		T1440/D140
2-Chlorophenol **M	<100 _{AA}	<10	<10 <10					<10 <10	ug/kg	TM16/PM8 TM16/PM8
2-Methylphenol 2-Nitrophenol	<100 _{AA}	<10 <10	<10					<10	ug/kg 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	<100AA	<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 TM16/PM8
Dimethyl phthalate **M Other SVOCs	<1000 _{AA}	<100	<100					<100	ug/kg	TIVITO/PIVIO
1,2-Dichlorobenzene	<100 _{AA}	<10	<10					<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene **M	<100AA	<10	<10					<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<100AA	<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 Carbazole	<100 _{AA}	<10 <10	<10 16					<10 <10	ug/kg	TM16/PM8 TM16/PM8
Carbazole Dibenzofuran #M	352 _{AA} 136 _{AA}	<10	13					<10	ug/kg ug/kg	TM16/PM8
Hexachlorobenzene	<100 _{AA}	<10	<10					<10	ug/kg ug/kg	TM16/PM8
Hexachlorobutadiene #M	<100AA	<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
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										1
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Geotechnics Client Name: SVOC Report : CEN 10:1 1 Batch

PN153428 Reference: Stockport Bus Station Location:

Sarah Burt

Contact:

Contact:	Sarah Bui	ı											
JE Job No.:	15/17326												
J E Sample No.	106-108	115-117	121-123								Ī		
Sample ID	WS204	WS220	WS220										
Depth	0.20	0.20	1.00									e attached r	
COC No / misc Containers	VJT	VJT	VJT								abbrevia	ations and a	cronyms
Sample Date		03/12/2015									i		
Sample Type	Soil	Soil	Soil										
Batch Number	2	2 04/12/2015	2								LOD/LOR	Units	Method No.
Date of Receipt SVOC MS	04/12/2015	04/12/2015	04/12/2015										140.
Phenois													
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 <10	<1 <10	<1 <10								<1	ug/l	TM16/PM30 TM16/PM30
4-Nitrophenol Pentachlorophenol	<10 <1	<10 <1	<10 <1								<10 <1	ug/l ug/l	TM16/PM30 TM16/PM30
Phenol	<1	<1	<1								<1	ug/l	TM16/PM30
PAHs	*1	,,,	1								- 1	ugn	TIVITO/T WISO
2-Chloronaphthalene	<1	<1	<1								<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	<1								<1	ug/l	TM16/PM30
Phthalates													Ť
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 1,4-Dichlorobenzene	<1 <1	<1 <1	<1 <1								<1 <1	ug/l	TM16/PM30 TM16/PM30
2-Nitroaniline	<1	<1	<1								<1	ug/l 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 Hexachlorobutadiene	<1 <1	<1 <1	<1 <1								<1 <1	ug/l	TM16/PM30 TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1								<1	ug/l 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
													1
	L	J.	J	l	L	l	l	l	l	l			

Geotechnics Client Name: VOC Report :

PN153428 Reference: Stockport Bus Station Location:

Sarah Burt Contact: 15/17326

JE Job No.:	15/17326								
J E Sample No.	106-108	115-117	121-123						
Sample ID	WS204	WS220	WS220						
Depth COC No / misc	0.20	0.20	1.00					e attached nations and a	
Containers	VJT	VJT	VJT						, .
Sample Date	03/12/2015	03/12/2015	03/12/2015						
Sample Type	Soil	Soil	Soil						1
Batch Number Date of Receipt	2	2	2				LOD/LOR	Units	Method No.
VOC MS	04/12/2015	04/12/2015	04/12/2015						140.
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 Chloroethane #M	<1 <6	<1 <6	<1 <6				<1 <6	ug/kg ug/kg	TM15/PM10 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 cis-1-2-Dichloroethene **M	<6 <7	<6 <7	<6 <7				<6 <7	ug/kg ug/kg	TM15/PM10 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 TM15/PM10
1,1-Dichloropropene [#] Carbon tetrachloride ^{#M}	<3 <4	<3 <4	<3 <4				<3 <4	ug/kg 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 Dibromomethane **M	<4	<4	<4				<4	ug/kg	TM15/PM10 TM15/PM10
Bromodichloromethane #M	<4 <4	<4 <4	<4 <4				<4 <4	ug/kg 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 ** Tetrachloroethene (PCE) *	<4 <3	<4 <3	<4 <3				<4 <3	ug/kg	TM15/PM10 TM15/PM10
1,3-Dichloropropane **M	<4	<4	<4				<4	ug/kg 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 *** Ethylbenzene ***	<5 <3	<5 <3	<5 <3				<5 <3	ug/kg ug/kg	TM15/PM10 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 * 1,1,2,2-Tetrachloroethane ***	<3 <3	<3 <3	<3 <3				<3 <3	ug/kg ug/kg	TM15/PM10 TM15/PM10
1,1,2,2-Tetrachioroethane Bromobenzene	<2	<2	<2				<2	ug/kg 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 * 4-Chlorotoluene	<3 <3	<3 <3	<3 <3				<3 <3	ug/kg ug/kg	TM15/PM10 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 # 1,3-Dichlorobenzene #M	<4 <4	<4 <4	<4 <4				<4 <4	ug/kg	TM15/PM10 TM15/PM10
1,3-Dichlorobenzene **** 1,4-Dichlorobenzene #	<4 <4	<4	<4				<4	ug/kg ug/kg	TM15/PM10 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 * Hexachlorobutadiene	<7 <4	<7 <4	<7 <1				<7 <1	ug/kg	TM15/PM10 TM15/PM10
Naphthalene	<4 <27	<27	<4 <27				<4 <27	ug/kg ug/kg	TM15/PM10 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

Solid

Geotechnics Client Name: VOC Report : CEN 10:1 1 Batch

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact: 15/17326

JE Job No.:	15/17326								
J E Sample No.	106-108	115-117	121-123						
Sample ID	WS204	WS220	WS220						
Depth	0.20	0.20	1.00				Please se	e attached n	otes for all
COC No / misc							abbrevia	ations and a	cronyms
Containers	VJT	VJT	VJT						
Sample Date Sample Type	03/12/2015 Soil	03/12/2015 Soil	03/12/2015 Soil						
Batch Number	2	2	2						Method
Date of Receipt		04/12/2015					LOD/LOR	Units	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 Bromomethane	<0.1 <1	<0.1 <1	<0.1 <1				<0.1 <1	ug/l ug/l	TM15/PM69 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 Bromochloromethane	<1 <2	<1 <2	<1 <2				<1 <2	ug/l ug/l	TM15/PM69 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 <2	<3 <2	<3 <2				<3 <2	ug/l	TM15/PM69 TM15/PM69
1,2-Dichloropropane Dibromomethane	<3	<3	<3				<3	ug/l 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 Dibromochloromethane	<2 <2	<2 <2	<2 <2				<2 <2	ug/l ug/l	TM15/PM69 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 Isopropylbenzene	<2 <3	<2 <3	<2 <3				<2 <3	ug/l ug/l	TM15/PM69 TM15/PM69
1,1,2,2-Tetrachloroethane	<4	<4	<4				<3 <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 TM15/PM69
tert-Butylbenzene 1,2,4-Trimethylbenzene	<3 <3	<3 <3	<3 <3				<3 <3	ug/l 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 TM15/PM69
1,2,4-Trichlorobenzene Hexachlorobutadiene	<3 <3	<3 <3	<3 <3				<3 <3	ug/l ug/l	TM15/PM69 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 HCI (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).
DR Dilution required. M MCERTS accredited. NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
M MCERTS accredited. NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
ND None Detected (usually refers to VOC and/SVOC TICs).
NDD No Determination Provides
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

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

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	_

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
ТМ30	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

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	



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Unit 3 Deeside Point

Zone 3

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Attention : Sarah Burt

Date: 7th January, 2016

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 2 Schedule C

Location : Stockport Bus Station

Date samples received: 4th December, 2015

Status: Final report

Issue:

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

Spirit Chianne

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE JOD NO.:	15/1/326				 	 	 	-		
J E Sample No.	79-81	91-93	100-102	103-105						
Sample ID	BH111	BH108	BH108	BH108						
Depth	0.20-0.40	1.00	4.00	5.00						
COC No / misc	0.20 0.10	1.00	1.00	0.00					e attached n ations and a	
Containers	VJT	VJT	VJT	VJT						
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						Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015	04/12/2015				LOD/LOR	Units	No.
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	0.05	0.00	0.00	.0.04				.0.04		Th 4.4/Dh 40
Naphthalene #M	0.05	2.00	0.23	<0.04				<0.04	mg/kg	TM4/PM8
Acenaphthylene Acenaphthene #M	0.03 <0.05	0.19 2.79	0.07	<0.03 <0.05				<0.03 <0.05	mg/kg	TM4/PM8 TM4/PM8
Fluorene #M	0.04	1.85	0.17	<0.03				<0.03	mg/kg mg/kg	TM4/PM8
Phenanthrene *M	0.43	16.09	1.83	0.11				<0.04	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 PAH Surrogate % Recovery	0.13 112	2.51 129	0.21 111	<0.02 118				<0.02 <0	mg/kg %	TM4/PM8 TM4/PM8
PAR Sulfogate % Recovery	112	129	111	110				~0	76	TIVI4/FIVIO
Methyl Tertiary Butyl Ether ***	<6	<6	<6	-				<6	ug/kg	TM15/PM10
Benzene *M	<5	<5	<5	-				<5	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	-				<3	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	-				<3	ug/kg	TM15/PM10
p/m-Xylene *M	<4	<4	<4	-				<4	ug/kg	TM15/PM10
o-Xylene *M	<4	<4	<4	-				<4	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	111	101	112	-				<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	115	83	123	-				<0	%	TM15/PM10

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

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

JE Job No.:	15/17326									
J E Sample No.	79-81	91-93	100-102	103-105						
Sample ID	BH111	BH108	BH108	BH108						
Depth	0.20-0.40	1.00	4.00	5.00						
•		1.00	4.00	3.00					e attached n ations and a	
COC No / misc										•
Containers	VJT	VJT	VJT	VJT						
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						Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015	04/12/2015				LOD/LOR	Units	No.
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										T1400/D1440
>C5-EC7	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12
>EC7-EC8 >EC8-EC10 **M	<0.1	<0.1	<0.1	<0.1				<0.1	mg/kg	TM36/PM12 TM36/PM12
>EC8-EC10""" >EC10-EC12	<0.1 <0.2	<0.1 1.2	<0.1 <0.2	<0.1 <0.2				<0.1 <0.2	mg/kg 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

TM16/PM8

<10

ug/kg

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report : Solid

J E Sample No.	79-81	91-93	100-102	103-105						
Sample ID	BH111	BH108	BH108	BH108						
Depth	0.20-0.40	1.00	4.00	5.00				Please se	e attached n	otes for all
COC No / misc									ations and a	
Containers	VJT	VJT	VJT	VJT						
Sample Date	03/12/2015	03/12/2015	03/12/2015	03/12/2015						
Sample Type		Soil	Soil	Soil						
Batch Number	2	2								
			2	2				LOD/LOR	Units	Method No.
Date of Receipt			04/12/2015					-40		TA 44 0 / DA 40
2-Nitrophenol 2,4-Dichlorophenol	<10 <10	<100 _{AA}	<10 <10	<10 <10				<10 <10	ug/kg	TM16/PM8 TM16/PM8
2,4-Dimethylphenol	<10	<100AA	<10	<10				<10	ug/kg 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 Total Speciated Phenols MS	<10 <10	<100 _{AA}	<10 <10	<10 <10				<10 <10	ug/kg	TM16/PM8 TM16/PM8
Total Speciated Fileriois MS	<10	<100 _{AA}	<10	<10				<10	ug/kg	TIVITO/FIVIO
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

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

Report: CEN 10:1 1 Batch

JE Job No.:	15/17326								
J E Sample No.	79-81	91-93	100-102						
Sample ID	BH111	BH108	BH108						
Depth	0.20-0.40	1.00	4.00				Places co	e attached no	otoe for all
COC No / misc								ations and ac	
Containers	VJT	VJT	VJT						
Sample Date	03/12/2015	03/12/2015	03/12/2015						
Sample Type	Soil	Soil	Soil						
Batch Number	2	2	2						
Date of Receipt							LOD/LOR	Units	Method No.
•							-0.5		TM20/DM4.4
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 # Dissolved Copper #	6.0 <7	25.4 <7	7.9 <7				<1.5 <7	ug/l	TM30/PM14 TM30/PM14
Dissolved Copper Dissolved Lead #	<5	23	<5				<5	ug/l ug/l	TM30/PM14
Dissolved Lead Dissolved Mercury#	<1	<1	<1				<1	ug/l	TM30/PM14
Dissolved Nickel #	4	6	5				<2	ug/l	TM30/PM14
Dissolved Nickel 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 0.06	0.04				<0.01 <0.01	ug/l	TM4/PM30 TM4/PM30
Benzo(k)fluoranthene PAH Surrogate % Recovery	77	77	74				<0.01	ug/l %	TM4/PM30
PAIT Surrogate 1/8 Necovery	- 77	- ' '	74					70	TIVI4/FIVISO
Methyl Tertiary Butyl Ether	<1	<1	<1				<1	ug/l	TM15/PM69
Benzene	<1	<1	<1				<1	ug/l	TM15/PM69
Toluene	<2	<2	<2				<2	ug/l	TM15/PM69
Ethylbenzene	<2	<2	<2				<2	ug/l	TM15/PM69
p/m-Xylene	<3	<3	<3				<3	ug/l	TM15/PM69
o-Xylene	<2	<2	<2				<2	ug/l	TM15/PM69
Surrogate Recovery Toluene D8	108	107	102				<0	%	TM15/PM69
Surrogate Recovery 4-Bromofluorobenzene	109	107	103				<0	%	TM15/PM69

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

Report: CEN 10:1 1 Batch

JE Job No.:	15/17326								
J E Sample No.	79-81	91-93	100-102				Ì		
Sample ID	BH111	BH108	BH108						
Depth	0.20-0.40	1.00	4.00				Diagon	e attached r	actor for all
COC No / misc								ations and a	
Containers	VJT	VJT	VJT						
Sample Date									
Sample Type	Soil	Soil	Soil						
Batch Number	2	2	2				LOD/LOR	Units	Method No.
Date of Receipt 0	04/12/2015	04/12/2015	04/12/2015						NO.
TPH CWG									
Aliphatics	_	_	_				_		
>C5-C6	<5 -5	<5	<5 -5				<5	ug/l	TM36/PM69 TM36/PM69
>C6-C8 >C8-C10	<5 <5	<5 <5	<5 <5				<5 <5	ug/l ug/l	TM36/PM69
>C8-C10 >C10-C12	<5 <5	<5 <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				<5	ug/l	TM36/PM69
>EC10-EC12 >EC12-EC16	<5 <10	<5 <10	<5 <10				<5 <10	ug/l	TM5/PM30 TM5/PM30
>EC16-EC21	<10	<10	<10				<10	ug/l 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 PCB 138	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1				<0.1 <0.1	ug/l	TM17/PM30 TM17/PM30
PCB 138 PCB 153	<0.1	<0.1	<0.1				<0.1	ug/l 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 4-Methylphenol	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5				<0.5 <0.5	ug/l 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

JE Job No.:	15/17326								
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 se	e attached n	otes for all
COC No / misc								ations and a	
Containers	VJT	VJT	VJT						
Sample Date	03/12/2015	03/12/2015	03/12/2015						
Sample Type	Soil	Soil	Soil						
Batch Number	2	2	2				LOD/LOR	Units	Method
Date of Receipt	04/12/2015	04/12/2015	04/12/2015				200/2011	o i ii c	No.
Total Speciated Phenols MS	<6	<6	<6				<6	ug/l	TM16/PM30
Total Cyanide #	<0.01	0.08	<0.01				<0.01	mg/l	TM89/PM0
Mass of raw test portion	0.0989	0.111	0.1017					kg	NONE/PM17
Leachant Volume	0.891	0.879	0.888					I	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
рН	7.57	7.94	8.61				<0.01	pH units	TM73/PM0
·						 			

Geotechnics Client Name: SVOC Report :

PN153428 Reference: Stockport Bus Station

Location: Sarah Burt

Contact: 15/17326

JE Job No.:	15/17326								
J E Sample No.	79-81	91-93	100-102						
Sample ID	BH111	BH108	BH108						
Depth COC No / misc	0.20-0.40	1.00	4.00					e attached n	
Containers	VJT	VJT	VJT						
Sample Date	03/12/2015	03/12/2015	03/12/2015						
Sample Type	Soil	Soil	Soil						
Batch Number	2	2	2				LOD/LOR	Units	Method No.
Date of Receipt SVOC MS	04/12/2015	04/12/2015	04/12/2015						NO.
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 4-Methylphenol	<10 <10	<100 _{AA}	<10 <10				<10 <10	ug/kg	TM16/PM8 TM16/PM8
4-Nitrophenol	<10	<100 _{AA}	<10				<10	ug/kg ug/kg	TM16/PM8
Pentachlorophenol	<10	<100AA	<10				<10	ug/kg ug/kg	TM16/PM8
Phenol **M	<10	<100AA	<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 Di-n-Octyl phthalate	<100 <100	<1000 _{AA}	<100 <100				<100 <100	ug/kg ug/kg	TM16/PM8 TM16/PM8
Diethyl phthalate	<100	<1000 _{AA}	<100				<100	ug/kg ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<1000 _{AA}	<100				<100	ug/kg	TM16/PM8
Other SVOCs								-55	
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 2,6-Dinitrotoluene	<10 <10	<100 _{AA}	<10 <10				<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
3-Nitroaniline	<10	<100AA	<10				<10	ug/kg	TM16/PM8
4-Bromophenylphenylether ***	<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 TM16/PM8
Bis(2-chloroethyl)ether Carbazole	<10 <10	<100 _{AA}	<10 184				<10 <10	ug/kg ug/kg	TM16/PM8
Dibenzofuran #M	<10	<100AA	97				<10	ug/kg ug/kg	TM16/PM8
Hexachlorobenzene	<10	<100AA	<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 *** Nitrobenzene ***	<10	<100 _{AA}	<10				<10	ug/kg	TM16/PM8
Nitrobenzene	<10	<100 _{AA}	<10				<10	ug/kg	TM16/PM8
									}

Solid

Geotechnics SVOC Report : Client Name: CEN 10:1 1 Batch

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact: 15/17326

JE Job No.:	15/17326								
J E Sample No.	79-81	91-93	100-102						
Sample ID	BH111	BH108	BH108						
Depth COC No / misc	0.20-0.40	1.00	4.00					e attached nations and a	
Containers	VJT	VJT	VJT						
Sample Date	03/12/2015								
Sample Type	Soil	Soil	Soil						Mattend
Batch Number Date of Receipt	2 04/12/2015	2 04/12/2015	2 04/12/2015				LOD/LOR	Units	Method No.
SVOC MS	04/12/2010	04/12/2010	04/12/2010						
Phenois									
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 2,4,5-Trichlorophenol	<1 <0.5	<1 <0.5	<1 <0.5				<1 <0.5	ug/l ug/l	TM16/PM30 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									TM40/DM400
2-Chloronaphthalene 2-Methylnaphthalene	<1 <1	<1 <1	<1 <1				<1 <1	ug/l ug/l	TM16/PM30 TM16/PM30
Phthalates			\ \ \				<u> </u>	ug/i	TIVITO/FIVISO
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	<1 <1				<1 <1	ug/l	TM16/PM30 TM16/PM30
4-Bromophenylphenylether 4-Chloroaniline	<1	<1	<1				<1	ug/l 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 Hexachlorobenzene	<0.5 <1	<0.5 <1	<0.5 <1				<0.5 <1	ug/l ug/l	TM16/PM30 TM16/PM30
Hexachlorobenzene 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
		ı							

Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt

JE Job No.: 5aran Burt 15/17326

VOC Report : Solid

JE Job No.:	15/17326								
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 se	e attached n	otes for all
COC No / misc								ations and a	
Containers	VJT	VJT	VJT						
Sample Date	03/12/2015								
Sample Type Batch Number	Soil 2	Soil 2	Soil 2						Method
	04/12/2015						LOD/LOR	Units	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 * Vinyl Chloride	<3 <2	<3 <2	<3 <2				<3 <2	ug/kg ug/kg	TM15/PM10 TM15/PM10
Bromomethane	<1	<1	<1				<1	ug/kg 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 # 1,1-Dichloroethane #M	<3 <6	<3 <6	<3 <6				<3 <6	ug/kg ug/kg	TM15/PM10 TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7				<7	ug/kg 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 * Carbon tetrachloride *M	<3 <4	<3 <4	<3 <4				<3 <4	ug/kg	TM15/PM10 TM15/PM10
1,2-Dichloroethane #M	<4 <5	<4 <5	<4 <5				<4 <5	ug/kg 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	<4 <4				<4 <4	ug/kg	TM15/PM10 TM15/PM10
cis-1-3-Dichloropropene Toluene #M	<3	<3	<3				<3	ug/kg 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 1,2-Dibromoethane #	<5 <3	<5 <3	<5 <3				<5 <3	ug/kg	TM15/PM10 TM15/PM10
Chlorobenzene #M	<4	<4	<4				<4	ug/kg 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 TM15/PM10
Bromoform Isopropylbenzene #	<4 <3	<4 <3	<4 <3				<4 <3	ug/kg 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 1,3,5-Trimethylbenzene *	<3 <3	<3 <3	<3 <3				<3 <3	ug/kg ug/kg	TM15/PM10 TM15/PM10
4-Chlorotoluene	<3	<3	<3				<3	ug/kg 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 *** 1,4-Dichlorobenzene **	<4 <4	<4 <4	<4 <4				<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10
n-Butylbenzene#	<4	<4	<4				<4	ug/kg 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	<4 102	<4				<4	ug/kg	TM15/PM10 TM15/PM10
Naphthalene 1,2,3-Trichlorobenzene *	<27 <7	103 <7	191 <7				<27 <7	ug/kg ug/kg	TM15/PM10 TM15/PM10
L.C.J- HIGHIOTODEHZENE							1	uu/KU	I I IVI I O/ I TIVI I U
Surrogate Recovery Toluene D8	111	101	112				<0	%	TM15/PM10

Client Name: Geotechnics VOC Report : CEN 10:11 Batch

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt

JE Job No.: 15/17326 J E Sample No. 79-81 91-93 100-102 BH108 Sample ID BH111 BH108 Depth 0.20-0.40 1.00 4 00 Please see attached notes for all COC No / misc abbreviations and acronyms VJT VJT Containers VJT Sample Date 03/12/2015 03/12/201 03/12/2015 Soil Batch Number Method 2 2 LOD/LOR Units 04/12/2015 04/12/2015 04/12/2015 Date of Receipt VOC MS TM15/PM6 Dichlorodifluoromethane ug/l TM15/PM69 Methyl Tertiary Butyl Ether <1 <1 <1 <1 ug/l Chloromethane <3 <3 <3 <3 ug/l TM15/PM6 Vinyl Chloride <0.1 <0.1 <0.1 <0.1 TM15/PM69 ug/l TM15/PM69 Bromomethane <1 <1 <1 <1 ug/l TM15/PM69 Chloroethane <3 <3 <3 <3 ug/l Trichlorofluoromethane <3 <3 <3 <3 ug/l TM15/PM69 1,1-Dichloroethene (1,1 DCE) <3 <3 <3 <3 TM15/PM6 ug/l TM15/PM69 Dichloromethane (DCM) <3 <3 <3 <3 ug/l trans-1-2-Dichloroethene <3 <3 <3 <3 ug/l TM15/PM69 <3 <3 <3 <3 TM15/PM69 ug/l TM15/PM69 cis-1-2-Dichloroethene <3 <3 <3 <3 ug/l 2.2-Dichloropropane <1 <1 <1 <1 ug/l TM15/PM69 Bromochloromethane <2 <2 <2 <2 TM15/PM69 ug/l Chloroform <2 <2 <2 TM15/PM69 <2 ua/l <2 <2 <2 TM15/PM69 1 1 1-Trichloroethane <2 ug/l 1,1-Dichloropropene <3 <3 <3 <3 ug/l TM15/PM69 <2 <2 <2 TM15/PM69 Carbon tetrachloride <2 ug/l TM15/PM69 <2 <2 <2 1.2-Dichloroethane <2 ug/l Benzene <1 <1 <1 <1 ug/l TM15/PM69 Trichloroethene (TCE) <3 <3 <3 <3 TM15/PM69 ug/l <2 <2 <2 <2 TM15/PM69 1.2-Dichloropropane ua/l TM15/PM69 Dibromomethane <3 <3 <3 <3 ug/l Bromodichloromethane <2 <2 <2 <2 TM15/PM69 ug/l <2 <2 <2 TM15/PM6 cis-1-3-Dichloropropene <2 ug/l Toluene <2 TM15/PM69 <2 <2 <2 ug/l trans-1-3-Dichloropropene <2 <2 <2 <2 ug/l TM15/PM69 1.1.2-Trichloroethane <2 <2 <2 <2 TM15/PM69 ug/l TM15/PM69 Tetrachloroethene (PCE) <3 <3 <3 <3 ug/l 1,3-Dichloropropane <2 <2 <2 <2 ug/l TM15/PM69 Dibromochloromethane <2 <2 <2 <2 TM15/PM69 ug/l 1,2-Dibromoethane <2 TM15/PM69 <2 <2 <2 ug/l <2 TM15/PM69 Chlorobenzene <2 <2 <2 ug/l 1,1,1,2-Tetrachloroethane <2 <2 <2 <2 ug/l TM15/PM69 <2 <2 <2 <2 TM15/PM69 Ethylbenzene ug/l TM15/PM69 <3 <3 <3 n/m-Xvlene <3 ug/l TM15/PM69 o-Xylene <2 <2 <2 <2 ug/l Styrene <2 <2 <2 <2 TM15/PM69 ug/l <2 <2 <2 <2 TM15/PM69 Bromoform ug/l TM15/PM69 Isopropylbenzene <3 <3 <3 <3 ug/l 1,1,2,2-Tetrachloroethane <4 <4 <4 <4 TM15/PM69 ug/l <2 TM15/PM69 Bromobenzene <2 <2 <2 ug/l TM15/PM69 1.2.3-Trichloropropane <3 <3 <3 <3 ug/l Propylbenzene <3 <3 <3 <3 ug/l TM15/PM69 <3 <3 <3 TM15/PM69 <3 ug/l TM15/PM69 1.3.5-Trimethylbenzene <3 <3 <3 <3 ug/l 4-Chlorotoluene <3 <3 <3 <3 ug/l TM15/PM69 tert-Butylbenzene <3 <3 <3 <3 TM15/PM69 ug/l 1,2,4-Trimethylbenzene <3 <3 <3 TM15/PM69 <3 ua/l <3 <3 <3 TM15/PM69 sec-Butvlbenzene <3 ug/l 4-Isopropyltoluene <3 <3 <3 <3 ug/l TM15/PM69 1,3-Dichlorobenzene <3 <3 <3 <3 TM15/PM69 ug/l TM15/PM69 <3 <3 <3 1.4-Dichlorobenzene <3 ug/l TM15/PM69 n-Butylbenzene <3 <3 <3 <3 ug/l 1,2-Dichlorobenzene <3 <3 <3 TM15/PM69 <3 ug/l 1.2-Dibromo-3-chloropropane <2 <2 <2 <2 TM15/PM69 ua/l TM15/PM69 1,2,4-Trichlorobenzene <3 <3 <3 <3 ug/l Hexachlorobutadiene <3 <3 <3 <3 ug/l TM15/PM69 <2 TM15/PM69 Naphthalene <2 <2 <2 ug/l TM15/PM69 1.2.3-Trichlorobenzene <3 <3 <3 <3 ug/l Surrogate Recovery Toluene D8 108 107 102 <0 TM15/PM69 103 TM15/PM6

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 HCI (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).
DR Dilution required. M MCERTS accredited. NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
M MCERTS accredited. NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
ND None Detected (usually refers to VOC and/SVOC TICs).
NDD No Determination Provides
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

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

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

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
ТМ30	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
ТМ30	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
ТМ30	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

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
ТМ38	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
ТМ38	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

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	



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

 Geotechnics
 Tel: +44 (0) 1244 833780

 Unit 1B
 Tel: +44 (0) 1244 833780

 Borders Industrial Park
 Fax: +44 (0) 1244 833781

 River Lane
 Fax: +44 (0) 1244 833781





Attention : Sarah Burt

Cheshire CH4 8RJ

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:

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

JE Job No.:	15/17326									
J E Sample No.	130-132	136-138						l		
Sample ID	WS203	WS224								
Depth	0.50	0.20								
•	0.00	0.20							e attached n ations and a	
COC No / misc										
Containers	VJT	VJT								
Sample Date	04/12/2015	04/12/2015								
Sample Type	Soil	Soil								
Batch Number	3	3						LOD/LOR	11-26-	Method
Date of Receipt	07/12/2015	07/12/2015						LOD/LOR	Units	No.
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 ***	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 0.60	0.38						<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene		0.15						<0.02	mg/kg %	TM4/PM8
PAH Surrogate % Recovery	118	118						<0	%	TM4/PM8
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Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326		 	 	 	 	_		
J E Sample No.	130-132	136-138							
Sample ID	WS203	WS224							
Depth	0.50	0.20					Diverse		-t fII
COC No / misc								e attached n ations and a	
Containers	VJT	VJT							
Sample Date									
Sample Type	Soil	Soil							
Batch Number	3	3					LOD/LOR	Units	Method No.
Date of Receipt	07/12/2015	07/12/2015							
TPH CWG									
Aliphatics >C5-C6 ***	<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 ***	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>EC10-EC12 >EC12-EC16	<0.2 <4	<0.2 <4					<0.2 <4	mg/kg mg/kg	TM5/PM16 TM5/PM16
>EC12-EC10 >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

							-			
J E Sample No.	130-132	136-138								
Sample ID	WS203	WS224								
Depth	0.50	0.20					Please se	otes for all		
COC No / misc							abbrevi	cronyms		
Containers	VJT	VJT								
Sample Date	04/12/2015	04/12/2015								
Sample Type	Soil	Soil								
Batch Number	3	3					1.00#.00	I India	Method	
Date of Receipt	07/12/2015	07/12/2015					LOD/LOR	Units	No.	
Phenol	<10	<10					<10	ug/kg	TM16/PM8	
Total Speciated Phenols MS	<10	<10					<10	ug/kg	TM16/PM8	
Total Organic Carbon #	0.50	1.01					<0.02	%	TM21/PM24	
pH #M	8.95	7.89					<0.01	pH units	TM73/PM11	
Sample Type	Sand	Clayey Loam					-0.01	None	PM13/PM0	
Sample Colour	Red	Dark Brown						None	PM13/PM0	
Other Items	stones	stones, brick fagments and vegetation						None	PM13/PM0	
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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 HCI (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 Blank Sample Client Sample Tip Blank Sample Tip Blank Sample OC Outside Calibration Range		
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 TB Trip Blank Sample	#	ISO17025 (UKAS) accredited - UK.
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 Trip Blank Sample	В	Indicates analyte found in associated method blank.
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 Trip Blank Sample	DR	Dilution required.
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 Trip Blank Sample	M	MCERTS accredited.
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 Trip Blank Sample	NA	Not applicable
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 Trip Blank Sample	NAD	No Asbestos Detected.
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 Trip Blank Sample	ND	None Detected (usually refers to VOC and/SVOC TICs).
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 Trip Blank Sample	NDP	No Determination Possible
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 Trip Blank Sample	SS	Calibrated against a single substance
+ 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	SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
++ 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	W	Results expressed on as received basis.
* 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 Trip Blank Sample	+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
An 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	++	Result outside calibration range, results should be considered as indicative only and are not accredited.
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	*	Analysis subcontracted to a Jones Environmental approved laboratory.
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	AD	Samples are dried at 35°C ±5°C
ME Matrix Effect NFD No Fibres Detected BS AQC Sample LB Blank Sample N Client Sample TB Trip Blank Sample	СО	Suspected carry over
NFD No Fibres Detected BS AQC Sample LB Blank Sample N Client Sample TB Trip Blank Sample	LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
BS AQC Sample LB Blank Sample N Client Sample TB Trip Blank Sample	ME	Matrix Effect
LB Blank Sample N Client Sample TB Trip Blank Sample	NFD	No Fibres Detected
N Client Sample TB Trip Blank Sample	BS	AQC Sample
TB Trip Blank Sample	LB	Blank Sample
	N	Client Sample
OC Outside Calibration Range	ТВ	Trip Blank Sample
	OC	Outside Calibration Range

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

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

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



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

Geotechnics
Unit 1B
Borders Industrial Park
River Lane
Chester
Cheshire

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





Attention : Sarah Burt

CH4 8RJ

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:

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

Spirit Chianne

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report : Solid

JE Job No.:	15/17326			 		 		 •		
J E Sample No.	148-150									
Sample ID	WS212									
Depth	1.00									
•	1.00								e attached nations and a	
COC No / misc										
Containers	VJT									
Sample Date	07/12/2015									
Sample Type	Soil									
Batch Number	4									Method
Date of Receipt	08/12/2015							LOD/LOR	Units	No.
Arsenic **M	10.4							<0.5	mg/kg	TM30/PM1
Cadmium #M	<0.1							<0.1	mg/kg	TM30/PM1
Chromium #M	41.3							<0.5	mg/kg	TM30/PM1
Copper #M	46							<1	mg/kg	TM30/PM1
Lead ^{#M}	29							<5	mg/kg	TM30/PM1
Mercury #M	0.5							<0.1	mg/kg	TM30/PM1
Nickel #M	29.0							<0.7	mg/kg	TM30/PM1
Selenium #M	1							<1	mg/kg	TM30/PM1
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
										T1445/D144
Methyl Tertiary Butyl Ether *** Benzene ***	<6							<6	ug/kg	TM15/PM10
Toluene #M	6 21							<5 <3	ug/kg 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 >C35-C44	43 <7							<7 <7	mg/kg	TM5/PM16
Total aliphatics C5-44	53							<26	mg/kg mg/kg	TM5/TM36/PM1
Aromatics	55							-20	mg/kg	
>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/PM1
Total aliphatics and aromatics(C5-44)	1052	i '	1	1 '	i		l	<52	mg/kg	TM5/TM36/PM1

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326		 	 				
J E Sample No.	148-150							
Sample ID	WS212							
Donath	1.00							
Depth COC No / misc							e attached n ations and a	
Containers								
Sample Date								
Sample Type	Soil							
Batch Number	4					LOD/LOR	Units	Method
Date of Receipt	08/12/2015							No.
MTBE#	<5					<5	ug/kg	TM31/PM12
Benzene #	12					<5	ug/kg	TM31/PM12
Toluene #	30					<5	ug/kg	TM31/PM12 TM31/PM12
Ethylbenzene # m/p-Xylene #	24					<5 <5	ug/kg	TM31/PM12
o-Xylene #	61 47					<5 <5	ug/kg ug/kg	TM31/PM12
O-Aylene	7/					-5	ug/kg	.10101/110112
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
2-Chlorophenol	~10					<10	ug/kg	TIVITO/FIVIO
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 4-Chloro-3-methylphenol	<10 <10					<10	ug/kg ug/kg	TM16/PM8 TM16/PM8
4-Methylphenol	<10					<10 <10	ug/kg 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

JE JOD NO.:	15/1/326									
J E Sample No.	148-150									
Sample ID	WS212									
Depth	1.00									
COC No / misc									e attached n ations and a	
	V 1.T									
Containers	VJT									
Sample Date	07/12/2015									
Sample Type	Soil									
Batch Number	4									Method
Date of Receipt	08/12/2015							LOD/LOR	Units	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 >EC10-EC12	<5 45							<5 <5	ug/l	TM36/PM69 TM5/PM30
>EC10-EC12 >EC12-EC16	10							<5 <10	ug/l	TM5/PM30
>EC12-EC16 >EC16-EC21	30							<10	ug/l ug/l	TM5/PM30
>EC16-EC21 >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
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Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report: CEN 10:1 1 Batch

JE Job No.:	15/17326							
J E Sample No.	148-150							
Sample ID	WS212							
Depth	1.00					Please se	e attached n	otes for all
COC No / misc							ations and a	
Containers	VJT							
Sample Date	07/12/2015							
Sample Type	Soil					Ì		
Batch Number	4							Method
Date of Receipt	08/12/2015					LOD/LOR	Units	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						I	NONE/PM17
Dissolved Organic Carbon	6					<2	mg/l	TM60/PM0
рН	11.55					<0.01	pH units	TM73/PM0
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Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt

JE Job No.: Saran Burt 15/17326

SVOC Report : Solid

JE Job No.:	15/17326										
J E Sample No.	148-150										
Sample ID	WS212										
Depth	1.00								Please se	e attached n	otes for all
COC No / misc	1.00									ations and a	
Containers	VJT										•
Sample Date	07/12/2015										
Sample Type	Soil										
Batch Number	4										Method
Date of Receipt	08/12/2015								LOD/LOR	Units	No.
SVOC MS	06/12/2013										110.
Phenois											
	-10								-10		TM4C/DM0
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									<10		TM16/PM8
Pyrene *M	122155 _{AA}								<10	ug/kg	TM16/PM8
•	106556 _{AA}									ug/kg	TM16/PM8
Benzo(a)anthracene	35629 _{AA}								<10	ug/kg	
Chrysene	49125 _{AA}								<10	ug/kg	TM16/PM8 TM16/PM8
Benzo(bk)fluoranthene	70633 _{AA}								<10	ug/kg	TM16/PM8
Benzo(a)pyrene	37328 _{AA}								<10	ug/kg	· ·
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
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Client Name: Geotechnics

Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 SVOC Report : Solid

JE Job No.:	15/17326								
J E Sample No.	148-150								
Sample ID	WS212								
Sample ID	W 32 12								
Depth	1.00							e attached n	
COC No / misc							apprevi	ations and a	cronyms
Containers	VJT								
Sample Date	07/12/2015								
Sample Type	Soil								
Batch Number	4						LOD/LOR	Units	Method
Date of Receipt	08/12/2015						LODILOR	Office	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 ug/kg	TM16/PM8
4-Bromophenylphenylether **M	<10						<10	ug/kg ug/kg	TM16/PM8
4-Chloroaniline	<10						<10	ug/kg ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10						<10	ug/kg ug/kg	TM16/PM8
4-Chlorophenylphenylether 4-Nitroaniline	<10						<10	ug/kg ug/kg	TM16/PM8
4-Nitroaniine Azobenzene	<10						<10	ug/kg ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10						<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether Carbazole	<10						<10	ug/kg	TM16/PM8
	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
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Client Name: Geotechnics SVOC Report : CEN 10:1 1 Batch

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

JE Job No.:	15/17326							
J E Sample No.	148-150							
Sample ID	WS212							
Depth	1.00						e attached n	
COC No / misc						abbrevi	ations and a	cronyms
Containers	VJT							
Sample Date	07/12/2015							
Sample Type Batch Number	Soil 4							Method
Date of Receipt	08/12/2015					LOD/LOR	Units	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 TM16/PM30
2,4-Dichlorophenol 2,4-Dimethylphenol	<0.5 <1					<0.5 <1	ug/l 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 PAHs	<1					<1	ug/l	TM16/PM30
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 Fluoranthene	<0.5 1.2					<0.5 <0.5	ug/l	TM16/PM30 TM16/PM30
Pyrene	<0.5					<0.5	ug/l 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 TM16/PM30
Benzo(ghi)perylene Phthalates	<0.5					<0.5	ug/l	TIVITO/PIVISU
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 TM16/PM30
Dimethyl phthalate	<1					<1	ug/l	TM16/PM30
								}
								}
]
								-
								}

Client Name: Geotechnics SVOC Report : CEN 10:1 1 Batch

Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

JE Job No.:	15/17326								
J E Sample No.	148-150								
Sample ID	WS212								
Depth COC No / misc	1.00							e attached n	
Containers	VJT								
Sample Date	07/12/2015								
Sample Type	Soil						ı		
Batch Number Date of Receipt	4 08/12/2015						LOD/LOR	Units	Method No.
SVOC MS	00/12/2013								
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 TM16/PM30
2-Nitroaniline 2,4-Dinitrotoluene	<1 <0.5						<1 <0.5	ug/l 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 Azobenzene	<0.5 <0.5						<0.5	ug/l	TM16/PM30 TM16/PM30
Bis(2-chloroethoxy)methane	<0.5 <0.5						<0.5 <0.5	ug/l 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 Hexachloroethane	<1 <1						<1 <1	ug/l	TM16/PM30 TM16/PM30
Isophorone	<0.5						<0.5	ug/l ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5						<0.5	ug/l	TM16/PM30
Nitrobenzene	<1						<1	ug/l	TM16/PM30
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Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt

JE Job No.: Saran Burt 15/17326

VOC Report : Solid

JE Job No.:	15/17326							
J E Sample No.	148-150							
Sample ID	WS212							
Depth	1.00					Please se	e attached n	otes for all
COC No / misc							ations and a	
Containers	VJT							
Sample Date	07/12/2015							
Sample Type	Soil							
Batch Number	4					LOD/LOR	Units	Method
Date of Receipt	08/12/2015							No.
VOC MS Dichlorodifluoromethane	<2					<2	ua/ka	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6					<6	ug/kg 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 TM15/PM10
trans-1-2-Dichloroethene # 1,1-Dichloroethane #M	<3 <6					<3 <6	ug/kg ug/kg	TM15/PM10 TM15/PM10
cis-1-2-Dichloroethene ***	<0 <7					<0 <7	ug/kg 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					<5 <5	ug/kg ug/kg	TM15/PM10 TM15/PM10
Trichloroethene (TCE) *** 1,2-Dichloropropane ***	<4					<4	ug/kg 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 TM15/PM10
Tetrachloroethene (PCE) # 1,3-Dichloropropane #M	<3 <4					<3 <4	ug/kg 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 <3					<4 <3	ug/kg	TM15/PM10 TM15/PM10
Styrene Bromoform	<4					<4	ug/kg 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 * 4-Chlorotoluene	21 <3					<3 <3	ug/kg ug/kg	TM15/PM10 TM15/PM10
4-Cniorotoluene tert-Butylbenzene #	<3 <5					<3 <5	ug/kg 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 ***	<4 <4					<4 <4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane # 1,2,4-Trichlorobenzene #	<4 <7					<7	ug/kg ug/kg	TM15/PM10
Hexachlorobutadiene	<4					<4	ug/kg 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 VOC Report : CEN 10:11 Batch

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

J E Sample No. WS212 Sample ID Please see attached notes for all Depth 1.00 COC No / misc abbreviations and acronyms Containers VJT Sample Date 07/12/2015 Batch Number Method LOD/LOR Units 08/12/2015 Date of Receipt VOC MS TM15/PM6 Dichlorodifluoromethane ug/l TM15/PM69 Methyl Tertiary Butyl Ether <1 <1 ug/l TM15/PM6 Chloromethane <3 <3 ug/l Vinyl Chloride <0.1 <0.1 TM15/PM69 ug/l TM15/PM69 Bromomethane <1 <1 ug/l TM15/PM69 Chloroethane <3 <3 ug/l Trichlorofluoromethane <3 <3 ug/l TM15/PM69 TM15/PM6 1,1-Dichloroethene (1,1 DCE) <3 <3 ug/l TM15/PM69 Dichloromethane (DCM) <3 <3 ug/l trans-1-2-Dichloroethene <3 <3 ug/l TM15/PM69 <3 <3 TM15/PM69 ug/l TM15/PM69 cis-1-2-Dichloroethene <3 <3 ug/l 2.2-Dichloropropane <1 <1 ug/l TM15/PM69 Bromochloromethane <2 <2 TM15/PM69 ug/l Chloroform <2 <2 TM15/PM69 ua/l <2 TM15/PM69 1 1 1-Trichloroethane <2 ug/l 1,1-Dichloropropene <3 <3 ug/l TM15/PM69 <2 <2 TM15/PM69 Carbon tetrachloride ug/l <2 TM15/PM69 1.2-Dichloroethane <2 ug/l Benzene <1 <1 ug/l TM15/PM69 Trichloroethene (TCE) <3 <3 TM15/PM69 ug/l <2 <2 TM15/PM69 1.2-Dichloropropane ua/l TM15/PM69 Dibromomethane <3 <3 ug/l Bromodichloromethane <2 <2 TM15/PM69 ug/l <2 <2 TM15/PM6 cis-1-3-Dichloropropene ug/l Toluene <2 TM15/PM69 <2 ug/l trans-1-3-Dichloropropene <2 <2 ug/l TM15/PM69 1.1.2-Trichloroethane <2 <2 TM15/PM69 ug/l TM15/PM69 Tetrachloroethene (PCE) <3 <3 ug/l 1.3-Dichloropropane <2 <2 ug/l TM15/PM69 Dibromochloromethane <2 <2 TM15/PM69 ug/l TM15/PM69 1,2-Dibromoethane <2 <2 ug/l <2 TM15/PM69 Chlorobenzene <2 ug/l 1,1,1,2-Tetrachloroethane <2 <2 ug/l TM15/PM69 <2 <2 TM15/PM69 Ethylbenzene ug/l <3 TM15/PM69 n/m-Xvlene <3 ug/l TM15/PM69 o-Xylene <2 <2 ug/l Styrene <2 <2 TM15/PM69 ug/l TM15/PM69 Bromoform <2 <2 ug/l TM15/PM69 Isopropylbenzene <3 <3 ug/l 1,1,2,2-Tetrachloroethane <4 <4 ug/l TM15/PM69 <2 TM15/PM69 Bromobenzene <2 ug/l TM15/PM69 1.2.3-Trichloropropane <3 <3 ug/l Propylbenzene <3 <3 ug/l TM15/PM69 <3 TM15/PM69 <3 ug/l TM15/PM69 1.3.5-Trimethylbenzene <3 <3 ug/l 4-Chlorotoluene <3 <3 ug/l TM15/PM69 tert-Butylbenzene <3 <3 TM15/PM69 ug/l TM15/PM69 1,2,4-Trimethylbenzene <3 <3 ua/l <3 TM15/PM69 sec-Butvlbenzene <3 ug/l 4-Isopropyltoluene <3 <3 ug/l TM15/PM69 1,3-Dichlorobenzene <3 <3 ug/l TM15/PM69 <3 TM15/PM69 1.4-Dichlorobenzene <3 ug/l TM15/PM69 n-Butylbenzene <3 <3 ug/l 1,2-Dichlorobenzene <3 <3 TM15/PM69 ug/l 1,2-Dibromo-3-chloropropane <2 <2 TM15/PM69 ua/l TM15/PM69 1,2,4-Trichlorobenzene <3 <3 ug/l Hexachlorobutadiene <3 <3 ug/l TM15/PM69 42 <2 TM15/PM69 Naphthalene ug/l TM15/PM69 1.2.3-Trichlorobenzene <3 <3 ug/l Surrogate Recovery Toluene D8 91 <0 TM15/PM69 TM15/PM6

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 HCI (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).
DR Dilution required. M MCERTS accredited. NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
M MCERTS accredited. NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
NA Not applicable NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
NAD No Asbestos Detected. ND None Detected (usually refers to VOC and/SVOC TICs).
ND None Detected (usually refers to VOC and/SVOC TICs).
NDD No Determination Provides
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

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

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

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
ТМ30	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

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	



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

Geotechnics
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Borders Industrial Park
River Lane
Chester
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Attention : Sarah Burt

Date: 21st December, 2015

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 5

Location : Stockport Bus Station

Date samples received: 9th December, 2015

Status: Final report

Issue:

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

JE Job No.:	15/17326							_		
J E Sample No.	169-171	175-177	181-183							
Sample ID	WS214	WS211	WS211							
Depth	0.50	0.20	1.00						e attached n	
COC No / misc								abbrevi	ations and a	cronyms
Containers	VJT	VJT	VJT							
Sample Date	08/12/2015	08/12/2015	08/12/2015							
Sample Type	Soil	Soil	Soil							
Batch Number	5	5	5							
								LOD/LOR	Units	Method No.
Date of Receipt		09/12/2015								
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 TM30/PM15
Chromium *** Copper ***	39.4 79	39.1 114	40.5 37					<0.5 <1	mg/kg	TM30/PM15
Lead *M	131	42	81					<5	mg/kg 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 2.99					<0.04	mg/kg	TM4/PM8 TM4/PM8
Fluoranthene **M Pyrene **	-	-	2.99					<0.03 <0.03	mg/kg mg/kg	TM4/PM8
Benzo(a)anthracene #	-	_	1.38					<0.05	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 ***	<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
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Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326							_		
J E Sample No.	169-171	175-177	181-183]		
Sample ID	WS214	WS211	WS211							
Depth	0.50	0.20	1.00					Diagona	a attached n	aton for all
COC No / misc									e attached r ations and a	
Containers	VJT	VJT	VJT							
Sample Date										
-										
Sample Type	Soil	Soil	Soil							
Batch Number	5	5	5					LOD/LOR	Units	Method No.
Date of Receipt	09/12/2015	09/12/2015	09/12/2015							NO.
TPH CWG										
Aliphatics >C5-C6 ***	<0.1	<0.1	<0.1					<0.1	malka	TM36/PM12
>C5-C6 >C6-C8 **M	<0.1	<0.1	<0.1					<0.1	mg/kg 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	.0.4	-0.4	-0.4					.0.4		Th 400/Dh 440
>C5-EC7 >EC7-EC8	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1					<0.1 <0.1	mg/kg mg/kg	TM36/PM12 TM36/PM12
>EC8-EC10 ***	<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	l				<10	ug/kg	TM16/PM8

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

J E Sample No.	169-171	175-177	181-183						
Sample ID	WS214	WS211	WS211						
Depth	0.50	0.20	1.00				Please se	e attached n	otes for all
COC No / misc								ations and ad	
Containers	VJT	VJT	VJT						
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				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
·	701	7.2							
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

JE Job No.:	15/17326								
J E Sample No.	169-171	175-177							
Sample ID	WS214	WS211							
Depth	0.50	0.20					Diagon on	e attached n	otoo for all
COC No / misc								e attached h ations and a	
Containers	VJT	VJT							
Sample Date									
Sample Type	Soil	Soil							
Batch Number	5	5					LOD/LOR	Units	Method
Date of Receipt	09/12/2015	09/12/2015							No.
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 <1	<5 <1					<5 <1	ug/l	TM30/PM14 TM30/PM14
Dissolved Mercury [#] Dissolved Nickel [#]	<2	<2					<2	ug/l 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 <5					<5 <5	-	TM36/PM69
>EC8-EC10	<5 <5	<5 <5					<5 <5	ug/l 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

JE Job No.:	15/17326											
J E Sample No.	169-171	175-177										
Sample ID	WS214	WS211										
Depth	0.50	0.20								Diagon	e attached n	-4 fII
COC No / misc											ations and a	
Containers	VJT	VJT										
Sample Date	08/12/2015	08/12/2015										
Sample Type	Soil	Soil										
Batch Number	5	5										
Date of Receipt										LOD/LOR	Units	Method No.
PCB 28	<0.1	<0.1								<0.1	//	TM17/PM30
PCB 52	<0.1	<0.1								<0.1	ug/l ug/l	TM17/PM30
PCB 32	<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 2,4,5-Trichlorophenol	<0.5 <0.5	<10.0 _{AC}								<0.5 <0.5	ug/l	TM16/PM30 TM16/PM30
2,4,6-Trichlorophenol	<0.5	<10.0 _{AC}								<0.5	ug/l 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
рН	8.51	8.45								<0.01	pH units	TM73/PM0
	1	1	1	1		1	1	1	1	1	1	1

Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 SVOC Report : Solid

JE Job No.:	15/17326								
J E Sample No.	169-171	175-177							
Sample ID	WS214	WS211							
Depth	0.50	0.20					Please se	e attached n	otes for all
COC No / misc								ations and a	
Containers	VJT	VJT							
Sample Date	08/12/2015	08/12/2015							
Sample Type	Soil	Soil							
Batch Number	5	5					LOD/LOR	Units	Method
Date of Receipt	09/12/2015	09/12/2015							No.
SVOC MS Phenols									
2-Chlorophenol #M	<50 _{AA}	<100 _{AB}					<10	ug/kg	TM16/PM8
2-Methylphenol	<50 _{AA}	<100AB					<10	ug/kg 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	450	4400					-40		TM40/DM2
2-Chloronaphthalene **M 2-Methylnaphthalene **M	<50 _{AA}	<100 _{AB}					<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
Naphthalene	5203 _{AA}	10101AB					<10	ug/kg ug/kg	TM16/PM8
Acenaphthylene	1741 _{AA}	1247 _{AB}					<10	ug/kg 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 Dibenzo(ah)anthracene	13125 _{AA}	30102 _{AB}					<10	ug/kg	TM16/PM8 TM16/PM8
Benzo(ghi)perylene	6540 _{AA}	8891 _{AB} 32523 _{AB}					<10 <10	ug/kg ug/kg	TM16/PM8
Benzo(b)fluoranthene	15607 _{AA} 35675 _{AA}	82984 _{AB}					<10	ug/kg	TM16/PM8
Benzo(k)fluoranthene	13874 _{AA}	32272 _{AB}					<10	ug/kg	TM16/PM8
Phthalates		AB						-55	
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
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Geotechnics Client Name:

PN153428 Reference: Stockport Bus Station Location:

Sarah Burt

Contact: JE Job No.: 15/17326 SVOC Report : Solid

2,6-Dinitrotoluene	JE Job No.:	15/17326											
Please see attached notes for all abbreviations and acronyms	J E Sample No.	169-171	175-177										
Please see attached notes for all abbreviations and acronyms													
Please see attached notes for all abbreviations and acronyms	Sample ID	WCO14	W6211										
COC No / misc Containers V J T V J T Sample Date Soil Soi	Sample ID	WS214	W5211										
COC No / misc Containers V J T V J T Sample Date Soil Soi													
Containers V J T V J T Sample Date 081/12/2015	Depth	0.50	0.20										
Sample Type Sample Type Soil	COC No / misc										abbrevia	ations and a	cronyms
Sample Type Batch Number 5 5	Containers	VJT	VJT										
Batch Number Date of Receipt 09/12/2015 09/12/20	Sample Date	08/12/2015	08/12/2015										
Batch Number Date of Receipt 09/12/2015 09/12/20	Sample Type	Soil	Soil										
Date of Receipt 09/12/2015													Method
SYOC MS											LOD/LOR	Units	
Other SVOCs Collaboration (100 mode) Collaboration (100													
1,2-Dichlorobenzene													
1,2,4-Trichlorobenzene M		-E0	~100								~10	ualka	TM46/DM0
1.3-Dichlorobenzene													
1,4-Dichlorobenzene													
2-Nitroaniline													
2,4-Dinitrotoluene	·												
2,6-Dinitrotoluene													
3-Nitroaniline	2,4-Dinitrotoluene												TM16/PM8
4-Bromophenylphenylether **M	2,6-Dinitrotoluene										<10	ug/kg	TM16/PM8
4-Chloroaniline	3-Nitroaniline	<50 _{AA}	<100 _{AB}								<10	ug/kg	TM16/PM8
4-Chloroaniline	4-Bromophenylphenylether ***	<50 _{AA}	<100 _{AB}								<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	4-Chloroaniline										<10	ug/kg	TM16/PM8
4-Nitroanlline	4-Chlorophenylphenylether										<10		TM16/PM8
Azobenzene	4-Nitroaniline			ĺ									TM16/PM8
Sis(2-chloroethoxy)methane <50Aa <100AB	Azobenzene												TM16/PM8
Single S													1
Carbazole 3472Aa 6378AB													
Dibenzofuran M													
Hexachlorobenzene													
Hexachlorobutadiene			133/9 _{AB}										
Hexachlorocyclopentadiene			<100 _{AB}										ł .
Hexachloroethane													
Sophorone	Hexachlorocyclopentadiene	<50 _{AA}	<100 _{AB}								<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine M	Hexachloroethane	<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	Isophorone #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	N-nitrosodi-n-propylamine #M	<50 _{AA}	<100 _{AB}								<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl 105 _{AA} 85 _{AB} <0 % TM16/PM8	Nitrobenzene #M										<10	ug/kg	TM16/PM8
	71 7	AA	AB										
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		1											
		1		1									
		1											
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Geotechnics Client Name: SVOC Report : CEN 10:1 1 Batch

PN153428 Reference: Stockport Bus Station Location:

Sarah Burt Contact:

Contact:	Sarah Bur	τ							
JE Job No.:	15/17326								
I E Comple No	169-171	175-177							
J E Sample No.	169-171	1/5-1//							
Sample ID	WS214	WS211							
•									
Depth	0.50	0.20						attached n	
COC No / misc							abbrevia	tions and a	cronyms
Containers	VJT	VJT							
Sample Date	08/12/2015	08/12/2015							
Sample Type	Soil	Soil							
Batch Number	5	5							Method
							LOD/LOR	Units	No.
Date of Receipt	09/12/2015	09/12/2015							INO.
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
	<10						<10		TM16/PM30
4-Nitrophenol		<200 _{AC}						ug/l	Į.
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						<1		TM16/PM30
		<20 _{AC}						ug/l	
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						<0.5	ug/l	TM16/PM30
		54.9 _{AC}							t e
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	<1.5						<1.5		TM16/PM30
		<20 _{AC}						ug/l	
Diethyl phthalate	<1	<20 _{AC}					<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<20 _{AC}					<1	ug/l	TM16/PM30

Client Name: Geotechnics SVOC Report : CEN 10:1 1 Batch

Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

JE Job No.:	15/17326										
J E Sample No.	169-171	175-177									
Sample ID	WS214	WS211									
Depth	0.50	0.20								e attached n	
COC No / misc									abbievia	alions and a	Cronyms
Containers	VJT	VJT									
Sample Date		08/12/2015									
Sample Type	Soil	Soil									
Batch Number	5	5							LOD/LOR	Units	Method No.
Date of Receipt	09/12/2015	09/12/2015									INU.
SVOC MS											
Other SVOCs											T1440/D1400
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 1,4-Dichlorobenzene	<1	<20 _{AC}							<1	ug/l	TM16/PM30 TM16/PM30
2-Nitroaniline	<1 <1	<20 _{AC}							<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<20 _{AC}							<1 <0.5	ug/l ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<10.0 _{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}	1						<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
			1								
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Geotechnics Client Name:

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact: JE Job No.: 15/17326

VOC Report : Solid

							ı		
J E Sample No.	169-171	175-177							
Sample ID	WS214	WS211							
Depth	0.50	0.20					Please se	e attached n	otes for all
COC No / misc							abbreviations and acronyr		
Containers	VJT	VJT							
Sample Date	08/12/2015	08/12/2015							
Sample Type Batch Number	Soil 5	Soil 5							Mathad
Date of Receipt		09/12/2015					LOD/LOR	Units	Method No.
VOC MS									
Dichlorodifluoromethane	<2	<2					<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether ***	<6	<6					<6	ug/kg	TM15/PM10
Chloromethane #	<3	<3					<3	ug/kg	TM15/PM10
Vinyl Chloride Bromomethane	<2 <1	<2 <1					<2 <1	ug/kg ug/kg	TM15/PM10 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 TM15/PM10
1,1-Dichloroethane #M cis-1-2-Dichloroethene #M	<6 <7	<6 <7					<6 <7	ug/kg ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4					<4	ug/kg 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 1,2-Dichloroethane **M	<4 <5	<4 <5					<4 <5	ug/kg ug/kg	TM15/PM10 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 *** cis-1-3-Dichloropropene	<4 <4	<4 <4					<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10
Toluene *M	<3	15					<3	ug/kg 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 *** 1.2-Dibromoethane **	<5 <3	<5 <3					<5 <3	ug/kg ug/kg	TM15/PM10 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} Styrene	7 <3	19 <3					<4 <3	ug/kg ug/kg	TM15/PM10 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 #M	<2	<2					<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane **M Propylbenzene **	<4 <4	<4 <4					<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10
2-Chlorotoluene	<3	<3					<3	ug/kg 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 * sec-Butylbenzene *	19 <4	47 <4					<6 <4	ug/kg	TM15/PM10 TM15/PM10
sec-Butylbenzene " 4-Isopropyltoluene #	<4 <4	10					<4 <4	ug/kg 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 # 1,2,4-Trichlorobenzene #	<4 <7	<4 <7					<4 <7	ug/kg	TM15/PM10 TM15/PM10
1,2,4-Trichlorobenzene " Hexachlorobutadiene	<4	<4					<4	ug/kg 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

Geotechnics Client Name: **VOC Report: CEN 10:1 1 Batch**

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact:

JE Job No.: 15/17326 J E Sample No. 175-177 WS214 WS211 Sample ID Depth 0.50 0.20 Please see attached notes for all COC No / misc abbreviations and acronyms VJT VJT Containers Sample Date 08/12/2015 08/12/2014 Soil Batch Number Method 5 LOD/LOR Units 09/12/2015 09/12/2015 Date of Receipt VOC MS TM15/PM6 Dichlorodifluoromethane ug/l TM15/PM69 Methyl Tertiary Butyl Ether <1 <1 <1 ug/l Chloromethane <3 <3 <3 ug/l TM15/PM6 Vinyl Chloride <0.1 <0.1 <0.1 TM15/PM69 ug/l TM15/PM69 Bromomethane <1 <1 <1 ug/l TM15/PM69 Chloroethane <3 <3 <3 ug/l Trichlorofluoromethane <3 <3 <3 ug/l TM15/PM69 TM15/PM6 1,1-Dichloroethene (1,1 DCE) <3 <3 <3 ug/l TM15/PM69 Dichloromethane (DCM) <3 <3 <3 ug/l trans-1-2-Dichloroethene <3 <3 <3 ug/l TM15/PM69 <3 <3 <3 TM15/PM69 ug/l TM15/PM69 cis-1-2-Dichloroethene <3 <3 <3 ug/l 2.2-Dichloropropane <1 <1 <1 ug/l TM15/PM69 Bromochloromethane <2 <2 <2 TM15/PM69 ug/l Chloroform <2 <2 <2 TM15/PM69 ua/l <2 <2 TM15/PM69 1 1 1-Trichloroethane <2 ug/l 1,1-Dichloropropene <3 <3 <3 ug/l TM15/PM69 <2 <2 <2 TM15/PM69 Carbon tetrachloride ug/l TM15/PM69 <2 <2 1.2-Dichloroethane <2 ug/l Benzene <1 <1 <1 ug/l TM15/PM69 Trichloroethene (TCE) <3 <3 <3 TM15/PM69 ug/l <2 <2 <2 TM15/PM69 1.2-Dichloropropane ua/l TM15/PM69 Dibromomethane <3 <3 <3 ug/l Bromodichloromethane <2 <2 <2 TM15/PM69 ug/l <2 <2 <2 TM15/PM6 cis-1-3-Dichloropropene ug/l Toluene TM15/PM69 <2 <2 <2 ug/l trans-1-3-Dichloropropene <2 <2 <2 ug/l TM15/PM69 1.1.2-Trichloroethane <2 <2 <2 TM15/PM69 ug/l TM15/PM69 Tetrachloroethene (PCE) <3 <3 <3 ug/l 1.3-Dichloropropane <2 <2 <2 ug/l TM15/PM69 Dibromochloromethane <2 <2 <2 TM15/PM69 ug/l TM15/PM69 1,2-Dibromoethane <2 <2 <2 ug/l <2 TM15/PM69 Chlorobenzene <2 <2 ug/l 1,1,1,2-Tetrachloroethane <2 <2 <2 ug/l TM15/PM69 <2 <2 <2 TM15/PM69 Ethylbenzene ug/l TM15/PM69 <3 <3 n/m-Xvlene <3 ug/l TM15/PM69 o-Xylene <2 <2 <2 ug/l Styrene <2 <2 <2 TM15/PM69 ug/l Bromoform <2 <2 <2 TM15/PM69 ug/l TM15/PM69 Isopropylbenzene <3 <3 <3 ug/l 1,1,2,2-Tetrachloroethane <4 <4 <4 TM15/PM69 ug/l <2 <2 TM15/PM69 Bromobenzene <2 ug/l TM15/PM69 1.2.3-Trichloropropane <3 <3 <3 ug/l Propylbenzene <3 <3 <3 ug/l TM15/PM69 <3 <3 TM15/PM69 <3 ug/l TM15/PM69 1.3.5-Trimethylbenzene <3 <3 <3 ug/l 4-Chlorotoluene <3 <3 <3 ug/l TM15/PM69 tert-Butylbenzene <3 <3 <3 TM15/PM69 ug/l TM15/PM69 1,2,4-Trimethylbenzene <3 <3 <3 ua/l <3 <3 TM15/PM69 sec-Butvlbenzene <3 ug/l 4-Isopropyltoluene <3 <3 <3 ug/l TM15/PM69 1,3-Dichlorobenzene <3 <3 <3 ug/l TM15/PM69 TM15/PM69 <3 <3

1.4-Dichlorobenzene

1,2-Dichlorobenzene

1,2,4-Trichlorobenzene

Hexachlorobutadiene

1.2.3-Trichlorobenzene

1.2-Dibromo-3-chloropropane

Surrogate Recovery Toluene D8

<3

<3

<2

<3

<3

<2

<3

89

<3

<3

<2

<3

<3

19

<3

٩n

n-Butylbenzene

Naphthalene

TM15/PM69

TM15/PM69

TM15/PM69

TM15/PM69

TM15/PM69 TM15/PM69

TM15/PM69

TM15/PM69 TM15/PM6

<3

<3

<3

<2

<3

<3

<2

<3

<0

ug/l

ug/l

ug/l

ua/l

ug/l

ug/l

ug/l

ug/l

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 HCI (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.	
DR Dilution required. M MCERTS accredited. NA Not applicable NAD No Asbestos Detected.	
M MCERTS accredited. NA Not applicable NAD No Asbestos Detected.	
NA Not applicable NAD No Asbestos Detected.	
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	

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

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

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

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	



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

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

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





Attention : Sarah Burt

Date: 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:

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

J E Sample No.	184-186										
Sample ID	BH103										
Depth	0.35-0.55								Diogeo eo	e attached n	otos for all
COC No / misc										ations and a	
Containers	VJT										
Sample Date											
Sample Type	Soil										
Batch Number	5										
									LOD/LOR	Units	Method No.
Date of Receipt									.0.5		TM20/DM45
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
TRU OMO											
TPH CWG											
Aliphatics	-0.4								.0.4		TM36/PM12
>C5-C6 **M	<0.1								<0.1	mg/kg	
>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	l	l	1	I	I	1		<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

JE Job No.:	15/17326							
J E Sample No.	184-186							
Sample ID	BH103							
Depth	0.35-0.55							
	0.00 0.00						e attached n ations and a	
COC No / misc								
Containers	VJT							
Sample Date	08/12/2015							
Sample Type	Soil							
Batch Number	5							Method
Date of Receipt	09/12/2015					LOD/LOR	Units	No.
TPH CWG	00/12/2010							
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 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
							0 0	
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					<10 <10	ug/kg	TM16/PM8 TM16/PM8
Phenol Total Speciated Phenols MS	<10					<10	ug/kg	TM16/PM8
Total Opeciated Filelius MS	~10					~10	ug/kg	TIVITO/FIVIO
Hexavalent Chromium #	<0.3					<0.3	mg/kg	TM38/PM20
Chromium III	13.4					<0.5	mg/kg	NONE/NONE
							- 0	
Total Cyanide **M	<0.5					<0.5	mg/kg	TM89/PM45
Total Organia Contract#	0.40					<0.00	0/	TM21/PM24
Total Organic Carbon #	0.10					<0.02	%	1 WIZ 1/PW24

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report : Solid

02 008 NO.:	10/1/020	 	 	 	 			
J E Sample No.	184-186							
Sample ID	BH103							
Depth	0.35-0.55					Please se	e attached n	otes for all
COC No / misc						abbrevi	ations and ad	cronyms
Containers	VJT							
Sample Date	08/12/2015							
Sample Type	Soil						1	
Batch Number	5					LOD/LOR	Units	Method No.
Date of Receipt								
рН ^{#М}	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.

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

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

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

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

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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.

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

SURROGATES

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

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

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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

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M	MCERTS accredited.
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NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to a Jones Environmental approved laboratory.
AD	Samples are dried at 35°C ±5°C
СО	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

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

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
ТМ30	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
ТМ30	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

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



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

Geotechnics
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River Lane
Chester
Cheshire
CH4 8RJ

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







Attention : Sarah Burt

Date: 30th December, 2015

Your reference : PN153428

Our reference : Test Report 15/17326 Batch 6

Location : Stockport Bus Station

Date samples received: 11th December, 2015

Status: Final report

Issue:

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

Spirit Character

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326								
J E Sample No.	199-201	202-204							
Sample ID	BH105	BH105							
Depth	1.00	2.00							
COC No / misc		2.00						e attached nations and a	
Containers	VJT	VJT							
Sample Date	09/12/2015	09/12/2015							
Sample Type	Soil	Soil							
Batch Number	6	6					LOD#LOD	Lluite	Method
Date of Receipt	11/12/2015	11/12/2015					LOD/LOR	Units	No.
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
DALLMO									
PAH MS Naphthalene #M	<0.04	<0.04					<0.04	ma/ka	TM4/PM8
Acenaphthylene	<0.04	<0.04					<0.04	mg/kg 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 TM4/PM8
Benzo(b)fluoranthene Benzo(k)fluoranthene	<0.05 <0.02	<0.05 <0.02					<0.05 <0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	106	120					<0.02	mg/kg %	TM4/PM8
TAIT outlogate 70 Necovery	100	120						70	11014/1 1010
			1						

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326						_		
J E Sample No.	199-201	202-204							
Sample ID	BH105	BH105							
Depth	1.00	2.00							
COC No / misc								e attached n ations and a	
Containers	VIT	VJT							
	VJT								
Sample Date									
Sample Type	Soil	Soil							1
Batch Number	6	6					LOD/LOR	Units	Method
Date of Receipt	11/12/2015	11/12/2015							No.
TPH CWG									
Aliphatics									
>C5-C6 #M	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>C6-C8 **M >C8-C10	<0.1 <0.1	<0.1 <0.1					<0.1 <0.1	mg/kg mg/kg	TM36/PM12 TM36/PM12
>C10-C10 **M	<0.1	<0.1					<0.1	mg/kg	TM5/PM16
>C12-C16 ***	<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 >EC10-EC12	<0.1 <0.2	<0.1 <0.2					<0.1 <0.2	mg/kg mg/kg	TM36/PM12 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 TM31/PM12
Ethylbenzene # m/p-Xylene #	<5 <5	<5 <5					<5 <5	ug/kg ug/kg	TM31/PM12 TM31/PM12
o-Xylene #	<5 <5	<5 <5					<5 <5	ug/kg	TM31/PM12
0-Aylene							· ·	29.19	
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
	Light Brown	Medium Brown						None	PM13/PM0
Other Items	stones	mosty stones and water						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	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 HCI (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.
В	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
СО	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

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
ТМ5	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
ТМ5	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

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
ТМ30	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
ТМ30	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

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



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

Unit 3 Deeside Point

Zone 3

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Geotechnics
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Chester
Cheshire

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





Attention : Sarah Burt

CH4 8RJ

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:

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

Spirit Character

Project Manager

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326								
J E Sample No.	208-210	214-216							
Sample ID	WS205	WS205							
Depth	0.50	1.50					Please se	e attached n	notes for all
COC No / misc								ations and a	
Containers	VJT	VJT							
Sample Date	11/12/2015	11/12/2015							
Sample Type	Soil	Soil							
Batch Number	7	7							Method
Date of Receipt	12/12/2015	12/12/2015					LOD/LOR	Units	No.
Arsenic **M	1.0	2.3					<0.5	mg/kg	TM30/PM15
Cadmium #M	0.4	-					<0.1	mg/kg	TM30/PM15
Chromium *M	11.2	85.5					<0.5	mg/kg	TM30/PM15
Copper **M	3	10					<1	mg/kg	TM30/PM15
Lead *M	6	7					<5	mg/kg	TM30/PM15
Mercury *M	<0.1	<0.1					<0.1	mg/kg	TM30/PM15
Nickel *M	5.3	21.2					<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1					<1	mg/kg	TM30/PM15
Vanadium	4	26					<1	mg/kg	TM30/PM15
Water Soluble Boron ***	0.2	<0.1					<0.1	mg/kg	TM74/PM32
Zinc *M	19	46					<5	mg/kg	TM30/PM15
		-						3 3	
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 **	<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 PN153428 Reference:

Location: Stockport Bus Station Report: Solid

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

Contact: JE Job No.:	Sarah Bui 15/17326	rt	n			Solids: V=	60g VOC jai	-, J=250g gl	ass jar, T=p	lastic tub		
J E Sample No.	208-210	214-216										
Sample ID	WS205	WS205										
Depth	0.50	1.50								Please se	e attached n	otes for all
COC No / misc											ations and ad	
Containers	VJT	VJT										
Sample Date	11/12/2015	11/12/2015										
Sample Type	Soil	Soil										
Batch Number	7	7								1.00//.00	1 be the	Method
Date of Receipt	12/12/2015	12/12/2015								LOD/LOR	Units	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/PM1
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/PM1
Total aliphatics and aromatics(C5-44)	<52	<52								<52	mg/kg	TM5/TM36/PM16
			l	1	l		l			ı l	1	

MTBE#

Benzene#

Toluene #

Ethylbenzene#

m/p-Xylene #

o-Xylene #

PCB 28#

PCB 52#

PCB 101#

PCB 118#

PCB 138#

PCB 153#

PCB 180#

Total 7 PCBs#

2-Chlorophenol

2-Methylphenol

Natural Moisture Content

<5

<5

<5

<5

<5

<5

<10

7.5

<10

<5

<5

<5

<5

<5

<5

<5

<35

<10

3.0

<10

<5

<5

<5

<5

<5

<5

<5

<5

<5

<5

<5

<5

<5

<35

<10

<0.1

<10

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

%

ug/kg

TM31/PM12

TM31/PM12

TM31/PM12

TM31/PM12

TM31/PM12

TM31/PM12

TM17/PM8

TM17/PM8

TM17/PM8

TM17/PM8

TM17/PM8

TM17/PM8

TM17/PM8

TM17/PM8

TM16/PM8

PM4/PM0

TM16/PM8

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326								
J E Sample No.	208-210	214-216							
Sample ID	WS205	WS205							
Depth	0.50	1.50					Diagona		-t fII
COC No / misc								e attached n ations and a	
Containers	VJT	VJT							
Sample Date	11/12/2015	11/12/2015							
Sample Type	Soil	Soil							
Batch Number	7	7							Method
Date of Receipt	12/12/2015	12/12/2015					LOD/LOR	Units	No.
2-Nitrophenol	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10					<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10					<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10					<10	ug/kg	TM16/PM8
•									
4-Chloro-3-methylphenol	<10	<10					<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10					<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10					<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10					<10	ug/kg	TM16/PM8
Phenol	<10	<10					<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10					<10	ug/kg	TM16/PM8
Hexavalent Chromium #	-	<0.3					<0.3	mg/kg	TM38/PM20
Chromium III	-	85.5					<0.5	mg/kg	NONE/NONE
Total Cyanide #M	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	<0.02	0.15					<0.02	%	TM21/PM24
рН ^{#М}	10.43	9.14					<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand						None	PM13/PM0
Sample Colour	Light Grey							None	PM13/PM0
Other Items									PM13/PM0
Other items	stones	stones						None	PIVIT3/PIVIU

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report: CEN 10:1 1 Batch

JE Job No.:	15/17326								
J E Sample No.	208-210								
Sample ID	WS205								
Depth	0.50						Diagon on	e attached n	otoo for all
COC No / misc								e atlached h ations and a	
Containers	VJT								
Sample Date	11/12/2015								
Sample Type	Soil								
Batch Number	7						LOD/LOR	11-26-	Method
Date of Receipt	12/12/2015						LOD/LOR	Units	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
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Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report: CEN 10:1 1 Batch

JE Job No.:	15/17326								
J E Sample No.	208-210						Ì		
Sample ID	WS205								
Depth	0.50						5.		
COC No / misc								e attached nations and a	
Containers	VJT								
Sample Date	11/12/2015								
Sample Type	Soil								
Batch Number	7						1 00 # 00	11-14-	Method
Date of Receipt	12/12/2015						LOD/LOR	Units	No.
TPH CWG									
Aliphatics									
>C5-C6	<5						<5	ug/l	TM36/PM69
>C6-C8	<5						<5	ug/l	TM36/PM69
>C8-C10	<5						<5	ug/l	TM36/PM69
>C10-C12	<5						<5	ug/l	TM5/PM30
>C12-C16	<10						<10	ug/l	TM5/PM30
>C16-C21	<10						<10	ug/l	TM5/PM30
>C21-C35	<10						<10	ug/l	TM5/PM30
>C35-C44	<10						<10	ug/l	TM5/PM30
Total aliphatics C5-44	<10						<10	ug/l	TM5/TM36/PM30/PM69
Aromatics									TM20/DM400
>C5-EC7 >EC7-EC8	<5 <5	,					<5 <5	ug/l	TM36/PM69 TM36/PM69
>EC7-EC8 >EC8-EC10	<5 <5						<5 <5	ug/l ug/l	TM36/PM69
>EC10-EC12	<5						<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 Chlassahanal	<0.5						-O.F		TM16/PM30
2-Chlorophenol 2-Methylphenol	<0.5						<0.5 <0.5	ug/l 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	<u> </u>					<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

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J E Sample No.	208-210										
Sample ID	WS205										
Depth	0.50								Please se	e attached n	otes for all
COC No / misc									abbrevi	ations and ad	ronyms
Containers	VJT										
Sample Date	11/12/2015										
Sample Type	Soil										
Batch Number	7								LOD/LOR	Units	Method
Date of Receipt											No.
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 NONE/PM17
Leachant Volume	0.896									I	NUNE/PM1/
Dissolved Organic Carbon	3								<2	mg/l	TM60/PM0
рН	10.99								<0.01	pH units	TM73/PM0
		L	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>			

Client Name: Geotechnics

Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 SVOC Report : Solid

JE Job No.:	15/17326							
J E Sample No.	208-210							
Sample ID	WS205							
Depth	0.50					Please se	e attached n	otes for all
COC No / misc	0.00						ations and a	
Containers	VJT							
Sample Date	11/12/2015							
Sample Type	Soil							
Batch Number	7							Method
Date of Receipt	12/12/2015					LOD/LOR	Units	No.
SVOC MS	12/12/2013							
Phenois								
2-Chlorophenol #M	<10					<10	ug/kg	TM16/PM8
2-Methylphenol	<10					<10	ug/kg ug/kg	TM16/PM8
2-Nitrophenol	<10					<10	ug/kg ug/kg	TM16/PM8
· ·	<10							TM16/PM8
2,4-Dichlorophenol ***						<10	ug/kg	l .
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								ļ
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 ug/kg	TM16/PM8
Hexachlorobenzene	<10					<10	ug/kg ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10					<10	ug/kg ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10					<10	ug/kg ug/kg	TM16/PM8
Hexachloroethane	<10					<10	ug/kg ug/kg	TM16/PM8
	<10							TM16/PM8
Isophorone #M	<10 <10					<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M						<10	ug/kg	
Nitrobenzene #M	<10					<10	ug/kg	TM16/PM8
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Geotechnics Client Name: SVOC Report : CEN 10:1 1 Batch

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact:

Contact:	Sarah Bur	ι								
JE Job No.:	15/17326									
J E Sample No.	208-210									
J E Sample NO.	200-210									
Sample ID	WS205									
Depth	0.50								e attached n	
COC No / misc								abbrevia	ations and a	cronyms
Containers	VJT									
Sample Date	11/12/2015									
Sample Type	Soil									
Batch Number	7							LOD/LOR	Units	Method
Date of Receipt	12/12/2015							LOD/LOR	Offics	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									~g,	
2-Chloronaphthalene	<1							<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1							<1	ug/l	TM16/PM30
Phthalates	` '							` '	ugn	TWTO/FW30
Bis(2-ethylhexyl) phthalate	<5							<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1							<1		TM16/PM30
	<1.5								ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5							<1.5 <1	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1								ug/l	TM16/PM30
Diethyl phthalate								<1	ug/l	
Dimethyl phthalate	<1							<1	ug/l	TM16/PM30
Other SVOCs										TM4C/DM20
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
	1		1	1	 	 	·	<u>. </u>		

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					l		
J E Sample No.	200-210							
Sample ID	WS205							
Depth	0.50					Please se	e attached n	ntes for all
COC No / misc							ations and a	
Containers	VJT							
Sample Date	11/12/2015							
Sample Type	Soil							1
Batch Number Date of Receipt	7 12/12/2015					LOD/LOR	Units	Method No.
VOC MS	12/12/2015							110.
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 #M	<1					<1	ug/kg	TM15/PM10
Chloroethane #M	<6 <3					<6 <3	ug/kg ug/kg	TM15/PM10
Trichlorofluoromethane **M 1,1-Dichloroethene (1,1 DCE) **M	<6					<6	ug/kg 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 *** Chloroform ***	<4 <f< td=""><td></td><td></td><td></td><td></td><td><4 <5</td><td>ug/kg</td><td>TM15/PM10</td></f<>					<4 <5	ug/kg	TM15/PM10
Chloroform "" 1,1,1-Trichloroethane #M	<5 <5					<5 <5	ug/kg 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 Bromodichloromethane **M	<4 <4					<4 <4	ug/kg 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 *** 1,2-Dibromoethane **	<5 <3					<5 <3	ug/kg 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 Isopropylbenzene #	<4 <3					<4 <3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane **M	<3 <3					<3 <3	ug/kg 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 tert-Butylbenzene #	<3 <5					<3 <5	ug/kg ug/kg	TM15/PM10
tert-Butylbenzene 1,2,4-Trimethylbenzene#	<5 <6					<5 <6	ug/kg 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 # 1,2,4-Trichlorobenzene #	<4 <7					<4 <7	ug/kg ug/kg	TM15/PM10 TM15/PM10
Hexachlorobutadiene	<4					<4	ug/kg ug/kg	TM15/PM10
Naphthalene	<27					<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7					<7	ug/kg	TM15/PM1
Surrogate Recovery Toluene D8	114					<0	%	TM15/PM1
Surrogate Recovery 4-Bromofluorobenzene	139					<0	%	TM15/PM10

Geotechnics Client Name: VOC Report : CEN 10:1 1 Batch

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact:

JE Job No.:	15/17326							
J E Sample No.	208-210					Ī		
Sample ID	WS205							
Depth COC No / misc	0.50						e attached nations and a	
Containers	VJT						adono ana a	oronymo
Sample Date	11/12/2015					i		
Sample Type	Soil							
Batch Number	7					LOD/LOR	Units	Method
Date of Receipt	12/12/2015							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 TM15/PM69
1,1-Dichloroethene (1,1 DCE) Dichloromethane (DCM)	<3 <3					<3 <3	ug/l 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 1,1-Dichloropropene	<2 <3					<2 <3	ug/l ug/l	TM15/PM69 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 TM15/PM69
cis-1-3-Dichloropropene Toluene	<2 <2					<2 <2	ug/l 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 Chlorobenzene	<2 <2					<2 <2	ug/l	TM15/PM69 TM15/PM69
1,1,1,2-Tetrachloroethane	<2					<2	ug/l 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 TM15/PM69
Isopropylbenzene 1,1,2,2-Tetrachloroethane	<3 <4					<3 <4	ug/l ug/l	TM15/PM69 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 1,2,4-Trimethylbenzene	<3 <3					<3 <3	ug/l	TM15/PM69 TM15/PM69
sec-Butylbenzene	<3 <3					<3 <3	ug/l 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 1,2,4-Trichlorobenzene	<2 <3					<2 <3	ug/l	TM15/PM69 TM15/PM69
Hexachlorobutadiene	<3 <3					<3 <3	ug/l 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 HCI (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.
В	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
СО	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

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

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	

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
ТМ30	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
ТМ30	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
ТМ30	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

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

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	



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

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Attention : Sarah Burt

CH4 8RJ

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:

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

Spirit Character

Project Manager

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

									ı		
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			Please se	e attached n	otes for all
COC No / misc										ations and a	
Containers	VJT	VJT	VJT	VJT	VJT	VJT					
Sample Date		09/12/2015			09/12/2015						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil					
Batch Number	8	8	8	8	8	8			LOD/LOR	Units	Method No.
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015					NO.
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 TM30/PM15
Copper ^{#M} Lead ^{#M}	38 85	11 18	153 68	173 192	86 106	17 46			<1 <5	mg/kg 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 Phenanthrene **M	<0.04 0.38	<0.04 0.17	0.91	175.01 _{AC}	0.77 5.71	<0.04 0.05			<0.04 <0.03	mg/kg	TM4/PM8 TM4/PM8
Anthracene #	0.09	0.17	9.61 2.75	1260.46 _{AC} 363.51 _{AC}	1.66	<0.04			<0.03	mg/kg 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 PAH Surrogate % Recovery	0.10	0.05 102	4.38 103	224.45 _{AC}	1.50 114	<0.02 116			<0.02 <0	mg/kg %	TM4/PM8 TM4/PM8
1741 Gallogate 76 Recovery	100	102	100	TOOAC	114	110				,,,	1111-11110
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
					<u> </u>						

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report : Solid

									1		
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			Diversion		
COC No / misc										e attached nations and a	
Containers	VJT	VJT	VJT	VJT	VJT	VJT					
Sample Date	09/12/2015	09/12/2015	09/12/2015	09/12/2015	09/12/2015	10/12/2015					
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil					
Batch Number	8	8	8	8	8	8					
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015			LOD/LOR	Units	Method No.
	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013					
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 Total aromatics C5-44	1019 2045	<7 <26	106 1630	543 9526	40 630	<7 31			<7 <26	mg/kg	TM5/PM16 TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	2893	<52	1677	9979	630	93			<52	mg/kg mg/kg	TM5/TM36/PM16
rotal aliphatics and aromatics(co 11)	2000	102	1077	3313	030	33			132	ilig/kg	THO THICK INTO
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
Note and Mark to Co.	40.5	40.5		40.5	<i>z</i> = -					24	DM
Natural Moisture Content	13.1	12.2	14.8	13.6	17.1	3.5			<0.1	%	PM4/PM0
2-Methylphenol	<50	<10	/50	<100	159	<10			<10	ua/ka	TM16/PM8
2-Nitrophenol	<50 _{AA}	<10	<50 _{AA}	<100 _{AB}	<10	<10			<10	ug/kg 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

0E 00D 110	10/1/020						 	 			
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			Please se	e attached n	otes for all
COC No / misc										ations and ac	
Containers	VJT	VJT	VJT	VJT	VJT	VJT					
Sample Date											
Sample Type		Soil	Soil	Soil	Soil	Soil					
Batch Number	8	8	8	8		8					
					8				LOD/LOR	Units	Method No.
Date of Receipt					12/12/2015				-10		TM4C/DM0
4-Nitrophenol Pentachlorophenol	<50 _{AA}	<10 <10	<50 _{AA}	<100 _{AB}	<10 <10	<10 <10			<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
Phenol	<50 _{AA}	<10	<50 _{AA}	<100AB	<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
. Star Oyamae	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0			-0.0	9/1/9	
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	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

JE Job No.:	15/17326										
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					Please se	e attached n	ntes for all
COC No / misc										ations and a	
Containers	VJT	VJT	VJT	VJT							
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					LOD/LOR	Units	Method
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015					LOD/LOR	Offics	No.
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
ndeno(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
o/m-Xylene	<3	<3	<3	<3					<3	ug/l	TM15/PM69
p-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
	1		1	1	1		1				

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report: CEN 10:1 1 Batch

JE JOD NO.:	15/1/326				 			-		
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						
	0.20	0.20	1.00	1.00					e attached nations and a	
COC No / misc										
Containers	VJT	VJT	VJT	VJT						
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				1.00/1.00	Units	Method
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015				LOD/LOR	Units	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 >C35-C44	<10 <10	<10 <10	<10	<10 <10				<10 <10	ug/l	TM5/PM30
Total aliphatics C5-44	<10	<10	<10 <10	<10				<10	ug/l ug/l	TM5/PM30 TM5/TM36/PM30/PM69
Aromatics	~10	~10	~10	~10				~10	ug/i	THE THEORY WEST WEST
>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

Sample ID Depth COC No / misc Containers Sample Date Sample Type Batch Number	Soil 8	235-237 HP01 0.20 V J T 09/12/2015 Soil 8	250-252 ws210 1.00 V J T 09/12/2015 Soil	271-273 WS223 1.00 V J T				Planes		
Depth COC No / misc Containers Sample Date Sample Type Batch Number	0.20 V J T 9/12/2015 Soil 8	0.20 V J T 09/12/2015 Soil	1.00 V J T 09/12/2015	1.00 V J T				Places es		
COC No / misc Containers Sample Date Sample Type Batch Number	V J T 9/12/2015 Soil 8	V J T 09/12/2015 Soil	V J T 09/12/2015	VJT				Please se		
Containers Sample Date 09/ Sample Type Batch Number	9/12/2015 Soil 8	09/12/2015 Soil	09/12/2015							otes for all
Sample Date 09/ Sample Type Batch Number	9/12/2015 Soil 8	09/12/2015 Soil	09/12/2015						ations and ac	
Sample Type Batch Number	Soil 8	Soil		10/12/2015						
Batch Number	8		Soil							
		8		Soil						
5	2/12/2015	-	8	8						Method
Date of Receipt 12/		12/12/2015	12/12/2015	12/12/2015				LOD/LOR	Units	No.
Total Speciated Phenols MS	<6	<6	<6	<6				<6	ug/l	TM16/PM30
										l .
Total Cyanide #	<0.01	<0.01	<0.01	<0.01				<0.01	mg/l	TM89/PM0
Mass of raw test portion 0	0.0982	0.1056	0.11	0.0933					kg	NONE/PM17
Leachant Volume	0.891	0.884	0.88	0.897					I	NONE/PM17
Dissolved Chromium III (0.007	0.006	<0.006	0.043				<0.006	mc/l	NONE/NONE
Dissolved Chromium III Dissolved Organic Carbon	0.007 7	0.006 13	<0.006	0.013 5				<0.006 <2	mg/l mg/l	TM60/PM0
	<0.006	<0.006	<0.006	<0.006				<0.006	mg/l	TM38/PM0
рН	8.62	9.70	7.90	11.71				<0.01	pH units	TM73/PM0
										l

Geotechnics Client Name: SVOC Report : Solid

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact: 15/17326

JE Job No.:	15/17326										
J E Sample No.	226-228	229-231	235-237	244-246	250-252	271-273					
Sample ID	HP02	HP02	HP01	WS210	WS210	WS223					
		0.50			4.00	4.00					
Depth COC No / misc	0.20	0.50	0.20	0.20	1.00	1.00				e attached nations and a	
Containers	VJT	VJT	VJT	VJT	VJT	VJT					,
Sample Date	09/12/2015		09/12/2015		09/12/2015						
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil					
Batch Number	8	8	8	8	8	8			LOD/LOR	Units	Method
Date of Receipt	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015			LOD/LOIX	Office	No.
SVOC MS											
Phenois	-50	.40	.50	-400	-40	-40			-40		T1440/D140
2-Chlorophenol #M 2-Methylphenol	<50 _{AA}	<10 <10	<50 _{AA}	<100 _{AB}	<10 159	<10 <10			<10 <10	ug/kg	TM16/PM8 TM16/PM8
2-Nitrophenol	<50 _{AA}	<10	<50 _{AA}	<100 _{AB}	<10	<10			<10	ug/kg ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<50 _{AA}	<10	<50 _{AA}	<100AB	<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-Chloronaphthalene *M	3271 _{AA}	<10	411 _{AA}	121597 _{AB}	1828	<10			<10	ug/kg ug/kg	TM16/PM8
Phthalates	OZ7 TAA	-10	TITAA	121007 AB	1020	-10			-10	ugritg	TIVITO/T IVIO
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 *** 1,3-Dichlorobenzene	<50 _{AA}	<10 <10	<50 _{AA}	<100 _{AB}	<10 <10	<10 <10			<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
1,4-Dichlorobenzene	<50 _{AA}	<10	<50 _{AA}	<100AB	<10	<10			<10	ug/kg 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 ***	<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 Azobenzene	<50 _{AA}	<10 <10	<50 _{AA}	<100 _{AB}	<10 <10	<10 <10			<10 <10	ug/kg	TM16/PM8 TM16/PM8
Bis(2-chloroethoxy)methane	<50 _{AA}	<10	<50 _{AA}	<100 _{AB}	<10	<10			<10	ug/kg 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
	<u> </u>										

Client Name: Geotechnics SVOC Report : CEN 10:1 1 Batch

Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt
JE Job No.: 15/17326

JE Job No.:	15/17326									
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					e attached n	
COC No / misc								abbrevia	ations and a	cronyms
Containers	VJT	VJT	VJT	VJT						
Sample Date		09/12/2015								
Sample Type Batch Number	Soil 8	Soil 8	Soil 8	Soil 8						Method
Date of Receipt		12/12/2015	12/12/2015					LOD/LOR	Units	No.
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 <0.5	<1 <0.5	<1 <0.5	<1 <0.5				<1 <0.5	ug/l	TM16/PM30 TM16/PM30
2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	<1	<1	<1	<1				<1	ug/l 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 <1	<5	<5	<5 <1				<5	ug/l	TM16/PM30 TM16/PM30
Butylbenzyl phthalate Di-n-butyl phthalate	<1.5	<1 <1.5	<1 <1.5	<1.5				<1 <1.5	ug/l ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1.5	<1				<1.5	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									Ū	
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 2,6-Dinitrotoluene	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1				<0.5 <1	ug/l	TM16/PM30 TM16/PM30
3-Nitroaniline	<1	<1	<1	<1				<1	ug/l 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 Hexachlorobenzene	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1				<0.5 <1	ug/l ug/l	TM16/PM30 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

Geotechnics Client Name: VOC Report : Solid

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact: JE Job No.: 15/17326

JE Job No.:	15/17326										
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 COC No / misc	0.20	0.50	0.20	0.20	1.00	1.00				e attached r	
Containers	VJT	VJT	VJT	VJT	VJT	VJT					
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			LOD/LOR	Units	Method No.
VOC MS	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015	12/12/2015					INU.
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2			<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether **	<6	<6	<6	<6	<6	<6			<6	ug/kg	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3			<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2			<2	ug/kg	TM15/PM10
Bromomethane	<1	<1	<1	<1	<1	<1			<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6			<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3 <6	<3 <6	<3 <6	<3 <6	<3 <6	<3 <6			<3 <6	ug/kg	TM15/PM10 TM15/PM10
1,1-Dichloroethene (1,1 DCE) **M Dichloromethane (DCM) **	<7	<7	<7	<7	<7	<7			<7	ug/kg ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3			<3	ug/kg ug/kg	TM15/PM10
1,1-Dichloroethane **	<6	<6	<6	<6	<6	<6			<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7			<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5			<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M 1,1-Dichloropropene #	<5 <3	<5 <3	<5 <3	<5 <3	<5 <3	<5 <3			<5 <3	ug/kg	TM15/PM10 TM15/PM10
Carbon tetrachloride ***	<4	<4	<4	<4	<4	<4			<3 <4	ug/kg ug/kg	TM15/PM10
1,2-Dichloroethane **M	<5	<5	<5	<5	<5	<5			<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5			<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5			<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Toluene **M trans-1-3-Dichloropropene	<3 <3	<3 <3	5 <3	24 <3	13 <3	<3 <3			<3 <3	ug/kg ug/kg	TM15/PM10 TM15/PM10
1,1,2-Trichloroethane *M	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE)#	26	<3	113	22	157	<3			<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5			<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3			<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5 <3	<5 <3	<5 <3	<5 62	<5 <3	<5 <3			<5 <3	ug/kg	TM15/PM10 TM15/PM10
Ethylbenzene ^{#M} p/m-Xylene ^{#M}	<4	<4	<4	69	13	<4			<3 <4	ug/kg ug/kg	TM15/PM10
o-Xylene **M	<4	<4	<4	27	9	<4			<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3			<3	ug/kg	TM15/PM10
Bromoform	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	16	<3	<3			<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3			<3	ug/kg	TM15/PM10
Bromobenzene #M	<2	<2	<2	<2	<2	<2			<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane **M Propylbenzene *	<4 <4	<4 <4	<4 <4	<4 <4	<4 <4	<4 <4			<4 <4	ug/kg	TM15/PM10 TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3			<3	ug/kg ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	31	<3	<3			<3	ug/kg ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3			<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5			<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	38	11	<6			<6	ug/kg	TM15/PM10
sec-Butylbenzene#	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M 1,4-Dichlorobenzene #	<4 <4	<4 <4	<4 <4	<4 <4	<4 <4	<4 <4			<4 <4	ug/kg	TM15/PM10 TM15/PM10
n-Butylbenzene *	<4	<4	<4	<4	<4	<4			<4 <4	ug/kg ug/kg	TM15/PM10
1,2-Dichlorobenzene **M	<4	<4	<4	<4	<4	<4			<4	ug/kg ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7			<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4			<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	6844	951	<27			<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7			<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	112	111	103	83	101	113			<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	111	130	74	70	81	131			<0	%	TM15/PM10

Geotechnics Client Name: **VOC Report: CEN 10:1 1 Batch**

PN153428 Reference:

Stockport Bus Station Location:

Sarah Burt Contact: JE Job No.: 15/17326

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 Please see attached notes for all COC No / misc abbreviations and acronyms VJT VJT VJT Containers VJT Sample Date 09/12/2015 09/12/201 09/12/2015 10/12/2014 Batch Number Method 8 8 LOD/LOR Units 12/12/2015 12/12/2015 12/12/2015 12/12/2015 Date of Receipt VOC MS TM15/PM6 Dichlorodifluoromethane ug/l TM15/PM69 Methyl Tertiary Butyl Ether <1 <1 <1 <1 <1 ug/l Chloromethane <3 <3 <3 <3 <3 ug/l TM15/PM6 Vinyl Chloride <0.1 <0.1 <0.1 <0.1 <0.1 TM15/PM69 ug/l TM15/PM69 Bromomethane <1 <1 <1 <1 <1 ug/l TM15/PM69 Chloroethane <3 <3 <3 <3 <3 ug/l Trichlorofluoromethane <3 <3 <3 <3 <3 ug/l TM15/PM69 1,1-Dichloroethene (1,1 DCE) <3 <3 <3 <3 <3 TM15/PM6 ug/l TM15/PM69 Dichloromethane (DCM) <3 <3 <3 <3 <3 ug/l trans-1-2-Dichloroethene <3 <3 <3 <3 <3 ug/l TM15/PM69 <3 <3 <3 <3 <3 TM15/PM69 ug/l TM15/PM69 <3 <3 cis-1-2-Dichloroethene <3 <3 <3 ug/l 2.2-Dichloropropane <1 <1 <1 <1 <1 ug/l TM15/PM69 Bromochloromethane <2 <2 <2 <2 <2 TM15/PM69 ug/l Chloroform <2 <2 <2 <2 TM15/PM69 <2 ua/l <2 <2 <2 TM15/PM69 1 1 1-Trichloroethane <2 <2 ug/l 1,1-Dichloropropene <3 <3 <3 <3 <3 ug/l TM15/PM69 <2 <2 <2 TM15/PM69 Carbon tetrachloride <2 <2 ug/l TM15/PM69 <2 <2 <2 <2 1.2-Dichloroethane <2 ug/l Benzene <1 <1 <1 <1 <1 ug/l TM15/PM69 Trichloroethene (TCE) <3 <3 <3 <3 <3 TM15/PM69 ug/l <2 <2 <2 <2 TM15/PM69 1.2-Dichloropropane <2 ua/l TM15/PM69 Dibromomethane <3 <3 <3 <3 <3 ug/l Bromodichloromethane <2 <2 <2 <2 <2 TM15/PM69 ug/l <2 <2 TM15/PM6 cis-1-3-Dichloropropene <2 <2 <2 ug/l Toluene TM15/PM69 <2 <2 <2 <2 <2 ug/l trans-1-3-Dichloropropene <2 <2 <2 <2 <2 ug/l TM15/PM69 1.1.2-Trichloroethane <2 <2 <2 <2 <2 TM15/PM69 ug/l TM15/PM69 Tetrachloroethene (PCE) <3 <3 <3 <3 <3 ug/l 1,3-Dichloropropane <2 <2 <2 <2 <2 ug/l TM15/PM69 Dibromochloromethane <2 <2 <2 <2 <2 TM15/PM69 ug/l 1,2-Dibromoethane TM15/PM69 <2 <2 <2 <2 <2 ug/l <2 TM15/PM69 Chlorobenzene <2 <2 <2 <2 ug/l 1,1,1,2-Tetrachloroethane <2 <2 <2 <2 <2 ug/l TM15/PM69 <2 <2 <2 TM15/PM69 Ethylbenzene <2 <2 ug/l TM15/PM69 <3 <3 <3 <3 n/m-Xvlene <3 ug/l TM15/PM69 o-Xylene <2 <2 <2 <2 <2 ug/l <2 <2 <2 <2 <2 TM15/PM69 Styrene ug/l <2 <2 <2 <2 <2 TM15/PM69 Bromoform ug/l TM15/PM69 Isopropylbenzene <3 <3 <3 <3 <3 ug/l 1,1,2,2-Tetrachloroethane <4 <4 <4 <4 <4 TM15/PM69 ug/l <2 <2 TM15/PM69 Bromobenzene <2 <2 <2 ug/l TM15/PM69 1.2.3-Trichloropropane <3 <3 <3 <3 <3 ug/l Propylbenzene <3 <3 <3 <3 <3 ug/l TM15/PM69 <3 <3 <3 TM15/PM69 <3 <3 ug/l TM15/PM69 1.3.5-Trimethylbenzene <3 <3 <3 <3 <3 ug/l 4-Chlorotoluene <3 <3 <3 <3 <3 ug/l TM15/PM69 ert-Butylbenzene <3 <3 <3 <3 <3 TM15/PM69 ug/l 1,2,4-Trimethylbenzene <3 <3 <3 TM15/PM69 <3 <3 ua/l <3 <3 <3 <3 TM15/PM69 sec-Butvlbenzene <3 ug/l 4-Isopropyltoluene <3 <3 <3 <3 <3 ug/l TM15/PM69 1,3-Dichlorobenzene <3 <3 <3 <3 <3 TM15/PM69 ug/l TM15/PM69 <3 <3 <3 <3 1.4-Dichlorobenzene <3 ug/l TM15/PM69 n-Butylbenzene <3 <3 <3 <3 <3 ug/l 1,2-Dichlorobenzene <3 <3 <3 <3 TM15/PM69 <3 ug/l 1.2-Dibromo-3-chloropropane <2 <2 <2 <2 <2 TM15/PM69 ua/l TM15/PM69 1,2,4-Trichlorobenzene <3 <3 <3 <3 <3 ug/l Hexachlorobutadiene <3 <3 <3 <3 <3 ug/l TM15/PM69 Naphthalene <2 <2 <2 <2 <2 TM15/PM6 ug/l TM15/PM69 1.2.3-Trichlorobenzene <3 <3 <3 <3 <3 ug/l Surrogate Recovery Toluene D8 107 107 106 56 <0 TM15/PM69 TM15/PM6 107 56

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

JE				JE	Date Of		
Job No.	Batch	Sample ID	Depth	Sample No.	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

JE	Datab	Sample ID	Donáh	JE	Date Of	Analysis	Deputh
Job No.	Batch	Sample ID	Depth	Sample No.	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
						Asbestos Level	NAD
						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
						Asbestos Level	NAD
						Waste Limit	<0.1%
						l	

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 HCI (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.
В	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
СО	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
ТВ	Trip Blank Sample
OC	Outside Calibration Range
AA	x5 Dilution
AB	x10 Dilution
AC	x50 Dilution

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

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

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
ТМ30	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
ТМ30	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

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

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	



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

Geotechnics
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River Lane
Chester
Cheshire
CH4 8RJ

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







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:

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

JE Job No.:	15/17326					 		 			
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	1.00									e attached nations and a	
Containers	۸٦	۸٦	۸٦								
Sample Date	14/12/2015	14/12/2015	14/12/2015								
Sample Type	Soil	Soil	Soil								
Batch Number	9	9	9						1.00 // 00	11-26-	Method
Date of Receipt	15/12/2015	15/12/2015	15/12/2015						LOD/LOR	Units	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 ***	<1	<1	<1						<1	mg/kg	TM30/PM15
Vanadium #M	4	30	15						<1	mg/kg	TM30/PM15
Water Soluble Boron *** Zinc ***	0.2 17	0.1 207	<0.1 22						<0.1 <5	mg/kg	TM74/PM32 TM30/PM15
ZINC	17	207	22						75	mg/kg	TIVISU/PIVITS
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 TM4/PM8
Benzo(a)pyrene # Indeno(123cd)pyrene #M	<0.04 <0.04	<0.04 <0.04	0.43 0.22						<0.04 <0.04	mg/kg mg/kg	TM4/PM8
Dibenzo(ah)anthracene#	<0.04	<0.04	0.22						<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
		I	1	1	1		!	!			

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

J E Sample No.	289-291	292-294	313-315								
Sample ID	WS217	WS217	BH106								
Depth	1.00	1.30	1.10-1.20						Please se	e attached n	otes for all
COC No / misc										ations and a	
	V I	V 1	VJ								
Containers	VJ	٧J									
Sample Date	14/12/2015	14/12/2015	14/12/2015								
Sample Type	Soil	Soil	Soil								
Batch Number	9	9	9						100#00	11-24-	Method
Date of Receipt	15/12/2015	15/12/2015	15/12/2015						LOD/LOR	Units	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	<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 >EC35-EC44	86 <7	<7 <7	<7 <7						<7 <7	mg/kg	TM5/PM16 TM5/PM16
Total aromatics C5-44	86	<26	<26						<26	mg/kg mg/kg	TM5/TM36/PM16
Total aliphatics and aromatics(C5-44)	218	<52	<52						<52	mg/kg	TM5/TM36/PM16
,	2.0									99	
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 4-Chloro-3-methylphenol	<10 <10	<10 <10	<10 <10						<10 <10	ug/kg	TM16/PM8 TM16/PM8
4-Methylphenol	<10	<10	<10						<10	ug/kg	TM16/PM8
4-Metrylphenol 4-Nitrophenol	<10	<10	<10						<10	ug/kg ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10						<10	ug/kg ug/kg	TM16/PM8
	-10	-10	-10	<u>l</u>	l	<u>l</u>	<u>l</u>		-10	29/N9	10/1 1010

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report : Solid

								ı		
J E Sample No.	289-291	292-294	313-315							
Sample ID	WS217	WS217	BH106							
Depth	1.00	1.30	1.10-1.20					Please se	e attached n	otes for all
COC No / misc								abbrevi	ations and ad	cronyms
Containers	٧J	٧J	٧J							
Sample Date	14/12/2015	14/12/2015	14/12/2015							
Sample Type		Soil	Soil							
Batch Number	9	9	9							
Date of Receipt								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
Total Organic Calbuil	0.24	0.15	1.75					-0.02	/0	. 1412 1/1 14124
рН #М	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 HCI (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.
В	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
СО	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
ОС	Outside Calibration Range

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

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

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



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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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:

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

Spirit Character

Project Manager

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE Job No.:	15/17326		 	 	 	 						
J E Sample No.	334-336	340-342										
Sample ID	BH109	BH109										
Depth	1.00-1.20	3.00-3.20					Please see attached notes for a abbreviations and acronyms					
COC No / misc	1.00 1.20	0.00 0.20										
Containers	٧J	٧J										
Sample Date												
Sample Type	Soil	Soil										
Batch Number	10	10					LOD/LOR	Units	Method No.			
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 12.4	<0.1 20.8					<0.1	mg/kg	TM30/PM15			
Nickel ^{#M} Selenium ^{#M}	12.4	20.8 <1					<0.7	mg/kg	TM30/PM15 TM30/PM15			
Vanadium	21	22					<1 <1	mg/kg	TM30/PM15			
Water Soluble Boron ***	0.4	0.5					<0.1	mg/kg mg/kg	TM74/PM32			
Zinc *M	25	82					<5	mg/kg	TM30/PM15			
Ziilo	20	02					· ·	99	11110071 11110			
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 ***	<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

JE Job No.:	15/17326		 	 								
J E Sample No.	334-336	340-342										
Sample ID	BH109	BH109										
Depth	1.00-1.20	3.00-3.20					Please see attached notes for a abbreviations and acronyms					
COC No / misc												
Containers	VJ	٧J										
Sample Date	15/12/2015	15/12/2015										
Sample Type	Soil	Soil										
Batch Number	10	10							Madhad			
Date of Receipt							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	23	30					<7	mg/kg	TM5/PM16			
>C35-C44	<7 <26	<7 30					<7 <26	mg/kg	TM5/PM16 TM5/TM36/PM16			
Total aliphatics C5-44 Aromatics	<20	30					<20	mg/kg	TM5/TM36/PM16			
>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 -5	ug/kg	TM17/PM8			
PCB 180 # Total 7 PCBs#	<5 <35	-					<5 <35	ug/kg	TM17/PM8 TM17/PM8			
Total / POBS	\35	-					<35	ug/kg	TIVIT//PIVI8			
2-Chlorophenol	<10	<10					<10	ug/kg	TM16/PM8			
Natural Moisture Content	15.8	21.4					<0.1	%	PM4/PM0			
2-Methylphenol	<10	<10					<10	ug/kg	TM16/PM8			

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326

Report : Solid

JE JOB NO.:	15/1/326		 	 	 	 	_		
J E Sample No.	334-336	340-342					Ì		
Sample ID	BH109	BH109							
Depth	1.00-1.20	3.00-3.20					l		
COC No / misc	1.00 1.20	0.00 0.20						e attached n ations and a	
Containers	٧J	VJ							
Sample Date									
-									
Sample Type		Soil							
Batch Number	10	10					LOD/LOR	Units	Method No.
Date of Receipt									
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 4-Methylphenol	<10 <10	<10 <10					<10 <10	ug/kg	TM16/PM8 TM16/PM8
4-Nitrophenol	<10	<10					<10	ug/kg ug/kg	TM16/PM8
Pentachlorophenol	<10	<10					<10	ug/kg ug/kg	TM16/PM8
Phenol	<10	<10					<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10					<10	ug/kg	TM16/PM8
								- 3 3	
Total Cyanide #M	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.32	0.15					<0.02	%	TM21/PM24
pH ^{#M}	8.36	8.36					<0.01	pH units	TM73/PM11
Sample Type	Sand	Sand						None	PM13/PM0
Sample Colour	Red	Medium Brown						None	PM13/PM0
Other Items	stones	mostly stones						None	PM13/PM0

Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt

JE Job No.: 15/17326

SVOC Report : Solid

JE Job No.:	15/17326								
J E Sample No.	334-336								
Sample ID	BH109								
Depth	1.00-1.20						Please se	e attached n	otes for all
COC No / misc								ations and a	
Containers	٧J								
Sample Date	15/12/2015								
Sample Type	Soil								
Batch Number Date of Receipt	10 17/12/2015						LOD/LOR	Units	Method No.
SVOC MS	17/12/2015								110.
Phenois									
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 2,4,6-Trichlorophenol	<10 <10						<10 <10	ug/kg ug/kg	TM16/PM8 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 #M									Thucas
2-Chloronaphthalene **M 2-Methylnaphthalene **M	<10 22						<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
2-ivietriyinapritrialerie Phthalates	22						×10	ug/kg	TIVITO/PIVIO
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 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 4-Bromophenylphenylether ***	<10 <10						<10 <10	ug/kg	TM16/PM8 TM16/PM8
4-Chloroaniline	<10						<10	ug/kg 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 Dibenzofuran ^{#M}	28						<10	ug/kg	TM16/PM8
Dibenzofuran "" Hexachlorobenzene	31 <10						<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
Hexachlorobutadiene #M	<10						<10	ug/kg 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
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Geotechnics Client Name:

PN153428 Reference: Stockport Bus Station Location:

Sarah Burt

Contact: JE Job No.: 15/17326 VOC Report : Solid

JE Job No.:	15/17326									
J E Sample No.	334-336									
Sample ID	BH109									
Depth	1.00-1.20							Please se	e attached n	otes for all
COC No / misc									ations and a	
Containers	٧J									
Sample Date	15/12/2015									
Sample Type	Soil									
Batch Number	10							LOD/LOR	Units	Method No.
Date of Receipt VOC MS	17/12/2015									140.
Dichlorodifluoromethane	<2							<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether **	<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 1,1-Dichloroethene (1,1 DCE) **M	<3 <6							<3 <6	ug/kg ug/kg	TM15/PM10 TM15/PM10
Dichloromethane (DCM) #	<7							<7	ug/kg 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 1,1,1-Trichloroethane **M	<5 <5							<5 <5	ug/kg ug/kg	TM15/PM10 TM15/PM10
1,1-Dichloropropene #	<3							<3	ug/kg 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 cis-1-3-Dichloropropene	<4 <4							<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10
Toluene *M	<3							<3	ug/kg 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 # Chlorobenzene #M	<3 <4							<3 <4	ug/kg	TM15/PM10 TM15/PM10
1,1,1,2-Tetrachloroethane ***	<4 <5							<4 <5	ug/kg 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 Bromobenzene	<3 <2							<3 <2	ug/kg ug/kg	TM15/PM10 TM15/PM10
1,2,3-Trichloropropane ***	<4							<4	ug/kg 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 TM15/PM10
sec-Butylbenzene# 4-Isopropyltoluene#	<4 <4							<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10
1,3-Dichlorobenzene **M	<4							<4	ug/kg 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 TM15/PM10
Naphthalene 1,2,3-Trichlorobenzene#	<27 <7							<27 <7	ug/kg ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	114							<0	ug/kg %	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	117							<0	%	TM15/PM10
		1	<u> </u>	<u> </u>	<u> </u>			-0	70	1

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)
						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 HCI (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.
В	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
СО	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

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

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
ТМ30	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
ТМ30	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

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



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

Geotechnics
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Attention : Sarah Burt

CH4 8RJ

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:

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

Spirit Chianne

Please include all sections of this report if it is reproduced 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 Report : Solid

·	349-351 WS218A 0.50	355 WS218A							
Depth COC No / misc		WS218A							
COC No / misc	0.50								
COC No / misc	0.00	1.20							
		1.20						e attached n ations and a	
	٧J	V							
Sample Date	<>	<>							
Sample Type	Soil	Soil							
Batch Number	11	11					LOD/LOR	Units	Method
Date of Receipt 18	8/12/2015	18/12/2015					LOD/LOR	Office	No.
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

JE Job No.:	15/17326						_		
J E Sample No.	349-351	355							
Sample ID	WS218A	WS218A							
Depth	0.50	1.20					Diagon and	a attached n	atoo for all
COC No / misc								e attached nations and a	
Containers	VJ	V							
	<>								
Sample Date		<>							
Sample Type	Soil	Soil							т
Batch Number	11	11					LOD/LOR	Units	Method
Date of Receipt	18/12/2015	18/12/2015							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} >C12-C16 ^{#M}	<0.2 <4	<0.2 <4					<0.2 <4	mg/kg mg/kg	TM5/PM16 TM5/PM16
>C12-C16 **** >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 Total aliphatics and aromatics(C5-44)	<26	<26					<26	mg/kg	TM5/TM36/PM16 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 <5	ug/kg	TM17/PM8
PCB 101 #	<5 <5	-					<5 <5	ug/kg	TM17/PM8
PCB 118 # PCB 138 #	<5 <5	-					<5 <5	ug/kg ug/kg	TM17/PM8 TM17/PM8
PCB 153 #	<5	_					<5	ug/kg	TM17/PM8
PCB 180 #	<5	-					<5 <5	ug/kg	TM17/PM8
Total 7 PCBs#	<35	-					<35	ug/kg	TM17/PM8
								- 0	
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

02 00B NO.:	10/1/020		 	 	 	 			
J E Sample No.	349-351	355							
Sample ID	WS218A	WS218A							
Depth	0.50	1.20					Diogeo eo	e attached n	otos for all
COC No / misc								ations and ac	
Containers	۸٦	V							
Sample Date	<>	<>							
Sample Type	Soil	Soil							
Batch Number	11	11							Method
Date of Receipt	18/12/2015	18/12/2015					LOD/LOR	Units	No.
2-Nitrophenol	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10					<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10					<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10					<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10					<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10					<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10					<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10					<10	ug/kg	TM16/PM8
Phenol	<10	<10					<10	ug/kg	TM16/PM8
Total Speciated Phenols MS	<10	<10					<10	ug/kg	TM16/PM8
Total opeciated Theriois Mo	110	110					110	ug/kg	110110/1100
Hexavalent Chromium #	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Chromium III	17.6	55.9					<0.5	mg/kg	NONE/NONE
On On an in	17.0	00.0					-0.0	mgmg	
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
									·

Client Name: Geotechnics

Reference: PN153428
Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 SVOC Report : Solid

JE Job No.:	15/17326											
J E Sample No.	349-351											
Sample ID	WS218A											
Depth	0.50									Please se	e attached n	otes for all
COC No / misc											ations and a	
Containers	٧J											
Sample Date	<>											
Sample Type	Soil											_
Batch Number Date of Receipt	11 18/12/2015									LOD/LOR	Units	Method No.
SVOC MS	10/12/2013											110.
Phenois												
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 2,4,6-Trichlorophenol	<10 <10									<10 <10	ug/kg ug/kg	TM16/PM8 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 #M												Thucas
2-Chloronaphthalene **M 2-Methylnaphthalene **M	<10 <10									<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
2-Metnyinaphthalates Phthalates	<10									<10	ug/kg	TIVITO/PIVI8
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		TM16/PM8
1,2,4-Trichlorobenzene **M	<10									<10	ug/kg 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 TM16/PM8
4-Bromophenylphenylether *** 4-Chloroaniline	<10 <10									<10 <10	ug/kg ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10									<10	ug/kg 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} Hexachlorobenzene	<10 <10									<10	ug/kg	TM16/PM8 TM16/PM8
Hexachlorobutadiene **M	<10 <10									<10 <10	ug/kg ug/kg	TM16/PM8 TM16/PM8
Hexachlorocyclopentadiene	<10									<10	ug/kg 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
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Geotechnics Client Name:

PN153428 Reference: Stockport Bus Station Location:

Sarah Burt Contact:

JE Job No.: 15/17326 VOC Report : Solid

J E Sample No.											
·	349-351										
Sample ID	WS218A										
Depth	0.50					Please see attached notes for					
COC No / misc						abbreviations and acronyms					
Containers	VJ										
Sample Date	<>										
Sample Type	Soil							T			
Batch Number Date of Receipt 1	11 18/12/2015					LOD/LOR	Units	Method No.			
VOC MS	10/12/2010										
Dichlorodifluoromethane	<2					<2	ug/kg	TM15/PM10			
Methyl Tertiary Butyl Ether ***	<6					<6	ug/kg	TM15/PM10			
Chloromethane #	<3					<3	ug/kg	TM15/PM10			
Vinyl Chloride	<2					<2	ug/kg	TM15/PM10			
Bromomethane Chloroethane #M	<1 <6					<1 <6	ug/kg ug/kg	TM15/PM10 TM15/PM10			
Trichlorofluoromethane #M	<3					<3	ug/kg 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 TM15/PM10			
2,2-Dichloropropane Bromochloromethane #M	<4 <4					<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10			
Chloroform **M	<4 <5					<4 <5	ug/kg 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) *** 1,2-Dichloropropane ***	<5 <4					<5 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10			
Dibromomethane #M	<4					<4	ug/kg 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 TM15/PM10			
Tetrachloroethene (PCE) # 1,3-Dichloropropane #M	<3 <4					<3 <4	ug/kg 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 TM15/PM10			
p/m-Xylene ^{#M} o-Xylene ^{#M}	<4 <4					<4 <4	ug/kg 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 Propylbenzene *	<4 <4					<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10			
2-Chlorotoluene	<3					<3	ug/kg 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 TM15/PM10			
4-Isopropyltoluene # 1,3-Dichlorobenzene #M	<4 <4					<4 <4	ug/kg ug/kg	TM15/PM10 TM15/PM10			
1,4-Dichlorobenzene #	<4					<4	ug/kg 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 1,2,3-Trichlorobenzene #	<27 <7					<27 <7	ug/kg	TM15/PM10 TM15/PM10			
1,2,3-Trichlorobenzene Surrogate Recovery Toluene D8	114					<0	ug/kg %	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
						Asbestos Containing Material	None
						Asbestos Containing Material (2)	None
						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 HCI (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.
В	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
СО	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

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

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
ТМ30	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

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



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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

 Geotechnics
 Tel: +44 (0) 1244 833780

 Unit 1B
 Tel: +44 (0) 1244 833780

 Borders Industrial Park
 Fax: +44 (0) 1244 833781

 River Lane
 Fax: +44 (0) 1244 833781





Attention : Sarah Burt

Cheshire CH4 8RJ

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:

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

Spirit Chianne

1 of 9

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report : Solid

JE Job No.:	15/17326					_					
J E Sample No.	356										
Sample ID	WS223										
Depth	2.00					Please see attached notes for					
COC No / misc						abbreviations and acronyms					
Containers	Т										
Sample Date	<>										
Sample Type	Soil										
Batch Number	12					1.00/1.00	Lluita	Method			
Date of Receipt	04/01/2016					LOD/LOR	Units	No.			
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 ***	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 <0.04					<0.03 <0.04	mg/kg	TM4/PM8 TM4/PM8			
Anthracene # Fluoranthene #M	<0.04					<0.04	mg/kg 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 ***	<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 >C10-C12 **M	<0.1 <0.2					<0.1 <0.2	mg/kg	TM36/PM12 TM5/PM16			
>C10-C12""" >C12-C16 #M	<0.2 <4					<0.2	mg/kg	TM5/PM16			
>C12-C16 """ >C16-C21 #M	<4 <7					<4 <7	mg/kg mg/kg	TM5/PM16			
>C16-C21 >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

JE Job No.:	15/17326											
J E Sample No.	356											
Sample ID	WS223											
Depth	2.00											
•	2.00						Please see attached notes for abbreviations and acronyms					
COC No / misc									,			
Containers	T											
Sample Date	<>											
Sample Type	Soil											
Batch Number	12								NA - Ma - al			
Date of Receipt	04/01/2016						LOD/LOR	Units	Method No.			
TPH CWG	04/01/2010											
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 Cyaniue	-0.0						-0.0	mg/ng	714103/1 1VI43			
Total Organic Carbon #	4.96						<0.02	%	TM21/PM24			
5		1	1						1			

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station

Contact: Sarah Burt JE Job No.: 15/17326 Report : Solid

-			 	 	 		 ų.					
J E Sample No.	356											
Sample ID	WS223											
Depth	2.00						Please se	ntes for all				
COC No / misc							Please see attached notes for abbreviations and acronyms					
Containers	Т											
Sample Date	<>											
Sample Type	Soil											
Batch Number	12						LOD/LOR	Units	Method			
Date of Receipt									No.			
рН * М	8.15						<0.01	pH units	TM73/PM11			
	Clayey Loam							None	PM13/PM0			
Sample Colour	Dark Brown							None	PM13/PM0			
Other Items	roots, grass, stones							None	PM13/PM0			
	<u> </u>	<u> </u>			<u> </u>	<u> </u>						

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 HCI (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.
В	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
СО	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
ОС	Outside Calibration Range

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

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

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



Cheshire CH4 8RJ

Jones Environmental Laboratory

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

Unit 3 Deeside Point

Zone 3

Deeside Industrial Park

Deeside CH5 2UA

 Geotechnics
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 Unit 1B
 Tel: +44 (0) 1244 833780

 Borders Industrial Park
 Fax: +44 (0) 1244 833781

 River Lane
 Fax: +44 (0) 1244 833781





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:

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

Spirit Chianne

Project Manager

Client Name: Geotechnics Reference: PN153428

Location: Stockport Bus Station
Contact: Jon Hutchinson

JE Job No.: John Hutchinso

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle

H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

51-55	J E Sample No. 36-40 41-45	56-60	61-65	66-70	71-75				
BH105	Sample ID BH101 BH102	BH106	BH108	BH109	BH112				
	Depth						Diagon on	a attached n	otoo for all
	COC No / misc							e attached n ations and a	
) VDC		\/ D.C	VDC	VDC	VDC				
VPG	Containers VPG VPG	VPG	VPG	VPG	VPG				
26/01/2016	Sample Date 26/01/2016 26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016				
ater Ground Wate	Sample Type Ground Water Ground Water	Ground Water	Ground Water	Ground Water	Ground Water				
3	Batch Number 3 3	3	3	3	3		1 00 // 00	I I a Ma	Method
016 26/01/2016	Date of Receipt 26/01/2016 26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016		LOD/LOR	Units	No.
4.1	ic# <2.5 3.2	<2.5	3.2	<2.5	<2.5		<2.5	ug/l	TM30/PM14
61	73 57	62	16	19	40		<12	ug/l	TM30/PM14
<0.5	ium# <0.5 <0.5	<0.5	<0.5	<0.5	<0.5		<0.5	ug/l	TM30/PM14
<1.5	Chromium# <1.5 <1.5	<1.5	<1.5	<1.5	<1.5		<1.5	ug/l	TM30/PM14
<7	er# <7 <7	<7	<7	<7	<7		<7	ug/l	TM30/PM14
<5	<5 <5	<5	<5	<5	<5		<5	ug/l	TM30/PM14
<1	ry# <1 <1	<1	<1	<1	<1		<1	ug/l	TM30/PM14
6	# 8 <2	<2	<2	4	<2		<2	ug/l	TM30/PM14
<3	ium# <3 14	<3	<3	<3	<3		<3	ug/l	TM30/PM14
<1.5	fium [#] 1.8 <1.5	<1.5	<1.5	<1.5	<1.5		<1.5	ug/l	TM30/PM14
<3	5 15	<3	<3	<3	<3		<3	ug/l	TM30/PM14
<0.1	<0.1 <0.1	<0.1	<0.1	0.1	<0.1		<0.1	ug/l	TM4/PM30
3 <0.013	* <0.013 <0.013	<0.013	<0.013	<0.013	<0.013		<0.013	ug/l	TM4/PM30
3 <0.013	<0.013 <0.013	<0.013	<0.013	<0.013	<0.013		<0.013	ug/l	TM4/PM30
4 <0.014	<0.014 <0.014	<0.014	<0.014	<0.014	<0.014		<0.014	ug/l	TM4/PM30
1 <0.011	0.020 0.020	<0.011	<0.011	0.020	<0.011		<0.011	ug/l	TM4/PM30
3 <0.013 2 <0.012	<0.013 <0.013 <0.012 <0.012	<0.013 <0.012	<0.013 <0.012	<0.013 <0.012	<0.013 <0.012		<0.013 <0.012	ug/l ug/l	TM4/PM30 TM4/PM30
3 <0.013	<0.012 <0.012	<0.012	<0.012	0.040	<0.012		<0.012	ug/l	TM4/PM30
5 <0.015	cene # <0.015 <0.015	<0.015	<0.015	<0.015	<0.015		<0.015	ug/l	TM4/PM30
1 <0.011	<0.011 <0.011	<0.011	<0.011	<0.011	<0.011		<0.011	ug/l	TM4/PM30
8 <0.018	nthene# <0.018 <0.018	<0.018	<0.018	<0.018	<0.018		<0.018	ug/l	TM4/PM30
6 <0.016	# <0.016 <0.016	<0.016	<0.016	<0.016	<0.016		<0.016	ug/l	TM4/PM30
1 <0.011	/rene# <0.011 <0.011	<0.011	<0.011	<0.011	<0.011		<0.011	ug/l	TM4/PM30
<0.01	racene # <0.01 <0.01	<0.01	<0.01	<0.01	<0.01		<0.01	ug/l	TM4/PM30
1 <0.011	ene # <0.011 <0.011	<0.011	<0.011	<0.011	<0.011		<0.011	ug/l	TM4/PM30
5 <0.195	<0.195 <0.195	<0.195	<0.195	<0.195	<0.195		<0.195	ug/l	TM4/PM30
<0.01	thene <0.01 <0.01	<0.01	<0.01	<0.01	<0.01		<0.01	ug/l	TM4/PM30
<0.01	hene <0.01 <0.01	<0.01	<0.01	<0.01	<0.01		<0.01	ug/l	TM4/PM30
90	% Recovery 86 85	89	86	83	88		<0	%	TM4/PM30
<0.1	Sutyl Ether # <0.1 <0.1	<0.1	<0.1	<0.1	<0.1		<0.1	ug/l	TM15/PM10
<0.5	<0.5 <0.5	<0.5	<0.5	<0.5	<0.5		<0.5	ug/l	TM15/PM10
<0.5	<0.5 <0.5	<0.5	<0.5	2.2	<0.5		<0.5	ug/l	TM15/PM10
<0.5	<0.5 <0.5	<0.5	<0.5	<0.5	<0.5		<0.5	ug/l	TM15/PM10
<1	<1 <1	<1	<1	<1	<1		<1	ug/l	TM15/PM10
<0.5	<0.5 <0.5	<0.5	<0.5	<0.5	<0.5		<0.5	ug/l	TM15/PM10
97	ery Toluene D8 97 96	96	97	95	98		<0	%	TM15/PM10
115	Bromofluorobenzene 114 114	115	113	111	101		<0	%	TM15/PM10
0.5 <1 0.5 97 15	<pre><1 <1 <0.5 <0.5 ery Toluene D8 97 96</pre>	<1 <1 <1 0.5 <0.5 97 97	<1 <1 <1 <1 <1 <1 < 0.5 <0.5 <0.5 <0.5 97 96	c1 <1	c1 <1	c1 <1	c1 <1	c1 <1	c1 <1

Client Name: Geotechnics
Reference: PN153428

Reference: PN153428
Location: Stockport Bus Station
Contact: Ion Hutchinson

Contact: Jon Hutchinson Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle

Report : Liquid

JE Job No.: 16/3162 H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

JE JOD NO.:	16/3162						11-112304,	Z-ZIIAC, IN-	NaOH, HN=	111103	_		
J E Sample No.	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75					
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112					
Depth											-		
COC No / misc												e attached r ations and a	
	\/ D.O	VDO	V.D.O	V.D.O.	VDO	VDO	\/ D 0	VDO					
Containers	VPG												
Sample Date													
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
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			205,2011	O.I.I.O	No.
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 45	<5	<5 -5			<5	ug/l	TM36/PM12
>C10-C12#	<5	<5	<5	<5	<5	<5 <10	9 1280	<5 <10			<5	ug/l	TM5/PM30 TM5/PM30
>C12-C16# >C16-C21#	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	1280	<10 <10			<10 <10	ug/l ug/l	TM5/PM30
>C16-C21 >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												-3	
>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 PCB 180	<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	ug/l ug/l	TM17/PM30 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
Total 7 T GEG	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7			-0.7	ugn	TWITTH WICO
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 Total Speciated Phenols HPLC	<0.5 <5	<0.5 <5	<0.5 <5	<0.5 <5	<0.5 <5	<0.5 <5	<0.5 <5	<0.5 <5			<0.5 <5	ug/l ug/l	TM26/PM0 TM26/PM0
Total Opeciated Filefiols HPLC	~5	~5	~5	~0	~5	~5	-5	~5			-5	ug/i	I IVIZO/FIVIU
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

Client Name: Geotechnics
Reference: PN153428

Location: Stockport Bus Station

Contact: Jon Hutchinson

JE Job No.: 16/3162

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle

H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

JE Job No.:	16/3162						H=H ₂ SO ₄ ,	Z=ZnAc, N=	NaOH, HN=	HNU ₃	-		
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 se	e attached n	notes for all
COC No / misc												ations and a	
Containers	VPG	VPG											
Sample Date	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	25/01/2016	26/01/2016					
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water					
Batch Number	3	3	3	3	3	3	3	3					Method
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	No.
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
Guiphide	40.5	10.5	40.5	40.5	40.5	40.5	40.5	40.5			40.5	mg/i	TIWITOO/I IVIO
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

Client Name: Geotechnics SVOC Report : Liquid

Reference: PN153428
Location: Stockport Bus Station
Contact: Jon Hutchinson
JE Joh No.: 16/3162

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		1		
Sample ID	BH101	BH102	BH103	BH105	BH106	BH108	BH109	BH112				
Depth										Please se	e attached n	otes for all
COC No / misc											ations and a	
Containers	VPG	VPG	VPG	VPG	VPG	VPG	VPG	VPG		Ì		
Sample Date		26/01/2016				26/01/2016		26/01/2016		[
Sample Type	Ground Water		Ground Water	Ground Water		Ground Water	Ground Water					
Batch Number	3	3 26/01/2016	3	3	3	3	3	3		LOD/LOR	Units	Method No.
Date of Receipt SVOC MS	20/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016	26/01/2016				140.
Phenois												
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 <0.5	<1	<1 <0.5	<1	<1	<1 <0.5	<1	<1		<1	ug/l	TM16/PM30 TM16/PM30
2,4,5-Trichlorophenol # 2,4,6-Trichlorophenol	<1	<0.5 <1	<1	<0.5 <1	<0.5 <1	<1	<0.5 <1	<0.5 <1		<0.5 <1	ug/l 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	-4	.4	-4	.4	.4	-4	-4	-4				TM4.0/DM400
2-Chloronaphthalene # 2-Methylnaphthalene #	<1 <1	<1 <1	<1 <1	<1 <1	<1 <1	<1 <1	<1 <1	<1 <1		<1 <1	ug/l ug/l	TM16/PM30 TM16/PM30
Phthalates	*1	*1	*1	*1	*1	*1	*1	*1		- 11	ugn	TIVITO/TIVISO
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 <1	<1		<1	ug/l	TM16/PM30 TM16/PM30
Dimethyl phthalate Other SVOCs	<1	<1	<1	<1	<1	<1	<1	<1		<1	ug/l	TIVITO/PIVISU
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 # 2.6-Dinitrotoluene	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1		<0.5 <1	ug/l ug/l	TM16/PM30 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 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5		<0.5 <0.5	ug/l	TM16/PM30 TM16/PM30
Bis(2-chloroethoxy)methane # Bis(2-chloroethyl)ether #	<1	<1	<1	<1	<1	<1	<1	<1		<1	ug/l 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 # Isophorone #	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5		<1 <0.5	ug/l ug/l	TM16/PM30 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
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	I	l		l	l			l	I	1		ı

Client Name: Geotechnics VOC Report : Liquid

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

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											e attached n ations and a	
COC No / misc	\/ D 0	\/ D 0	\/ D 0	\/ D 0	\/ D 0	V/D 0	\/ D 0	\/ D 0		abbievii	ations and a	Cionyma
Containers	VPG	VPG	VPG	VPG	VPG	VPG	VPG	VPG				
Sample Date	26/01/2016	26/01/2016			26/01/2016			26/01/2016				
Sample Type	Ground Water	Ground Water		Ground Water		Ground Water	Ground Water					1
Batch Number	3	3	3	3	3	3	3	3		LOD/LOR	Units	Method
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				No.
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
_	<2	<2	<2	<2	<2	<2	<2	<2		<2	-	TM15/PM10
Bromodichloromethane #	<2	<2	<2	<2		<2	<2	<2		<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene					<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	l .
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
	<3 <3	<3 <3	<3 <3	<3 <3	<3 <3	<3 <3	<3 <3	<3 <3		<3 <3	-	TM15/PM10
1,2-Dichlorobenzene * 1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	<2	<2	<2	<2		<2	ug/l	TM15/PM10
											ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3		<3	ug/l	1
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

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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.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCI (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.
Indicates analyte found in associated method blank.
Dilution required.
MCERTS accredited.
Not applicable
No Asbestos Detected.
None Detected (usually refers to VOC and/SVOC TICs).
No Determination Possible
Calibrated against a single substance
Surrogate recovery outside performance criteria. This may be due to a matrix effect.
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.
Samples are dried at 35°C ±5°C
Suspected carry over
Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
Matrix Effect
No Fibres Detected
AQC Sample
Blank Sample
Client Sample
Trip Blank Sample
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
ТМ30	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.				
ТМ30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7	PM14	Analysis of waters and leachates for metals by ICP OES. Samples are filtered for dissolved metals and acidified if required.	Yes			
TM36	Modified US EPA method 8015B. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID.	PM12	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM38	Soluble Ion analysis using the Thermo Aquakem Photometric Automatic Analyser. Modified US EPA methods 325.2, 375.4, 365.2, 353.1, 354.1	PM0	No preparation is required.	Yes			
TM60	Modified USEPA 9060. Determination of TOC by calculation from Total Carbon and Inorganic Carbon using a TOC analyser, the carbon in the sample is converted to CO2 and then passed through a non-dispersive infrared gas analyser (NDIR).	PM0	No preparation is required.	Yes			
TM73	Modified US EPA methods 150.1 and 9045D. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser.	PM0	No preparation is required.	Yes			
TM106	Determination of Sulphide by Skalar Continuous Flow Analyser	PM0	No preparation is required.				
NONE	No Method Code	NONE	No Method Code				



Jones Environmental Laboratory

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

Unit 3 Deeside Point

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Tel: +44 (0) 1244 833780

Fax: +44 (0) 1244 833781

Attention : Sarah Burt

Date: 26th February, 2016

Your reference : PN153428

Our reference: Test Report 15/17326 Batch 1 Schedule B

Location : Stockport Bus Station

Date samples received: 3rd December, 2015

Status: Final report

Issue:

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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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 HCI (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

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

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

DEVIATING SAMPLES

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

SURROGATES

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

DILUTIONS

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

NOTE

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.

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ABBREVIATIONS and ACRONYMS USED

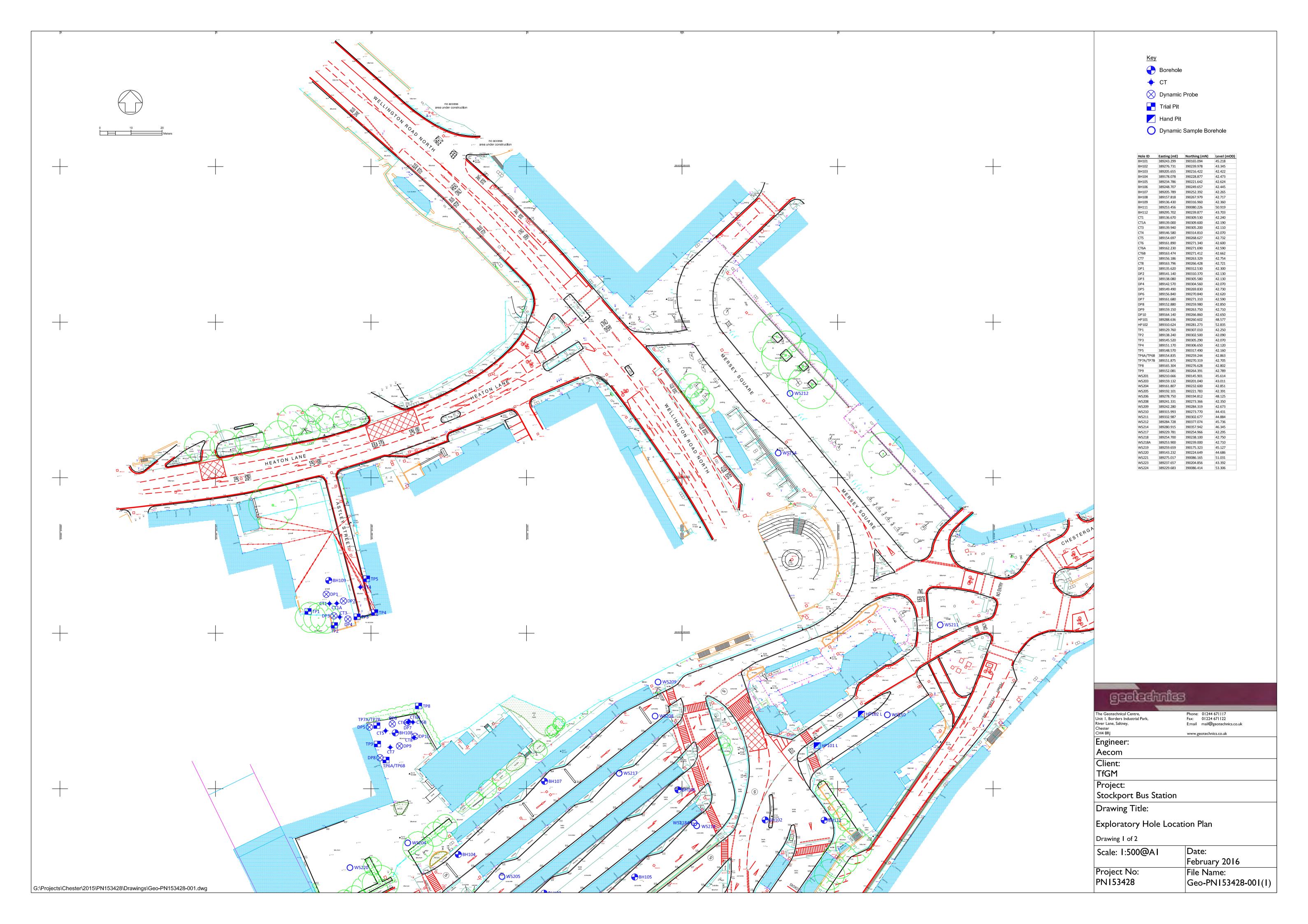
#	ISO17025 (UKAS) accredited - UK.
В	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
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
СО	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

JE Job No: 15/17326

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

APPENDIX 13

Exploratory Hole Location Plan





APPENDIX 14

Investigation Techniques and General Notes



INTRODUCTION

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

TRIAL PITS

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

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

CABLE PERCUSSION BORING

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

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

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

ROTARY DRILLING

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

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

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

WINDOW SAMPLING

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

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

EXPLORATORY HOLE RECORDS

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

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

DYNAMIC PROBING

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

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

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

INSTRUMENTATION

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

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





- 1. The report is prepared for the exclusive use of the Client named in the document and copyright subsists with Geotechnics Limited. Prior written permission must be obtained to reproduce all or part of the report. It is prepared on the understanding that its contents are only disclosed to parties directly involved in the current investigation, preparation and development of the site.
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- 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 I to 8, where appropriate, in Geotechnics Limited's UKAS accredited Laboratory, where possible. A list of tests is given.
- Tests requiring the use of another laboratory having UKAS accreditation where possible are identified.
- Any unavoidable variations from specified procedures are identified in the report.
- 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 I m 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 brior 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.

Capabilities on project: Environment

Appendix D – Soils Screening Assessment

ASSIVE LOD WHERE NO AWAL IS STATISTICS	_																															
Exploratory Hole 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	1.00-1.20 1.00-1	09 020-0.40	0.50	1.00 0.2	0 0.20	0.50	W5201 0.50	0.50 0	\$204 W5205 120 0.50	W5205	W5206 W520 0.50 0.50	8 W5210	W5210	0.20 1	211 W5212 20 1.00	9/5214 0.50	W5217 W5217 1.00 1.30	0.50	1.20 1.00	0.20	W5220	W5223 W5223 1.00 2.00	W5224 0.20
Target		Made Ground S	Incial Sands and Gravels Made Groun	nd Glacial Sands and Gravels	Made Ground Glacial Sar and Grave	nds Glacial Sands sis and Gravels	Made Ground	Made Ground Che	Beds Mar	ade Ground Glacial : and Gr	Sands avels Made Ground	Made Ground Mad	te Ground Made G	round Made Gro	ound Made Groun	d Made Ground	Made Ground Made	Ground Made Ground	Glacial Sands and Gravels Ma	de Ground Made Gro	ound Made Ground	Made Ground	Made Ground Made	iround Made Groun	Made Ground No	de Ground Gravels	Made Ground	Glacial Sands Glacial Sand and Gravels and Gravel	Made Ground	Made Ground	Made Ground Glacial Sands and Gravels	Made Ground
Strata Logs		Gravel	Gravel Gravel	Gravel	Gravel Gravel	Gravel	Gravel	Gravel	Sand	Gravel Gra	rel Gravel	Gravel (Gravel San	d Sand	Sand	Sand	Gravel S	and Sand	Sand	Sand Sand	Sand	Sand	Sand S	nd Sand	Sand	Sand Sand	Sand	Sand Gravel	Sand	Sand	Sand Clay	Sand
Determinant Metals Assertic	0.5 make 0.5 co.5 make 0.5 co.5 make 0.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 make 0.5 co.5 make 0.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 make 0.5 co.5 co.5 co.5 co.5 co.5 co.5 co.5 co	14	1.9	4 59	0.5	25	AR.Y	44.0	43	6,9	53 ^*	12	13.4	21.5			7 81	10	23	92	2.5	1 101	135	87 50	214	1.1	6 ^-	15	2 44	3 30.7	14 14	6 134
Cadmium Hexavalent Chromium	c0.1 mg/kg c0.1 c0.3 mg/kg c0.3	25	42	0.4	7.4	63 -0.1	40.3	-03 -03	13	0.1 <0.1	-03	5.7	25	03	08 401	1	1.7	0.5 0.4	-03	2.8	0.4 0.3	4 01	02 <01	e0.1	03	0.4 0	2 125	-03	0.5	2 0.1	10.1	0.8
Chromium Copper	<0.5 mg/kg <0.5 <1 mg/kg <1	11.5 17	31.8 13 13	4 62 4 15 N	17 5	88.8 93 12 19	72 180	66.5 54	69.5	58.4 22	68.2 8 7 4	15.3 13	15.5 41	58 153	66 8 38	13 111 11 4	6 49.8 5 34	125	85.5 10	11.2 61	16.9 66 13 17	3 51.4 3 51.4	39.1 114	40.5 41. 37 4	39.4 79	13.5 75	7 17.6 10 12	55.9 1 14	13 15	5 57	16.1 35.7 17 15	52.6 2 44
Mercury Mercury	c0.1 mg/kg c0.1 c0.1 mg/kg c0.1	<0.1 d <0.1 d	39 0.1 <0.1 0.1 <0.1	9 28 c0.1 c	0.1 <0.1 0.1 <0.1	23 13 49.1 49.1	12 12	0.7 <0.1 0.7 <0.1	11 11	0.1 <0.1 0.1 <0.1	40.1 40.1	-0.1 -0.1	0.2 0.2	03 <0.1 0.3 <0.1	40.1 40.1	18 10 0;	6 89 2 d01 d0.1 2 d0.1 d0.1	-0.1 -0.1	40.1 40.1	0.1 <0.1 0.1 <0.1	23 19 6 6	2 106 5 0.4 5 0.4	02 02 02	02 0: 02 0:	02 <0 02 <0	1 41	d1 d1 d1	d1 d1 d1 d1	d).1 d).1	<0.1 -	46 272 c0.1 0.6 c0.1 0.	93 02 4 02
Nickel Selenium Vanadium	<0.7 mg/kg <0.7 <1 mg/kg <1 <1 mg/kg <1	<1 4.8 <1 <1	10.9 6. 1 <1 17	1.4 15.9 <1 < 5 16	2.4 :1 <1	9.9 11.6 <1 12 15	39 1 49	25.4 <1 <1 28	15 <1 15	12.4 <1	20.8 4.9 <1 22 2	57 <1 <1 5	17	63.4 2 <1 98	30.2 14 <1 38	19 19 <1 18	5 12.6 <1 13	1 <1	21.2 <1 <1 <1	20.7	6.6 64 11 9	9 38.9 2 2 9 56	44.5 2 <1 60	28 3	35.5 1 <1 53	69 19 <1 4 3	9 55 <1 10 4	11.4 c1 c1	c1 3	1	57 228 c1 c1 5 2	15.3 <1 3 20
Zinc Water Soluble Boron Non Metals	<5 mg/kg <5 <0.1 mg/kg <0.1	50 0.2	44 4 0.3 ±0.1	41 82 0.4	31 0.4	23 22 0.3 e0.1	495 0.6	53 0.5	23 0.3	25 0.4	82 34 0.5 0.1	26 0.1	- 55	109	1.3	20 15	7 197 0.7	02 03	46	168	35 18 0.2	5 142 2 1.9	104 0.9	32 4 09 0:	131 0.8	17 20 02 0	1 02	42 0.2	66 0.1 <0.1	0.8	42 103 0.2 0.1	139
Total Cyanide pH Total Ospanic Carbon	c5 mg/sq c5 c0.1 mg/sq c0.1 c0.1 mg/sq c0.1 c0.7 mg/sq c0.1 c1 mg/sq c1 c1 mg/sq c1 c1 mg/sq c1 c1 mg/sq c1 c5 mg/sq c0.1 c0.1 mg/sq c0.1 c0.1 mg/sq c0.1 c0.1 mg/sq c0.1 c0.5 mg/sq c0.5 c0.01 pH units c0.01 c0.02 \$\$ c0.02	<0.5 <0.5	938 89	<0.5 × 9.77	0.5 <0.5	40.5 0.29 9.56	9.5 8.45	0.7 <0.5 8.82	8.67	5 <0.5 836	40.5 8.36 8.43	11.23	<0.5 8.48	9.42	<0.5 8.71 9	25 8.7	8 8 95	40.5 87 10.40	40.5 40.5 9.14	6.79	-0.5 10.5 8.4	40.5 8 8.29	8.6	878 11.3	892	93 8	-0.5 9 12.46	<05 <05	99 91	1 86	.05 -0.5 11.84 8.1	7.80
TPH compounds		d	- CA - C	30 <	5 5	d 1/1	11.00	d	0.14	d	0.15 0.05			13.57	146 0	d	d	5.80 (0.02	d		35	0.44	d		d	a .	9 0.02	d d	0.3	14		5
Benzene Toleane Etwoberoane o-Xylene mit-Xylene MTBE	ය් ශුණ ය ය ශුණ ය ය ශුණ ය ය ශුණ ය	6	9.0	0 0	5 5 5 5	0.0		6 6		40						0	0		0 0		42 22		0 0	3	4	9		0 0			4	6
mit-Xviene MTBE	ර ගුණ ර ර ගුණ ර	45	٥	0 0	4 4	4		4		99						9	4		9 9	đ	93		9 9	4	9 9	4		4 4			4 4	6 6
Aliphatics >C5-C6 Aliphatics >C6-C8	c0.1 mg/kg c0.1 c0.1 mg/kg c0.1	<0.1 <6 <0.1 <6	0.1 0.1 <0.1	<0.1 <	0.1 <0.1 0.1 <0.1	<0.1 <0.1	<0.1 <0.1	e0.1 c0.1	L1 <0.1 L1 <0.1	.1 <0.1 .1 <0.1	<0.1 <0.1	d0.1 d0.1 d0.1 d0.1	<0.1 <0.1	<0.1 <0.1	d1 d1	<0.1 <0.1	d1 d1 d1 d1	<0.1 <0.1	d1 d1	<0.1 <0.1	d) 1 d) 1	d).1 d).1	d1 d1 d1 d1	<0.1 <0.1	d1 d d1 d	41 4.1	d1 d1	d1 d1 d1 d1	d).1 d).1	<0.1 + <0.1 +	@1 @1 @1 @1	e0.1 e0.1
Alphates >C8-C10 Alphates >C10-C12 Alphates >C12-C16	c0.1 mg/kg c0.1 c0.2 mg/kg c0.2 c4 mg/kg c4	<0.1 d <0.2 d <4 o	11 40.1 12 40.1 4 40.2	e0.1 c	0.1 +0.1 0.2 +0.2 4 +4	40.1 40.2 64	<0.1 <0.2 <4	60.1 (0.1 (0.2 (0.2 (4 (4	12 d0.1 12 d0.2	2 40.1	40.1 40.2 64	40.1 40.2 40.4	0.1 e0.1 e0.2 e4	d0.1 d0.2 d4	d0.1 d0.2 d4	40.1 40.2 44	401 401 402 402 44 44	40.1 40.2 64	42 42 4 4	-0.2	6 2 6 2	3 d.1 d.2 3 d	52 c02 22 c4	<0.2 o4	601 d0 602 d0 64 64	2 d2 d	d0.1 d0.2 o4	d2 d2 d4 d4	d0.1 d0.2 d4	d2 d2	01 d01 d02 d02 d4 d4	601 602 64
Alichatica s-CE-CB Alichatica s-CE-CB Alichatica s-CE-CB Alichatica s-CE-C10 Alichatica s-CE-C110 Alichatica s-CE-C121 Alichatica s-CE-CE-CE-CE-CE-CE-CE-CE-CE-CE-CE-CE-CE-	<7 mg/kg <7 <7 mg/kg <7 <26 mg/kg <26	2 d	7 d 7 d 28 d	c7 c	7 c7 7 c7 28 c28	d d d8	27 360 430	c7 c7 67 c7 67 c26	28 28	23 Z	30 11 30 28	d d d d		12 35	20 c7 436 c7 848 c78	1 45	0 c7 2 c7 2 c7	10 <7 97 <7 107 <38	d d	42 E)	19 11 105 28 141 45	1 9 8 d 3 d8	62 c7 197 c7 310 c38	5	c7 c7	122 d7 132 d8	d d	d d d d	d d	d d	7 47 62 47 62 48	c7 c7
Aromatics >C5-EC7 Aromatics >FC7-FC8	c5 uplin c5 c5 uplin c5 uplin c5 uplin c5 uplin c5 uplin c5 uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin uplin c5 uplin	e0.1 e6	0.1	d)1 d	0.1 (0.1	40.1	d0.1	d0.1 d0.1	11 40.1	1 40.1	d0.1	d.1 d.1	e0.1	<0.1 c0.1	40.1	40.1 40.1	d1 d1	d1 d1	41 41	d1	401	@1 @1	d1 d1	d0.1	d1 d	41	41	d1 d1	d1	41	d1 d1	e01
Aromatics >ECF-EC8 Aromatics >EC8-EC10 Aromatics >EC10-EC12	c0.1 mg/kg c0.1 c0.2 mg/kg c0.2	<0.1 d <0.2 d		e0.1 e	0.1 ±0.1 0.2 ±0.2	d) 1 d) 2	d0.1	-0.1 +0.1 -0.2 +0.1	12 40.1	1 d0.1 2 d0.2	-0.1 -0.2	-0.1 -0.1 -0.2 -0.2	e0.1	1.7 <0.2	d) 1 d) 2	±0.1 31	d1 d1 7 d2 d2	e0.1 e0.2	d1 d1 d2	06 -02	02 -01 22	9 17	d0.1 d0.1	09 10	d) d	@1 2 @2	d1 d2	d1 d1 d2 d2	d) 1 d) 2	<0.1 <0.2	01 d1 d2 d2	-0.1 -0.2
Anomatica Science PC12 Anomatica PC10-EC12 Anomatica SC112-EC14 Anomatica SC112-EC16 Anomatica SC112-EC16 Total anomatica SC21-EC36 Total anomatica SC21-EC36 Total anomatica SC3-SC	<7 maka <7 <7 maka <7	4 of d d d d	9	50 < 107 <	7 d 7 d	d d	229 543	33 <7 98 <7		8 -27 162	38 d	31	35 74	416 1069	93 e7 925 e7	35 82	6 c4 c4 1 c7 4 c7	68 <7 349 <7	a a	113 340	110 305 281 543	5 159 8 401	2009 3359	54 29 185 57	278 <7 665	86 d	a	a a	a a	a a	₹7 - ₹7 31 ₹7	d d
Total alphatics and aromatics (C5-35) PCBS	<52 mg/kg <52 c52 mg/kg <52	626 d 652 d	26 27 52 28	177	26 26 52 52	d2 d2	1339	214 <52	2	218	79 d2	d2 31	124	1677	2040 - 426 2893 - 42	131.	7 - 26 9 - d2	406 (28 583 (32	42 42	543	578 997	630	6379	271 99 271 105	1045 1045	218 d2	d2	d2 d2	42 42	d2 d2	93 d2	68 62
PCB101 PCB118 PCB138	c5 up/sp c5 c5 up/sp c5 c5 up/sp c5						4	d0 d0 d0	4		44	d d	4	4	4		d0 d0	d d	d0 d0		44	4	45 45	d0 d0	25 25 25		0 0		0	d	5 6	#=
PCB130 PCB153 PCB180	d uple d d uple d			+			0	d0 d0 d0	9	=	4	9	9	4	4		40 40	d d	d0 d0		4	0	05 05 05	d0 d0	05 05		4		0	0 0	5 5	
PCB52 PCB52 Total 7 PCBs	601 melan cil.1 602 melan cil.2 603 melan cil.2 604 melan cil.2 605 melan cil.2 607 melan cil.2 607 melan cil.2 607 melan cil.2 607 melan cil.2 607 melan cil.2 607 melan cil.2 607 melan cil.2 608 melan cil.2 608 melan cil.2 609 melan cil.2 600 melan cil.2 600 me						d 05	d0 d50	d d5	5	d 35	d d 35	d 05	d -05	d 45		40 450	d d5	40 40 45	0	d d5	d d5	<25 <175	d0 d0 d50	425 4175		d 35		d 35	d 05	5 05	
Phanol 2.4-Dichlosophanol	<10 ug/kg <10 <10 ug/kg <10	<10 <1 <10 <1	10 <10	198		<10	<100 <100	<10 <10	0 <10	0 <10	<10	<10 <10	- d0 - d0	-d0 -d0	<10	<10	<10 <100 <10 <100	<10 <10	<10 <10 <10 <10	<10 -10	<100 <100	<10	<100 <10 <100 <10	<10 <10	c50 <11 c50 <11	<10	<10	<10 <10 <10 <10	<10	<10 <10	c10 c10	<10 <10
2.4.5-Trichlorcohenol 2-Chlorophenol	<10 ug/kg <10 <10 ug/kg <10	<10 <1 <10 <1	10 <10	<10 <10		<10 <10	<100 <100	<10 <10 <10	0 <10	0 <10	<10 <10	<10 <10	යා යා	යා යා	<10 <10	<10 <10	<10 <100 <10 <100	<10 <10	<10 <10 <10 <10	<10	<100 <100	<10 <10	<100 <10 <100 <10	<10 <10	d0 d1 d0 d1	<10 <10	<10 <10	<10 <10 <10 <10	<10 <10	<10 -	210 <10 <10 <10	<10 <10
2-Motyphanol 2-Mophanol 4-Chloro-3-mathylphanol	<10 ug/kg <10 <10 ug/kg <10 <10 ug/kg <10	<10 <1 <10 <1 <10 <1	<10 10 <10 10 <10	<10 <10		<10 <10	<100 <100	<10 <10 <10 <10	0 <10 0 <10	<10 0 <10 0 <10	<10 <10	<10 <10 <10	රා රා රා	යා යා	<10 <10	<10 <10	<10 <100 <10 <100 <10 <100	<10 <10	<10 <10 <10 <10 <10 <10	<10 <10 <10	<100 <100 <100	<10 <10	<100 <10 <100 <10 <100 <10	<10 <10	යම දුර යම දුර යම දුර	<10 <10	<10 <10	<10 <10 <10 <10	<10 <10	<10 -	:10 <10 <10 <10	<10 <10
4-Metropherol 4-Metropherol 2-4-Dimetropherol	<10 ug/kg <10 <10 ug/kg <10	<10 <1 <10 <1 <10 <1	10 <10 10 <10	<10 357		<10 <10	<100 <100	<10 <10 <10 <10	0 <10	0 <10 0 <10	<10 <10	<10 <10	යා යා යා	යා යා	<10 <10	<10	6 <10 <100 <10 <100	<10 <10	<10 <10 <10 <10	<10 <10	<100 303	<10 <10 309	<100 <10 <100 <10	<10 <10	<50 <11 <50 <11	<10 <10	<10 <10	<10 <10 <10 <10	<10 <10	<10	:10 <10 :10 <10	<10 <10
2.4.Drasth/chanol 2.4.6-Techlorophenol Poly Acensis: Hydrocarbona Acensis: these	<10 ug/kg <10	c10 c1	10 <10 A <0.05	<10		<10	<100	<10 <10	0 <10	0 <10	<10	<10	රා	1.08	<10	<10	<10 <100	<10	c10 c10	c10	1.38 222.4	<10	<100 <10	<10	d0 c1	d10	<10	c10 c10	c10	<10	10 (10	<10
Acerepthylene Anthricene	<0.03 maka <0.03 <0.04 maka <0.04	<0.03 No	A <0.03 A <0.04	0.57 < 14.68 <	0.03 <0.03 0.04 <0.04	0.03	0.19 3.61	0.07 <0.1 0.45 <0.1	103 104	0.03 <0.03 0.08 <0.04	0.03 0.14	NA NA NA		0.8 <0.03 2.75	0.09 0.	8.0 04 23.2	9 0.88	<0.03 <0.04	<0.03 NA <0.04 NA		0.5 10.5 3.03 363.5	8 0.96 1 1.66	NA NA	0.11 0.64	NA cū NA cū	33 -0.03	4.03	4003 4003 4004 4004	0.50	ous -	-0.05 -0.05 -0.03 -0.03 -0.04 -0.04	<0.03
Benzo (si Anthracene Benzo (si Pyrene Benzo(k)fluoranthene	c0.06 mgkg c0.06 c0.04 mgkg c0.04 c0.02 mgkg c0.02 c0.07 mgkg c0.07 c0.05 mgkg c0.07	<0.04 No <0.02 No	A <0.05 A <0.04 A <0.02	72.09 19.4 7.61 <	0.06 <0.06 0.04 <0.04 0.02 <0.02	0.38 0.43 0.16	5.43 6.33 2.51	0.55 0.51 <0.1	0.05	0.41 <0.06 0.6 0.25 <0.02	0.06 0.3 0.13	NA NA NA NA NA		9.46 11.91 4.38	0.27 0. 0.28 0. 0.1 0.	05 14.8	2 1.42 8 1.49 4 0.6	3.61 0.00 1.61 0.00	40.06 NA 40.04 NA 40.02 NA		5.65 591.7 5.45 649.5 2.41 224.4	3.66 2 4.23 5 1.5	NA NA	1.38 1.73 0.66	NA c0 NA c0 NA c0	8 408 H 404 12 402	408 404 402	40.06 40.06 40.04 40.04 40.02 40.02	0.11 0.1 0.04	1 0.41 1 0.41 4 0.19	0.05 d.04 d.02 d.02	0.35 0.32 0.15
Benzorbi Ruoranthene Benzorbifikoranthene Banto (nhi) nantarra	c0.04 molec c0.04	<0.04 N	A <0.07 A <0.05 A <0.04	27.17 < 19.56 < 9.17 <	0.07 <0.07 0.05 <0.05 0.04 <0.04	0.57 0.41 0.2	8.95 6.44 3.6	0.76 <0.1 0.55 <0.1 0.24 <0.1		0.89 <0.07 0.84 <0.05 0.32 <0.04 0.42	0.47			15.65 11.27 6.75	0.35 0. 0.25 0. 0.12 0.	18 53.0 13 38.1 07 19.2		5.76 0.00	0 4007 NA 0 4005 NA 1 4004 NA		5.18 577.1	2 5.35	NA .	2.35 1.69 0.84	NA di	0007 05 -0.05 04 -0.04	40.07 40.05 40.04	-0.07 -0.07 -0.05 -0.05 -0.04 -0.04	0.15 0.11 0.08	5 0.69 - 1 0.5 - 8 0.41 -	<0.07 do.07	0.53 0.38 0.18
Chrysene Diberzo (sh) Anthrecene Fluorintheme	-0.02 make -0.02 -0.04 make -0.04 -0.03 make -0.03 -0.04 make -0.04 -0.04 make -0.04 -0.04 make -0.04 -0.03 make -0.03 -0.03 make -0.03 -0.03 make -0.05	<0.02 No <0.04 No <0.03 No	A <0.02 A <0.04 A <0.03 A <0.04 A <0.04	23.02 2.35 < 56.83 9.05 <	0.04 0.04 0.05 <0.03	0.02 0.45 0.04 0.87	6.34 0.96 15.7	0.72 0.08 <0.1 1.29		0.42 0.06 <0.04 0.64	0.05 0.35 0.05 0.04 0.75	NA NA NA		10.7 1.42 <0.04 18.7 0.91 <0.04	0.31 0. <0.04 0.58 0.	15 X 41 27 86:	7 1.66 9 0.22 9 3.73	0.69 <0.04	-0.02 NA -0.04 NA -0.03 NA		3.12 301.7 6.12 628.9 0.77 58.5 13.08 1312.5 1.38 175.0	0.73	NA NA NA	1.62 0.31 2.99	NA <0	003 40 02 04 40 04 0.05 40 03	<0.04	002 -002 -004 -004 -003 -003	-0.04 0.14	1 0.37 0.08 4 4 0.37	<0.04 <0.04	0.42 0.07 0.76
Fixone Indeno (123cd) overe	<0.04 mg/kg <0.04 <0.04 mg/kg <0.04	<0.04 No	A <0.04 A <0.04	9.05 < 9.29 11.56 <		0.05	1.85 3.77	0.25 <0.1	104	04 <0.04 03 <0.04 04 <0.04	0.04	NA NA		6.32	0.14 0.	10.4 07 21.1	7 0.68 6 0.82	<0.04 2.73 <0.04	<0.04 NA <0.04 NA		1.38 175.0 3.35 317.3 0.87 21.4	7 2.42	NA NA	034 12 032	NA di NA di NA di	M 40.04 M 40.04	d0.04	-0.04 -0.04 -0.04 -0.04 -0.04 -0.04	0.08	8 0.47	<0.04 <0.04	<0.04 0.2
Phenestrene Pyrene	<0.03 mg/kg <0.03 <0.03 mg/kg <0.03	<0.04 No <0.03 No <0.03 No	A <0.04 A <0.03 A <0.03	63.86 53.5	0.04 <0.03	0.86 0.76	16.09 13.88	0.23 <0.1 1.83 1.36	0.11 0.1	02 <003 08 <003	0.43 0.67	NA NA		0.77 <0.04 9.61 18.76	0.38 0 0.52 0	17 70.7 25 76.1	9 398 8 326	2.59 0.00 0.00	-0.04 NA 0.03 NA 1-0.03 NA		8.3 1260.4 12.04 1372.5	6 5.71 8 7.68	NA	2.55 2.83	NA NA	003 405	40 IS	403 403 403 403	0.06	0.17	0.05 <0.03	0.41 0.67
PAH 17 Total SVOCs Pentachlorcoherol	<0.6 mg/kg <0.6	<0.6 No	A <0.8	334.2	0.6 -0.6	43	<100	<10	<10	4.5 <0.5 0	<10	NA NA <10	-50	d0	<10	13 509/	4 24.8 <100	40.8 <0.6 <10	<0.5 NA <10		73.6 808 <100	<10	NA <100	<10	NA 40	5 45	<10	as as	<10	<10	08 d08 <10	
2.4-Dinitrotokens 2.5-Dinitrotokens 2-Chloronachthalens	<10 ug/kg <10 <10 ug/kg <10 <10 ug/kg <10	4	10				<100 <100 <100	<10 <10 <10	<10 <10 <10	0	<10 <10 <10	<10 <10 <10	යා යා යා	යා යා	<10 <10 <10		<100 <100 <100	<10 <10 <10	<10 <10 <10		<100 <100 <100	<10 <10 <10	<100 <100 <100	<10 <10 <10	ර0 ර0 ර0		<10 <10 <10		<10 <10 <10	<10	:10 :10 <10	
2-Methylaphine 2-Nitramine 3-Nitramine	<10 ug/kg <10 <10 ug/kg <10 <10 ug/kg <10	4	10				<100 <100 <100	112 <10 <10	<10	22 0	<10 <10 <10	<10 <10	176 <50	411 -d0	3271 <10 <10 <10		<100 <100 <100	<10 <10 <10	<10	2203	12159 <100 <100	/7 1828 <10 <10	10161 <100 <100	<10 <10	3980 <50 <50		<10 <10 <10		<10 <10 <10	<10	:10 :10 <10	
4-Metryphenol 4-Netrophenol 6-Metrophenol	<10 ug/kg <10 <10 ug/kg <10	4	10				<100 <100	<10 <10	<10 <10	0	<10 <10	<10 <10	d0	යා යා	<10 <10		<100 <100	<10 <10	<10		<100	488 <10	<100 <100 -100	<10 <10	ර0 ර0		<10 <10		<10 <10	<10	:10 <10	+ + =
Azobenzene Bis/2-chloroethox/methane	<10 ug/kg <10 <10 ug/kg <10	4	10				<100 <100	<10 <10	<10 <10	0	<10 <10	<10 <10	- d0 - d0	යා යා	<10 <10		<100 <100	<10 <10	<10 <10		<100 <100	<10 <10	<100 <100	<10 <10	යා යා		<10 <10		<10 <10	<10 <10	:10 <10	
Din-butylyhthalas Din-octylyhthalas	<10 ug/kg <100 <100 ug/kg <100 <100 ug/kg <100	41 41 41	100				<1000 <1000	<100 <100	<10 <10	00	<100 <100	<100 <100	21 G0 G00 G00	යග යග	<100 <100		<1000 <1000	<100 <100 <100	<10 <10	0	<1000 <1000	<100 <100	<1000 <1000	<100 <100	-500 -500		<100 <100		<100 <100	<100 <100	<100 <100	
Hexachlorobenzene Hexachlorobenzene Hexachlorocyclopentadiene	<10 ug/kg <10 <10 ug/kg <10 <10 ug/kg <10	41 41	0				<100 <100 <100	<10 <10	<10 <10	31	<10 <10 <10	<10 <10	272 -d0 -d0	ජන ජන ජන	2429 <10 <10 <10		<100 <100	138 <10 <10 <10	<10 <10	1770	<100 <100	<10 <10	<100 <100	<10 <10 <10	4577 d0 d0		<10 <10		<10 <10 <10	<10	.10 c10 <10	
Bist2-chlorosthyterher 4-Chlorosniine Nitrobenzene	<10 ug/kg <10 <10 ug/kg <10 <10 ug/kg <10	41 41 41	10				<100 <100 <100	<10 <10 <10	<10 <10 <10	0	<10 <10 <10	<10 <10 <10	ය0 ය0 ය0	යා යා යා	<10 <10 <10		<100 <100 <100	<10 <10 <10	<10 <10 <10		<100 <100 <100	<10 <10 <10	<100 <100 <100	<10 <10 <10	ය0 ය0 ය0		<10 <10 <10		<10 <10 <10	<10 <10 <10	.10 c10 c10	
Isophorone Hexachlorobutadiene Hexachlorosthane	<10 ug/kg <10 <10 ug/kg <10 <10 ug/kg <10	41 41 41	10				<100 <100 <100	<10 <10 <10	<10 <10 <10	0	<10 <10 <10	<10 <10 <10	ය0 ය0 ය0	රා රා	<10 <10 <10		<100 <100 <100	<10 <10 <10	<10 <10 <10		<100 <100 <100	<10 <10 <10	<100 <100 <100	<10 <10 <10	ර0 ර0 ර0		<10 <10 <10		<10 <10 <10	<10 <10 <10	.10 c10 c10	
Butybersylphtheliste Distrybhtheliste Dimethyl phtheliste	<100 ug/kg <100 <100 ug/kg <100 <100 ug/kg <100	41 41 41	100 100				<1000 <1000 <1000	<100 <100 <100	<10 <10 <10	00	<100 <100 <100	<100 <100 <100) <u>ජග</u> ජග ජග	ය00 ය00	<100 <100 <100		<1000 <1000 <1000	<100	<10 <10 <10	0	<1000 <1000 <1000	<100	<1000 <1000 <1000	<100 <100 <100	<500 <500 <500		<100 <100 <100		<100 <100 <100	<100 + <100 +	:100 :100 <100	
4-Bromophers/ohers/sets 1.2.4-Trichloroberszene 1.3-Dichloroberszene	<10 ug/kg <10 <10 ug/kg <10 <10 ug/kg <10	41 41 41	10				<100 <100 <100	<10 <10 <10	<10 <10 <10	0	<10 <10 <10	<10 <10 <10	ය0 ය0 ය0	යා යා	<10 <10 <10		<100 <100 <100	<10 <10 <10	<10 <10 <10		<100 <100 <100	<10 <10 <10	<100 <100 <100	<10 <10 <10	රව රව රව		<10 <10 <10		<10 <10 <10	<10	:10 :10 :10	
Benzofhilluoranthene 4-Chlorophanylphanylether	<0.05 mg/kg <0.05 <10 ug/kg <10	<0.05 N	A <0.05	19.56 <	0.05	0.41	<100	0.55 <0.1 <10	105 <10	0.64 <0.05	<10	NA NA	-50	11.27 -50	0.25 0. <10	13 38.1	7 1.56	4.15 0.08 <10	<0.05 NA <10		6.18 577.1 <100	3.85 <10	NA <100	1.69	NA <0.	25 42.55	<0.05 <10	-0.05	<10 0.11	<10 0.5	:0.05 <0.05	0.38
Virul Chloride Trichloroethene (TCE)	<2 uplie <2 <5 uplie <5	4					4	4	4		a 6	4 5	d d	4	d d		4	a 6	8		4	a 6	d d	d d	42 45		4		a 6	2 11	2 d	
Chloroform Chloroform	c4 up/sp c4 c4 up/sp c4 c5 up/sp c5	0 0 0					d d	ol d	여 여 선		8	64 64 65	ol d	6 6	d d		6 6 6	04 04 05	9 9 5		64 d	d d	ol d	6 6	d d		d d		ol d	d d	å e	
1.1.1-Techtorosthane 1.3.0-Chlorosthane 1.3-Dichtorobergene	1	d d		+			G G G	d d	d d		0 0	d d	d d	d d	0 0 0		d d	d d d	4 4		d d	d d	d d	d d	d d		d d		0 0 0	d d	å et	
1.4-Dichlorostherie (PCE) 1.1.2-Trichlorostherie	c4 ug/kg c4 c3 ug/kg c3 c4 ug/kg c4	of of					ol ol	여 강 여	ot 43 ot		6 43 6	64 63 64	ol ol	113 of	26 43 64		4 4 4	64 63 64	4 4 4		o4 o4	ol 157 ol	ol 01	04 c3 c4	c4 19		여 - ය - 여		d d	64 63 64	A	
1.1-Dichlospethane 1.1-Dichlospethane (1.1 DCE) 1.1-Dichlospespane	c6 ug/kg c6 c5 ug/kg c6 c3 ug/kg c3	d d					ත් ත්	d d	d d 3		4 4	45 45 43	d d	d d	d d		46	d d d	di di		48 48 43	6 6	d d	d d	4 4 4		d d		d d	d d	8 6 0	
1.2.3-Trichlorcorcosne 1.2.4-Trimethyberozne 1.2-Discrosifiene	c3 uping c3 c4 uping c4 c6 uping c6 c3 uping c3 c4 uping c4	d d		$+ \exists$	$=$ \blacksquare	+	ස් ස්	d d	et et	- $=$	4	4 45	d d	6 6	d d	+ =	ol di	64 65	6 4		o4 3	8 11	ol 47	o4 5	c4 19	_	d d	$\vdash \vdash$	8	d d	# 6	= =
1.2-Dichlosoberbane 1.2-Dichlosoberbane		9 4		\blacksquare			o4 -d5	ol d	et 6	=	ol d	8 4	ot 6	ot ot	6 6		8 4	el d	8 4		6 6	6 6	d d	el el	d d		d d		d d	d d	4 4	#=
1.35-Temethybenane 1.3-Dichlosopopane 2.3-Dichlosopopane	c3 up/sp c3 c4 up/sp c4	9					d d	d o4	4		d d	4 4	d 64	4	d 4		9 4	4 4	4 6		o4	04 04	28 c4	04 04	o4 11		d d		d d	4	3 ol	
2-Chlorotoluene 4-Chlorotoluene	4 up/sp <4 43 up/sp <3 <3 <3 <3 <4	4		+			a a	a a	d d		4 4	4 3 4	d d	4 4	a a		d d	d d	4 4 4		a a	a a	a a	d d	4		a a		a a	a .	a a	=
promoberzane Bromochioromethane Bromodichioromethane	c2 ug/kg c2 c4 ug/kg c4 c4 ug/kg c4	8		\perp			6 6	ol ol	94 94		64 64	<2 c4 c4	64 64	e2 e4	4 4			c4 c4			62 64 64	ol ol	er el	c2 c4 c4	64 64		6 6		6 6	c2 c4 c4	ol.	
Bromoform cis-1-2-Dichlorosthene cis-1-3-Dichloropropers	c4 ug/kg c4 <7 ug/kg <7 c4 ug/kg <4	9				<u> </u>	04 c7 04	04 c7 04	04 47 64		64 67 64	04 47 44	64 67 64	c4 c7 c4	04 07 04	<u> </u>	05 27 05	04 67 68	04 47 64		04 27 04	04 07 04	04 c7 o4	04 c7 c4	c4 c7 c4		66 67 66	E	64 67 64	04 0 07 0 04	d d ot	
Ditromomethere 4-isopropyllokere Streene	c4 ug/kg c4 c4 ug/kg c4 c3 ug/kg c4	9		<u> </u>		<u> </u>	o4 o4 o3	ol ol ol	et et d		oi oi <3	04 04	64 64 43	oi oi c3	o4 o4 o3	<u> </u>	ol ol	04 04 c3	하 하 라	_	04 04 23	et et e3	ol 10	04 04 <3	여 여 ය		6 6	<u> </u>	64 64 63	64 6 64 6	d d	
1 A.S. Ministration Commission Co	1	4		+			3	d d	4	==	4	3	4	4	4		4	a a	4		4	8	d d	a a	4		4		4	a .	3 4	
Chlorosthane Chloromethane	<5 ug/sq <5	4		\blacksquare			4	6	4		4	c di di	8	4	4		46	di di	4 4 4		di di	4 4	d d	4	4		4		4	d .	8 4	=
Dichloroffsormethere sec-Baybersene	c2 ug/kg c3 c4 ug/kg c4	4	-				-2 -4	2 of	4 4		Q 4	2 2 4	2 d	2 d	2 4		4 4	4 4	2 d		22 04	2 d	42 e4	d d	2 d		2 d		2 d	2 d	a et	
trans-1-2-Dichloroshene Dichloromethene (DCM)	c5 ug/kg <5 <3 ug/kg <3 <7 ug/kg <7	d d	1	\perp			ය 100	d 2	4 4		4 4	d 3	d d	d d	4		4 4	d d	4 4		4 4	d d	0 0 0	0 0	d d		a a		9	3 3	a a	
Trichlorofluoromethane 1.2.3-Trichlorobenzene 1.2.4-Trichlorobenzene	<3 up/sp <3 <7 up/sp <7 <7 up/sp <7	4					3 3 3	3 3 3	d d		4 4	3 3 7	3 3 3	47 47	4 4		4 4 4	<3 <7 <7	4 2 2		4 4	0 0 0	d d	43 47	4 4		a a		3 3 3	3 3 3	3 d d	
1.2-Obserno-3-chioropropane Benzane	c4 up/sp c4 c5 up/sp c5	44		\blacksquare			ot o	ol d	ot d		4	of dj	ot d	4	4		d d	ol d	9		ot d	o4 d5	d u	o4	d d		d d		6 6	4	4	#=
Ethybergene g-Xyland	c3 up/sp c3 c4 up/sp c4	4		\Box			9	d d	4 4		9		4	2 4	4 4		d d	3 4	4 4		1 1	2 43	42 19	1 2	15 7		4		0	a .	3 ol	
p.m-Aylana Methyl Tertiary Butyl Ether n-Butylbenzene	c4 ug/kg c4 c6 ug/kg c6 c4 ug/kg c4	of df					6 6	ol di ol	64 65		6 6	c4 c5 c4	6 6	64 65 64	64 64		04 d5 04	04 05 04	6 6		- di - di	0 13 d5 o4	37 di of	d d	14 e6 e4		ol di ol		4 4	ol ol	di di	
Dibromochioromethane Procybenzane 1.2-Dibromo-3-chioromopane	c5 ug/kg c5 c4 ug/kg c4 c4 ug/kg c4	4 8		$\pm \Box$			d d	d ol ol	d e4		d d	- d - d - d	d 4	9	4		d d	d d d	d 64		d el	d d	d d	d el	d d		d d		d d	d d	d of	
Asbestos Asbestos Containing Material Asbestos Containing Material (2)	None None	None None No None None None None None No	one one		fone fone				Non	00	None None	Fibre				Fibre Bundles	None None		Fibr	e Bundles None			None None		Nines Nin		None None				None None	None None
Principicaniania (12.2-Denom-2-chinospropana Autorato) Autorato Comaning Manini (2) Autorato Comaning Manini (2) Autorato Comaning Manini (2) Autorato Comaning Manini (2) Autorato Leval (2) Autorato Leval (2) Autorato Leval (2) Autorato Leval (2) Autorato Leval (2) Autorato Leval (2) Autorato Leval (2) Autorato Leval (2) Autorato Leval (2) Autorato Serean (2)	None None None	NAD N	AD AD		fore fore Soli Stones IAD IAD		SoilStone NAD NAD	None Soli Store NAD	NA/	irmani D	None ShiliStree R NAD NAD	Soil. Quar	Statistical Societies	NAD NAD	None None SoliStone NAD NAD NAD	Quartifishie Charatie	NAD NAD	None None NCSu-Riv Soil-Stone NAD NAD	Qua Qua	Carante Cul Carc	NAD NAC	NAD NAD	None None None None Ruil Rini Suid Ruil R NAD NAD NAD NAD	Cia-F	None No Sul Staffsaulikin So NAD NA NAD NA	Stone	Stones/Soil NAD NAD	stones	NAD NAD	None II None II No Rui Sair Laugu II NAD II NAD II	Ioli Stone NAD NAD	solistores NAD NAD
Ashestos Screen (2) Others	None None	NAD N	AD	1	4AD		NAD NAD	NAD NAD	NA.	0	NAD NAD	04	NAD NAD	NAD	NAD NAD	Larydotte	NAD NAD	NAD NAD		NAD NAD	NAD NAD	NAD	NAD NAD NAD		NAD NA		NAD NAD		NAD	NAD 1	(AD	NAD NAD

	Name	Date
Author:	WH	11/03/2016

Determinant	Unit	Misinum	Maximum	Count	Source	'Guideline Value (Commerical TOC 0.58 to 3.48%)	Exceedar s of AECS GACs
						0.50 to 3.40%)	GACE
Arsenic Cormism	maka	4L00	66.7	42	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	640 maka 190 maka	
Hexivolent Chromium Chromium III	maka maka	400 400	4.00 87.3 93	16 16	LOMCIEH SAUL 2014 LOMCIEH SAUL 2014 LOMCIEH SAUL 2014	23 mg/kg 8600 mg/kg 8600 mg/kg	
Copper Lead	maka maka	<l00< td=""><td>180 947</td><td>42 39</td><td>LOMCIEH SAULs 2014 Defra CASL 12/2014</td><td>68000 maka 2300 maka</td><td></td></l00<>	180 947	42 39	LOMCIEH SAULs 2014 Defra CASL 12/2014	68000 maka 2300 maka	
Mercury Mercury Nickel	marka marka marka	<000 <000	6.5 6.5 64.9	42 42 30	LOMCIEH SAULs 2014 LOMCIEH SAULS 2014 LOMCIEH SAULS 2014	58 maka 1100 maka 980 maka	
Selenium Vanadium Zinc	mg/kg ma/ka ma/ka	<000 <000	29 29 495	42 39 39	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	12000 mg/kg 730000 mg/kg 9000 mg/kg 240000 mg/kg	
Water Soluble Boron Non Metals Total Counids	maka	4L00	96	42	LOMCIEH S4ULs 2014 USEPA RSL		
pH Total Organic Carbon	pH units	<000	12.46 14.2	41 38	100	12 mg/kg LOD LOD	
TPH compounds Bendene Toluine	ug/kg ug/kg	<1.00	35 42	21 21	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	27000 ug/kg 56000000 ug/kg	
Ethylbenzene o-Xylene min-Xylene	ug/kg ug/kg ug/kg	<000 <000	24 70 93	21 21 21	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	5700000 uaka 6500000 uaka 5900000 uaka	
MTBE	ugko	<l00< td=""><td><lod< td=""><td>20</td><td>EIC/AGS/CL:AIRE</td><td>7900000 ug/kg</td><td></td></lod<></td></l00<>	<lod< td=""><td>20</td><td>EIC/AGS/CL:AIRE</td><td>7900000 ug/kg</td><td></td></lod<>	20	EIC/AGS/CL:AIRE	7900000 ug/kg	
Alphatics >C6-C8 Alphatics >C6-C10	maka maka	<000 <100	4.00 4.00 0.5	41 42 42	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	7800 mg/kg	
Alerhatics >C10-C12 Aliphatics >C12-C16 Aliphatics >C16-C21	maka maka maka	<000 <100	5.2 23 111	42 42 42	LOMCIER SAULS 2014 LOMCIER SAULS 2014 LOMCIER SAULS 2014 LOMCIER SAULS 2014	2000 mg/kg 9700 mg/kg 59000 mg/kg 1600000 mg/kg 1600000 mg/kg	
Aliphatics >C21-C35 Total aliphatics C5-35	marka marka	<000 <000	436 848	42	LOMCIEH S4ULs 2014 AGAC	1600000 make	
Aromatics >CS-EC7 Aromatics >EC7-EC8 Aromatics >EC8-EC10	maka maka maka	<000 <000	4.00 4.00 0.2	41 42 42	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	26000 mg/kg 56000 mg/kg 3500 mg/kg	
Aromatica > EC10-EC12 Aromatica > EC12-EC16 Aromatica > EC16-EC21	maka maka maka	<l00 <l00< td=""><td>22.9 467 3055</td><td>42 42 42</td><td>LOMCIEH S4Us 2014 LOMCIEH S4Us 2014 LOMCIEH S4Us 2014</td><td>16000 maka 36000 maka 28000 maka</td><td></td></l00<></l00 	22.9 467 3055	42 42 42	LOMCIEH S4Us 2014 LOMCIEH S4Us 2014 LOMCIEH S4Us 2014	16000 maka 36000 maka 28000 maka	
Aromatics >EC21-EC35 Total aromatics C5-35 Total allohatics and aromatics (C5-35)	maka maka	400	5438 9526	42 42	LOMCIEH SAUL 2014 LOMCIEH SAUL 2014	28000 mg/kg 28000 mg/kg	
PCBs	uoko	4.00	4.00	21	100	LOD	
PC8118 PC8138 PC8153	ug/kg ug/kg ug/kg	<000 <000	400 400 400	21 21 21	100 100 100	LOD LOD	E
PC8180 PC828 PC852	uaka uaka uaka	<100 <100	4.00	21 21 21 21	L00 L00	LOD	
PCBS2 Total 7 PCBs Phenol	ugko	<000 <100	4.00			L00 L00	
Phenol 2.4-Dichlorophenol 2.4.5-Trichlorophenol	ug/kg ug/kg ug/kg	<100 <100	198 4.00 4.00	39 39	AGAC	440000 ug/kg 2500000 ug/kg 82000000 ug/kg	
2-Chlorophenol 2-Methylphenol	ug/kg ug/kg	<000	4.00 159 4.00	39 39	AGAC AGAC	5800000 ug/kg 160000000 ug/kg	
2-Nitrophenol 4-Chioro-3-methylphenol 4-Methylphenol	ugka uaka uaka	<100 <100	-LOD 2907	39 39 39	L00 L00	82000000 ug/kg LOD	
4-Nitrohand 2.4-Dimethylphend 7.4 K-Tinhinnyhand	uaka uaka	<l00 <l00< td=""><td>4.00 3030</td><td>39 39</td><td>LOD LOD AGAC</td><td>16000000 upkp 210000 upkp</td><td></td></l00<></l00 	4.00 3030	39 39	LOD LOD AGAC	16000000 upkp 210000 upkp	
Poly Acoratic Hydrocarbons Aconachithere Aconachitylere	maka maka	<100	222.46 10.58	41		84000 mg/kg 83000 mg/kg	
Anthracene Bergo (a) Anthracene	maka maka	<000 <000	363.51 591.71	38 41	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	520000 mg/kg 170 mg/kg	
Benzo (a) Pyrene Benzo(k)fluoranthene Benzo(bk)fluoranthene	maka maka maka	<000 <000	649.52 224.45 801.62	41 41 41	LOMCIEH SAULS 2014 LOMCIEH SAULS 2014 LOMCIEH SAULS 2014	35 maka 1200 maka 1200 maka	
Benzolb Yluoranthene Benzo (ghi) perylene Chrysene	maka maka maka	<100 <100	577.17 301.71 628.96	41 41 41	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	44 maka 3900 maka 350 maka	
Dibenzo (ah) Anthracene Fluoriarithene	maka maka maka	4100 4100	58.58 1312.54 175.01	41 41 38	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	3.5 maka 23000 maka 63000 maka	
Indeno (123od) pyrene Nichthelene Phenanthrene	maka maka maka	<000 <100	317.37 21.42 1260.46	41 41 41	LOMCIEH S4ULs 2014	500 maka 190 maka 22000 maka	
Person	maka maka	<100	1372.58 8088	38 41	LOMCIEH SAULs 2014	54000 maka	
Pertachiorophenol 2.4-Diritrotojuene	uaka uaka	<l00< td=""><td>4.00</td><td>22 22</td><td>LOMCIEH SAUL 2014 EICAGS/CL:AIRE</td><td>400000 ug/kg 3700000 ug/kg</td><td></td></l00<>	4.00	22 22	LOMCIEH SAUL 2014 EICAGS/CL:AIRE	400000 ug/kg 3700000 ug/kg	
2.6-Diretrotoluene 2-Chlororsophthalene 2-Methylnschthalene	uaka uaka uaka	<l00 <l00< td=""><td><lod <lod 121597</lod </lod </td><td>22 22 22</td><td>EIC/AGS/CL-AIRE EIC/AGS/CL-AIRE USEPA RSL</td><td>190000 upks 190000 upks 39000 upks 164200 upks</td><td></td></l00<></l00 	<lod <lod 121597</lod </lod 	22 22 22	EIC/AGS/CL-AIRE EIC/AGS/CL-AIRE USEPA RSL	190000 upks 190000 upks 39000 upks 164200 upks	
2-Nitroaniine 3-Nitroaniine 4-Methylphenol	ug/kg ug/kg ug/kg	<000 <000	<lod <lod 2907</lod </lod 	22 22 22	USEPA RSL LOD LOD	164200 upike 8000000 upike LOD LOD	
4-Nitrophine 4-Nitrophinol Azoberzene	uaka uaka uaka	<000 <100	400 400 400	22 22 22	USEPA RSL LOD USEPA RSL	110000 ug/kg LOD 26000 ug/kg	
Bis (2-chloroethoxylmethane Carbazole	uoko	4100 4100	<lod 50353</lod 	22 22 22	LOD	LOD LOD	
Di-n-octylphthalate Di-n-octylphthalate Dibenzofuran	ugika ugika ugika	<000 <000	4.00 72535	22 22 22	EICAGSICL AIRE USEPA RSL	89000000 ug/kg 1000000 ug/kg	
Hexachiorobergene Hexachiorocycloperdadiene Bis/2-chloroethyllether	uaka uaka uaka	<000 <000	4.00 4.00	22 22 22	LOMCIEH S4UL 2014 USEPA RSL USEPA RSL	7500 uaka 250000 uaka 250000 uaka	
4-Chiorosniine Nitroberosne Isophorone	ug/kg ug/kg ug/kg	<100 <100	4.00 4.00	22 22 22	LOD USEPA RSL USEPA RSL	2000 ug/kg 2400000 ug/kg	
Hexachicrobutediene Hexachicrosthane But-thero/chthalate	ug/kg ug/kg ug/kg	<l00 <l00< td=""><td>400 400 400</td><td>22 22 22</td><td>LOMCIEH SAULs 2014 EIC/AGS/CL:AIRE EIC/AGS/CL:AIRE</td><td>31000 uaka 22000 uaka 940000000 uaka</td><td></td></l00<></l00 	400 400 400	22 22 22	LOMCIEH SAULs 2014 EIC/AGS/CL:AIRE EIC/AGS/CL:AIRE	31000 uaka 22000 uaka 940000000 uaka	
Distrivibrithalists Directly/ phthalate	uaka uaka	<000 <000	<.00	22 22	EIC/AGS/CL-AIRE LOD USEPA RSL	150000000 upkg LOD	
1.2.4-Trichlorobergene 1.3-Dichlorobergene Bergolb/fluoriethene	ugika ugika	<000 <000	4.00	22 22 22	LOMCIEH S4ULs 2014 LOMCIEH S4ULs 2014	220000 upkg LOD	
4-Chloropheru/pheru/erher VOCs	marka uarka	<000 <100	577.17 <lod< td=""><td>41 22</td><td>LOMCIEH S4LR x 2014 AGAC</td><td>44 mg/kg LOD</td><td></td></lod<>	41 22	LOMCIEH S4LR x 2014 AGAC	44 mg/kg LOD	
Viryl Chloride Trichloroethene (TCE) Carbon tetrachloride	ug/kg ug/kg ug/kg	<000 <000	4.00 4.00	22 22 22		LOD LOD 2900 ualka	
Chlorobenzene Chloroform	uaka uaka	<100 <100	4.00	22 22 22	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	56000 ug/kg 99000 ug/kg	
1.1.1.2-Tetrachiorosthane 1.1.1-Trichiorosthane 1.3-Dichiorobenzene 1.4-Dichiorobenzene	uaka uaka	400	400	22 22 22	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	110000 ug/kg 660000 ug/kg 30000 ug/kg	
1.4-Dictionsteriere Tetrachlorosthere (PCE) 1.1.2-Trichlorosthere 1.1.Dictionsterie	uaka uaka uaka	<000 <000	4.00 157 4.00	22 22 22	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014 EIC/AGS/CL-AIRE	4400000 ug/kg 19000 ug/kg 94000 ug/kg	
1.1-Dichloroethene (1.1 DCE) 1.1-Dichlorcoropene	uaka uaka uaka	400 400	4.00 4.00	22 22 22	EIC/AGS/CL-AIRE LOD LOD	280000 ug/kg LOD LOD	
1.2.3-Trichloroproteine 1.2.4-Trimetry/bergene 1.2-Dibromoethere	ug/kg ug/kg ug/kg	<000 <000	4.00 54 4.00	22 22 22	USEPA RSL EIC/AGS/CL:AIRE	110 ug/kg 26100 ug/kg 160 ug/kg	
1.2-Dichlorophensene 1.2-Dichlorophense 1.2-Dichlorophense	uaka uaka	<l00 <l00< td=""><td>4.00</td><td>22 22</td><td>LOMCIEH SAULs 2014 LOMCIEH SAULs 2014</td><td>2000000 upika 670 upika 3300 upika</td><td></td></l00<></l00 	4.00	22 22	LOMCIEH SAULs 2014 LOMCIEH SAULs 2014	2000000 upika 670 upika 3300 upika	
1.2-5-frimetrobergane 1.3-5-frimetrobergane 2.2-5-frimetropropria	uaka uaka	<000 <000	4.00 4.00		USEPA RSL USEPA RSL	12000000 ug/kg 2300000 ug/kg	
2.2-Dichloroproane 2-Chlorobbane 4-Chlorobbane	ug/kg ug/kg	<100 <100	4.00 4.00	22	LOD USEPA RSL USEPA RSL	23000000 upiko 23000000 upiko 23000000 upiko 97000 upiko	
Bromobenzene Bromochloromethene Bromodichloromethene	uoko	100		22			
	uoko uoko uoko uoko	<000 <000	4.00 4.00	22 22		630000 up/kg 1300 up/kg	
Bromoform cis-1-2-Dichlorosthene cis-1-3-Dichloropropene	uaka uaka uaka uaka uaka	400 400 400 400	400 400 400	22 22 22 22	USEPA RSL USEPA RSL EICAGS/CL-AIRE LOD	630000 upike 1300 upike 760000 upike LOD	
cis-1-2-Dichlorosthene cis-1-3-Dichlorostopene Dibnomonistrane 4-Isopropyllolusne Stemme	uoko uoko uoko uoko	4700 4700 4700 4700	400 400 400	22 22 22	USEPA RSL USEPA RSL EIC/AGS/CL-AIRE	630000 ug/kg 1300 ug/kg 760000 ug/kg	
cis-1-2-Dichlorosthene cis-1-3-Dichlorostopene Dhoromomethese 4-Isopropyltolusne Sowene train-1-3-Dichlorostopene	upkę upkę upkę upkę upkę upkę upkę upkę	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	400 400 400 400 400 400 400 400 400	22 22 22 22 22 22 22 22 22 22 22 22 22	JASEPA RSI. JASEPA RSI. EICHAGSCI. AIRE LOD LOD LOD LOD LOD LOD LOD EICHAGSCI. AIRE LOD LOD LOD LOD LOD LOD LOD LOD LOD LOD	630000 ug/kg 1300 ug/kg 760000 ug/kg LOD LOD 98000 ug/kg LOD 3300000 ug/kg LOD 102000 ug/kg	
risk -1-2-Christonesthere risk -1-3-Christonessens Decementaries -1-acceptableans Streen Streen 1-1-2-2-Centerlonestens Borromanias Chisrosthere Chisrosthere Chisrosthere	upke upke upke upke upke upke upke upke	400 400 400 400 400 400 400 400 400 400	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	22 22 22 22 22 22 22 22 22 22 22 22 22	ISSEPA PS. ISSEPA PS. ISSEPA PS. ICOCASCA JAME ICOCASCA JAME ICOCASCA JAME ICOCASCA JAME ICOCASCA JAME ICOCASCA JAME ICOCASCA JAME ICOCASCA JAME ICOCASCA JAME	630000 ug/kg 1300 ug/kg 1300 ug/kg 15000 ug/kg 1,000 28000 ug/kg 1,000 3300000 ug/kg 1,000 100000 ug/kg 270000 ug/kg 270000 ug/kg 270000 ug/kg 280000 ug/kg	
sin-1-3 Eichbersehren sin-1-3 Eichbersehren sin-1-3 Eichbersehren bhommenhane 4-1-lossenbrühren bhomme stran-1-3 Eichbersehren stran-1-3 Eichbersehren stran-1-3 Eichbersehren stran-1-3 Eichbersehren stran-1-3 Eichbersehren stran-1-3 Eichbersehren sonnentran- sonnentran- sonnentran- sonnentran- bersehren bersehren beite odhilt sonnentran- son Burthersene	upkę upkę upkę upkę upkę upkę upkę upkę	400 400 400 400 400 400 400 400 400 400	400 400 400 400 400 400 400 400 400 400	22 22 22 22 22 22 22 22 22 22 22 22 22	USEPA MS, USEPA MS, EPUASSCA, AME 1,000	63000 uplice 1300 uplice 1300 uplice 75000 uplice 75000 uplice 100 100 100 uplice 100 100 uplice 100 uplice 100 uplice 1000 uplice 1000 uplice 270000 uplice 270000 uplice 1000	
sic-1-3 Dichlorosthere sic-1-3 Dichlorosthere Dichlorosthere Honorosthere Honorosthere Honorosthere Dichlorosthere	uphe uphe uphe uphe uphe uphe uphe uphe	400 400 400 400 400 400 400 400	400 400 400 400 400 400 400 400 400 400	22 22 22 22 22 22 22 22 22 22 22 22 22	109FPA 855, 109FPA 855, 109FPA 855, 100FPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855,	63000 upke 1300 upke 76000 upke 76000 upke 100 100 100 100 330000 upke 100 1000 upke 100 1000 upke 1000 upke 1000 upke 1000 upke 1000 upke 1000 upke 1000 upke 1000 upke 1000 upke	
no. 1.3 Deblemenheur no. 1.5 Deblemenheur no. 1.5 Deblemenheur 1.5 Deblemenheur 1.5 Indeblemenheur 1.	upike upike	400 400 400 400 400 400 400 400	400 400 400 400 400 400 400 400 400 400	22 22 22 22 22 22 22 22 22 22 22 22 22	109FPA 855, 109FPA 855, 109FPA 855, 100FPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855, 100PPA 855,	63000 uples 1300 uples 76000 uples 76000 uples 100 100 100 100 100 100 100 100 100 10	
ini. 1-3 Ekikherenthere ini. 1-3 Ekikherenthere Tehenomenthere 1-benomenthe	uphe uphe uphe uphe uphe uphe uphe uphe	400 400 400 400 400 400 400 400	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	22 22 22 22 22 22 22 22 22 22 22 22 22	SISPA RS.	63000 upke 1300 upke 76000 upke 76000 upke 1400 upke 1400 upke 1400 upke 1400 upke 1400 upke 1400 upke 1400 upke 1400 upke 15000 upke 1500 upke 15000 upke 15000 upke 15000 upke 15000 upke 15000 upke 12000000 upke 1200000000 upke 1200000000 upke 120000000 upke 1200000000 upke 1200000000 upke 1200000000 upke 1200000000 upke 12000000000000000000000000000000000000	
and 1.5 Distributions from an 3.5 Distribution from a	upike upike	COD COD	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	22 22 22 22 22 22 22 22 22 22 22 22 22	SIRPA NS.	### ### #### #########################	
do 1.2 De l'Internationa de 1.3 De l'Internationa de 1.3 De l'Internationa de l'International de l'Internati	upike upike	4.000 4.000	4.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	22 22 22 22 22 22 22 22 22 22 22 22 22	SIRPA NS.	#30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #300000 uple #300000 uple #300000 uple #300000 uple #300000 uple #300000 uple #3000000 uple #300000 uple #300000 uple #3000000 uple #3000000 uple #3000000 uple #3000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #300000000 uple #30000000 uple #300000000 uple #3000000000 uple #300000000000000000000000000000000000	
10.1.2. Extraordiscs 10.1.2. Extraordiscs 1.0.1.2. Extraordiscs 1.	spike spike	4.000 4.000	4.000 4.000	22 22 22 22 22 22 22 22 22 22 22 22 22	SIRPERN BILL	#30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #30000 unbe #300000 unbe #300000 unbe #300000 unbe #300000 unbe #300000 unbe #3000000000 unbe #300000000000000000000000000000000000	
In 1.5 Microstrace The Control of t	upfine spirite	4.000 4.000	4.000 4.000	22 22 22 22 22 22 22 22 22 22 22 22 22	SEEP_A DE	#30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #300000 uple #300000 uple #300000 uple #300000 uple #300000 uple #300000 uple #3000000 uple #300000 uple #300000 uple #3000000 uple #3000000 uple #3000000 uple #3000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #300000000 uple #30000000 uple #300000000 uple #3000000000 uple #300000000000000000000000000000000000	
10. 1.5 De Chrombers 10. 1.5 De Chrombers 1. Annier Admiration	upike upike	4.000 4.000	4:00 4:00 4:00 4:00 4:00 4:00 4:00 4:00	22 22 22 22 22 22 22 22 22 22 22 22 22	SEEP_A DE	#30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #30000 uple #300000 uple #300000 uple #300000 uple #300000 uple #300000 uple #300000 uple #3000000 uple #300000 uple #300000 uple #3000000 uple #3000000 uple #3000000 uple #3000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #30000000 uple #300000000 uple #30000000 uple #300000000 uple #3000000000 uple #300000000000000000000000000000000000	

Capabilities on project:

Appendix E – Controlled Waters Screening Assessment

> Threshold Value
> 2x Threshold Value
> 10 x Threshold value

| Exploratory Hole | | | BH102 | BH108
 | BH108 | BH111
 | BH112 | HP01 | HP02 | WS204
 | WS205 | WS206
 | WS210 | WS211 | WS212 | WS214
 | WS220 | WS220 | WS22 |
|--|--|--|---
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| 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 |
| | | | Glacial |
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 | | | |
| Target | | | Sands and | 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 Gr |
| Strata Logs | | | Gravels
Gravel | Gravel
 | Gravel | Gravel
 | Gravel | Sand | Sand | Sand
 | Sand | Sand
 | Sand | Sand | Sand | Sand
 | Sand | Sand | Sano |
| Determinant
Metals | Unit | | |
 | |
 | | | |
 | |
 | | | |
 | | | |
| Arsenic
#N/A | ug/l
#N/A | <2.5
#N/A | <2.5
#N/A | #N/A
 | #N/A | #N/A
 | 5.9
#N/A | #N/A | #N/A | #N/A
 | <2.5
#N/A | #N/A
 | #N/A | 3.5
#N/A | #N/A | 3.9
#N/A
 | #N/A | 79.1
#N/A | #N/ |
| #N/A
Cadmium | #N/A
ug/l | #N/A
<0.5 | #N/A | #N/A
 | #N/A | #N/A
 | #N/A
<0.5 | #N/A | #N/A
<0.5 | #N/A
 | #N/A | #N/A
 | #N/A
<0.5 | #N/A
<0.5 | #N/A | #N/A
 | #N/A | #N/A | #N// |
| Hexavalent Chromium | mg/l | < 0.006 | 40.0 | 0.02
 | <0.006 | 0.006
 | 50.0 | <0.006 | <0.006 | 10.0
 | 50.0 | 40.0
 | <0.006 | 10.0 | 10.0 | 10.0
 | 10.0 | 10.0 | <0.006 |
| Chromium III
Chromium | ma/l
ug/l | <0.006
<1.5 | <1.5 | <0.006
25.4
 | 7.9 | <0.006
 | <1.5 | 6.1 | 6.5 | <1.5
 | | <1.5
 | | <1.5 | 3.6 | <1.5
 | 3.9 | | |
| Copper
Lead | ug/l
Ug/l | <7 | <7
<5 | <7 23
 | <7
<5 | <7
<5
 | <7
<5 | 10 | 14
10 | <7
 | | <7
<5
 | <5 | | <7 | <7
<5
 | | | <7
<5 |
| Mercury
Mercury | ug/l
ug/l | <1
<1 | <1 | <1
 | <1 | <1
 | <1 | | <1
<1 | <1
 | <1 | <1
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 | | <1 | <1 | <1
<1
 | <1 | <1 | <1 |
| Nickel | ug/l | <2 | <2 | 6
 | 5 |
 | <2 | 4 | 5 | <2
 | 4 | <2
 | <2 | <2 | <2 | <2
 | <2 | <2 | <2 |
| Selenium
Vanadium | ug/l
ua/l | <3
<1.5 | <3
10.2 | <3
 | <3 | <3
 | <3
4.6 | 39.8 | <3
22.6 | <3
3.7
 | 5.3 | 3.7
 | 5.1 | 3.5 | <3
6.8 | 5.2
 | <3
1.7 | <3
9.4 | ব্য |
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#N/A | #N/A
#N/A | #N/ |
| #N/A | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A | #N/ |
| činc
Boron | ug/l
ug/l | <3
<12 | <12 | 13
 | 15 | <12
 | 64 | 10
187 | 50 | <12
 | <12 | 23
 | 61 | | <3
<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/ |
| Total Cyanide | mg/l
#N/A | <0.01
#N/A | <0.01
#N/A | 0.08
#N/A
 | <0.01
#N/A | <0.01
#N/A
 | NA
#N/A | <0.01
#N/A | <0.01
#N/A | #N/A
 | <0.01
#N/A | <0.01
#N/A
 | <0.01
#N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A | <0.01
#N/ |
| #N/A | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A | #N/ |
| #N/A | #N/A
pH units | #N/A
<0.01 | #N/A
9.49 | #N/A
7.94
 | #N/A
8.61 | #N/A
7.57
 | #N/A
8.26 | #N/A
9.7 | #N/A
8.62 | #N/A
8.46
 | #N/A
10.99 | #N/A
8.59
 | #N/A
7.9 | #N/A
8.45 | #N/A
11.55 | #N/A
8.51
 | #N/A
8.56 | #N/A
8.25 | #N/ |
| #N/A
Dissolved Organic Carbon | #N/A
mg/l | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A
NA | #N/A | #N/A | #N/A
 | #N/A | #N/A
NA
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A | #N/ |
| #N/A | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A | #N/ |
| #N/A
#N/A | #N/A
#N/A | #N/A
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#N/A | #N/ |
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#N/A | #N/A
#N/A | #N/A
 | #N/A | #N/A
#N/A | #N/ |
| TPH compounds | ug/l | <1 | <1 | <1
 | 4 | 4
 | 4 | | | <1
 | 4 | <1
 | 4 | <1 | 4 | 4
 | <1 | <1 | 4 |
| lenzene
'oluene | ug/l | <2 | <2 | <2
 | <2 |
 | <1
<2 | <2 | <2 | <2
 | | <2
 | | <2 | | <2
 | <2 | <2 | <1
<2 |
| thylbenzene
-Xylene | ug/l
ug/l | <2
<2 | <2 | <2
 | <2
<2 | <2
<2
 | <2 | <2 | <2 | <2
<2
 | <2 | <2
 | <2 | <2 | <2
<2 | <2
 | <2 | <2 | <2
<2 |
| n/m-Xvlene
Methyl Tertiary Butyl Ether | ua/l
ug/l | | | <3
<1
 | <3
<1 | <3
<1
 | <3
<1 | <3 | <3 | <3
<1
 | |
 | | | <3
<1 | <3
<1
 | <3
<1 | <3
<1 | <3
<1 |
| Aliphatics
Ali_>C5-C6 | ug/l | | | <5
 | <5 | 45
 | <5 | | | <5
 | |
 | <5 | | 45 | 45
 | | | <5 |
| Ali_>C6-C9 | ug/l | <5 | <5 |
 | |
 | | | <5 | <5
 | <5 | <5
 | | | <5 | -5
 | | <5 | 45 |
| Ali_>C8-C11
Ali_>C10-C13 | ug/l
ug/l | <5
<5 | |
 | <5
<5 |
 | <5
<5 | | <5
<5 | <5
<5
 | | <5
<5
 | | <5
<5 | <5
<5 | <5
<5
 | <5
<5 | | ර
ර |
| Ni_>C12-C17
Ni >C16-C22 | ug/l
ug/l | <10 | |
 | <10
<10 | <10
 | | <10 | <10 | <10
<10
 | | <10
 | <10 | <10 | <10
<10 | <10
<10
 | | | <10
<10 |
| li >C21-C36
liphatics >C35-C44 | ua/l | <10
<10 | | <10
 | <10 | <10
 | | <10 | <10 | <10
<10
 | <10
<10 | <10
 | <10 | <10 | <10 | <10
 | 120 | <10 | <10
<10 |
| romatics | | | |
 | |
 | | | |
 | |
 | | | |
 | | | |
| urom_>EC5-EC7
urom_>EC7-EC9 | ug/l
ug/l | -5
-5 | <5 | <5
 | <5
<5 | ර
ර
 | <5 | <5 | <5 | <5
<5
 | <5 | <5
 | <5 | <5 | 6 | <5
<5
 | <5 | <5 | <5
<5 |
| Arom_>EC8-EC11
Arom_>EC10-EC13 | ug/l
ug/l | 45
45 | |
 | <5
<5 |
 | <5
<5 | | | <5
<5
 | |
 | | 45
45 | | 45
45
 | -d
-d | | <5
<5 |
| rom_>EC12-EC17 | ug/l | <10 | <10 | <10
 | <10 | <10
 | <10 | <10 | <10 | <10
 | <10 | <10
 | <10 | <10 | 10 | <10
 | 170 | <10 | <10
<10 |
| rom >EC16-EC22
rom_>EC21-EC36 | ug/l | <10
<10 | <10 |
 | <10 | <10
 | <10 | <10 | <10 | <10
<10
 | <10 | <10
 | <10 | | <10 | <10
<10
 | | <10 | <10 |
| romatics >EC35-EC44
PH (C8-C40) | ug/l
ug/l | <10
<10 | <10
<10 | <10
<10
 | <10
<10 | <10
<10
 | <10
<10 | <10
<10 | <10
<10 | <10
<10
 | <10
<10 | <10
<10
 | <10
<10 | <10
<10 | <10
85 | <10
 | 270
2560 | <10
<10 | <10
<10 |
| otal 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 |
| CB 101 #N/A | ug/l #N/A | <0.1
#N/A | NA
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/ |
| #N/A | #N/A | #N/A | #N/A | #N/A
 | #N/A
#N/A | #N/A
#N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A
#N/A | #N/A
 | #N/A
#N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A | #N/ |
| PCB 118
#N/A | ua/l
#N/A | <0.1
#N/A | NA
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/ |
| #N/A
PCB 138 | #N/A
ug/l | #N/A
<0.1 | #N/A
NA | #N/A
<0.1
 | #N/A | #N/A
 | #N/A
<0.1 | #N/A | #N/A
<0.1 | #N/A
<0.1
 | #N/A | #N/A
 | #N/A
<0.1 | #N/A
<0.1 | #N/A
<0.1 | #N/A
 | #N/A
<0.1 | #N/A
<0.1 | #N/ |
| PCB 153 #N/A | ug/l
#N/A | <0.1
#N/A | NA
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/ |
| #N/A | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A | #N/ |
| #N/A
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#N/A
 | #N/A
#N/A | #N/A
#N/A | #N/A
#N/A | #N/A
 | #N/A | #N/A
#N/A | #N/. |
| PCB 180 #N/A | ua/l
#N/A | <0.1
#N/A | NA
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A | <0.1
#N/A
 | <0.1
#N/A | <0.1
#N/A | <0.1
#N/ |
| PCB 28
PCB 52 | l/gu
l/gu | <0.1 | NA
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
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#N/A | #N/A
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#N/A | #N/A
 | #N/A | #N/A
#N/A | #N/ |
| #N/A | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | #N/A
 | #N/A | #N/A
 | #N/A | #N/A | #N/A | |
 | men | #N/A | |
| Phenol Phenol | 21671 | | |
 | |
 | | | |
 | |
 | | mer. | mier. | #N/A
 | #N/A | #IN/A | #N/ |
| 2-Chlorophenol | ua/l | <1 | <1 | <1
 | <1 | <1
 | <1 | | | <1
 | <1 | <1
 | <1 | <20 | <1 | #N/A
 | <1 | <1 | #N/.
#N/. |
| | ua/l
ug/l | <1 | <1 | <1
 | <1
<1 |
 | <1 | <1 | <1 | <1
 | <1 | <1
 | <1 | <20
<20 | ব
ব | ব
ব
 | <1
<1 | <1
<1 | #N/. |
| 2-Methylphenol
2,4-Dichlorophenol | ug/l
ug/l
ug/l | <1
<0.5
<0.5 | <1
<0.5
<0.5 | <1
<0.5
<0.5
 | <1
<1
<0.5
<0.5 | <0.5
<0.5
 | <1
<0.5
<0.5 | <1
<0.5
<0.5 | <1
<0.5
<0.5 | <1
<0.5
<0.5
 | <1
<0.5
<0.5 | <1
<0.5
<0.5
 | <1
<0.5
<0.5 | <20
<20
<10.0
<10.0 | <1
<1
<0.5
<0.5 | <1
<1
<0.5
<0.5
 | <1
<1
<0.5
<0.5 | <1
<1
<0.5
<0.5 | #N/.
<1
<1
<0.5
<0.5 |
| 2,4-Dichlorophenol
2-Nitrophenol
2.4.5-Trichlorophenol | ua/l
ug/l
ug/l
ug/l
ug/l
ua/l | <1
<0.5
<0.5
<0.5
<0.5 | <1
<0.5
<0.5
<0.5
<0.5 | <1
<0.5
<0.5
<0.5
<0.5
 | <1
<0.5
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<0.5 | <0.5
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 | <1
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<0.5
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<0.5
<0.5
 | <1
<0.5
<0.5
<0.5
<0.5 | <0.5
<0.5
<0.5
<0.5
 | <1
<0.5
<0.5
<0.5
<0.5 | <20
<20
<10.0
<10.0
<10.0
<10.0 | <1
<1
<0.5
<0.5
<0.5
<0.5 | <1
<1
<0.5
<0.5
<0.5
<0.5
 | <1
<1
<0.5
<0.5
<0.5
<0.5 | <1
<1
<0.5
<0.5
<0.5
<0.5 | #N// <1 <0.5 <0.5 <0.5 <0.5 <0.5 |
| 2,4-Dichlorophenol
2-Nitrophenol | ua/l
ug/l
ug/l
ug/l
ua/l | <0.5
<0.5
<0.5 | <1
<0.5
<0.5
<0.5
<0.5
<0.5
<0.5 | <1
<0.5
<0.5
<0.5
<0.5
<0.5
<0.5
 | <1
<0.5
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<0.5 | <0.5
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 | <1
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<0.5 | <1
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<0.5 | <1
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 | <1
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<0.5 | <1
<0.5
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<0.5
<0.5
<0.5
 | <1
<0.5
<0.5
<0.5
<0.5
<0.5
<0.5 | <20
<20
<10.0
<10.0
<10.0
<10.0
<10.0
<10.0 | <1
<1
<0.5
<0.5
<0.5
<0.5 | <1
<1
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 | <1
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<0.5 | <1
<1
<0.5
<0.5
<0.5
<0.5
<0.5 | #N/.
<1
<0.5
<0.5
<0.5 |
| (4-Dichlorophenol -Nitrophenol -(4-5-Trichlorophenol -Chloro-3-methylphenol -Nitrophenol -Nitrophenol | Nou
Topu
Topu
Topu
Topu
Topu
Topu
Topu
To | <1
<0.5
<0.5
<0.5
<0.5
<0.5
<1.5
<1 | <1
<0.5
<0.5
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 | <1 <1 <0.5 <0.5 <0.5 <0.5 <0.5 <1.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0 | <0.5
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<1.5 | <1
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<10 | <1
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<10 | <20
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<20 | <1
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Determinant	Unit	Minimum	Maximum	Count	Source	AGAC	es of AECOI GACs
Arsenic #N/A	ug/l #N/A	<lod <lod< td=""><td>79.1</td><td>18</td><td>WS Regs 2010 (Eng/Wal) WHO DWG 2011</td><td>10 ug/l #N/A #N/A</td><td></td></lod<></lod 	79.1	18	WS Regs 2010 (Eng/Wal) WHO DWG 2011	10 ug/l #N/A #N/A	
#N/A #N/A Cadmium	#N/A ug/l	<tod <tod< td=""><td>#N/A <lod< td=""><td>56</td><td>WHO DWG 2011 WHO DWG 2011 WFD England/Wales. 2015 - AA-EQS Inl</td><td>#N/A #N/A #N/A #N/A 0.08 ug/l</td><td></td></lod<></td></tod<></tod 	#N/A <lod< td=""><td>56</td><td>WHO DWG 2011 WHO DWG 2011 WFD England/Wales. 2015 - AA-EQS Inl</td><td>#N/A #N/A #N/A #N/A 0.08 ug/l</td><td></td></lod<>	56	WHO DWG 2011 WHO DWG 2011 WFD England/Wales. 2015 - AA-EQS Inl	#N/A #N/A #N/A #N/A 0.08 ug/l	
Hexavalent Chromium Chromium III	mg/l mg/l	<lod <lod< td=""><td>0.02</td><td>8</td><td>WFD England/Wales. 2015 - Freshwater WFD England/Wales. 2015 - Freshwater</td><td>0.0034 mg/l 0.0047 mg/l</td><td></td></lod<></lod 	0.02	8	WFD England/Wales. 2015 - Freshwater WFD England/Wales. 2015 - Freshwater	0.0034 mg/l 0.0047 mg/l	
Chromium Copper	ug/l ug/l	<lod <lod< td=""><td>25.4 22</td><td>18</td><td>WFD England/Wales. 2015 - Freshwater WFD England/Wales. 2015 - Freshwater</td><td>4.7 ug/l 1 ug/l</td><td></td></lod<></lod 	25.4 22	18	WFD England/Wales. 2015 - Freshwater WFD England/Wales. 2015 - Freshwater	4.7 ug/l 1 ug/l	
.ead Mercury	ug/l ug/l	<lod< td=""><td><lod 23<="" td=""><td>18</td><td>WFD England/Wales. 2015 - AA-EQS Inl LOD</td><td>1.2 ug/l LOD</td><td></td></lod></td></lod<>	<lod 23<="" td=""><td>18</td><td>WFD England/Wales. 2015 - AA-EQS Inl LOD</td><td>1.2 ug/l LOD</td><td></td></lod>	18	WFD England/Wales. 2015 - AA-EQS Inl LOD	1.2 ug/l LOD	
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Selenium /anadium	ug/l ug/l	<lod <lod< td=""><td><lod 39.8</lod </td><td>18</td><td>WS Regs 2010 (Eng/Wal) WFD England/Wales. 2015 - Freshwater</td><td>10 ug/l 10.9 ug/l</td><td></td></lod<></lod 	<lod 39.8</lod 	18	WS Regs 2010 (Eng/Wal) WFD England/Wales. 2015 - Freshwater	10 ug/l 10.9 ug/l	
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#N/A Zinc	#N/A ug/l	<lod< td=""><td>#N/A 10</td><td>56</td><td>WHO DWG 2011 SEPA WAT-SG-53 Fresh EQS - AA - 201</td><td>#N/A #N/A 20 ug/l</td><td></td></lod<>	#N/A 10	56	WHO DWG 2011 SEPA WAT-SG-53 Fresh EQS - AA - 201	#N/A #N/A 20 ug/l	
Soron Non Metals	ug/l	<lod< td=""><td>187</td><td>18</td><td>WS Regs 2010 (Eng/Wal)</td><td>1000 ug/l</td><td></td></lod<>	187	18	WS Regs 2010 (Eng/Wal)	1000 ug/l	
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#N/A #N/A	#N/A #N/A	<lod <lod< td=""><td>#N/A #N/A</td><td>56 56</td><td>WFD England/Wales. 2015 - Freshwater LOD</td><td>#N/A #N/A LOD</td><td></td></lod<></lod 	#N/A #N/A	56 56	WFD England/Wales. 2015 - Freshwater LOD	#N/A #N/A LOD	
#N/A	#N/A pH units	<lod <lod< td=""><td>#N/A</td><td>56</td><td>LOD LOD</td><td>LOD</td><td></td></lod<></lod 	#N/A	56	LOD LOD	LOD	
#N/A Dissolved Organic Carbon	#N/A mg/l	<tod <tod< td=""><td>#N/A</td><td>56</td><td>LOD LOD</td><td>LOD</td><td></td></tod<></tod 	#N/A	56	LOD LOD	LOD	
#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td></td></lod<>	#N/A	56	LOD	LOD	
#N/A #N/A #N/A	#N/A #N/A #N/A	<lod <lod< td=""><td>#N/A #N/A</td><td>56</td><td>LOD LOD</td><td>LOD LOD</td><td></td></lod<></lod 	#N/A #N/A	56	LOD LOD	LOD LOD	
#N/A	#N/A	<lod< td=""><td>#N/A</td><td></td><td>LOD</td><td>LOD</td><td></td></lod<>	#N/A		LOD	LOD	
TPH compounds lenzene	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>WS Regs 2010 (Eng/Wal)</td><td>1 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WS Regs 2010 (Eng/Wal)</td><td>1 ug/l</td><td></td></lod<>	18	WS Regs 2010 (Eng/Wal)	1 ug/l	
oluene thylbenzene	ug/l ug/l	<lod <lod< td=""><td><lod <lod< td=""><td>18</td><td>WFD England/Wales. 2015 - Freshwater SEPA WAT-SG-53 Fresh EQS - AA - 201</td><td>74 ug/l 20 ug/l</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18</td><td>WFD England/Wales. 2015 - Freshwater SEPA WAT-SG-53 Fresh EQS - AA - 201</td><td>74 ug/l 20 ug/l</td><td></td></lod<></lod 	18	WFD England/Wales. 2015 - Freshwater SEPA WAT-SG-53 Fresh EQS - AA - 201	74 ug/l 20 ug/l	
-Xylene /m-Xylene	ug/l ug/l	<lod< td=""><td><lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>190 ug/l 190 ua/l</td><td></td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>190 ug/l 190 ua/l</td><td></td></lod<></lod 	18	USEPA RSL (tapwater) USEPA RSL (tapwater)	190 ug/l 190 ua/l	
ethyl Tertiary Butyl Ether	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>WHO DWG 2011</td><td>15 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WHO DWG 2011</td><td>15 ug/l</td><td></td></lod<>	18	WHO DWG 2011	15 ug/l	
L>C5-C6 L>C6-C9	ug/l ug/l	<lod< td=""><td><lod <lod< td=""><td>18</td><td>WHO Petroleum DWG 2008 WHO Petroleum DWG 2008</td><td>15000 ug/l 15000 ug/l</td><td>Ė</td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18</td><td>WHO Petroleum DWG 2008 WHO Petroleum DWG 2008</td><td>15000 ug/l 15000 ug/l</td><td>Ė</td></lod<></lod 	18	WHO Petroleum DWG 2008 WHO Petroleum DWG 2008	15000 ug/l 15000 ug/l	Ė
li_>C8-C11 li_>C10-C13	ug/l ug/l	<tod <tod< td=""><td><lod< td=""><td>18 18</td><td>WHO Petroleum DWG 2008 WHO Petroleum DWG 2008</td><td>300 ug/l 300 ug/l</td><td>LΞ</td></lod<></td></tod<></tod 	<lod< td=""><td>18 18</td><td>WHO Petroleum DWG 2008 WHO Petroleum DWG 2008</td><td>300 ug/l 300 ug/l</td><td>LΞ</td></lod<>	18 18	WHO Petroleum DWG 2008 WHO Petroleum DWG 2008	300 ug/l 300 ug/l	LΞ
i_>C12-C17 i >C16-C22	ug/l ug/l	<lod <lod< td=""><td><lod <lod< td=""><td>18</td><td>WHO Petroleum DWG 2008 LOD</td><td>300 ug/l LOD</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18</td><td>WHO Petroleum DWG 2008 LOD</td><td>300 ug/l LOD</td><td></td></lod<></lod 	18	WHO Petroleum DWG 2008 LOD	300 ug/l LOD	
i >C21-C36 liphatics >C35-C44	ug/l	<lod <lod< td=""><td>120</td><td>18</td><td>LOD AGAC</td><td>LOD</td><td></td></lod<></lod 	120	18	LOD AGAC	LOD	
rom_>EC5-EC7	ug/l	<lod <lod< td=""><td><lod< td=""><td></td><td>WS Regs 2010 (Eng/Wal)</td><td>1 ug/l</td><td></td></lod<></td></lod<></lod 	<lod< td=""><td></td><td>WS Regs 2010 (Eng/Wal)</td><td>1 ug/l</td><td></td></lod<>		WS Regs 2010 (Eng/Wal)	1 ug/l	
rom_>EC7-EC9 rom_>EC8-EC11	ug/l ug/l	<lod <lod< td=""><td><lod <lod< td=""><td>18</td><td>WFD England/Wales. 2015 - Freshwater WHO Petroleum DWG 2008</td><td>74 ug/l 300 ug/l</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18</td><td>WFD England/Wales. 2015 - Freshwater WHO Petroleum DWG 2008</td><td>74 ug/l 300 ug/l</td><td></td></lod<></lod 	18	WFD England/Wales. 2015 - Freshwater WHO Petroleum DWG 2008	74 ug/l 300 ug/l	
rom_>EC10-EC13 rom >EC12-EC17	ug/l ug/l	<lod <lod< td=""><td>45 170</td><td>18</td><td>WHO Petroleum DWG 2008 WHO Petroleum DWG 2008</td><td>90 ug/l 90 ug/l</td><td></td></lod<></lod 	45 170	18	WHO Petroleum DWG 2008 WHO Petroleum DWG 2008	90 ug/l 90 ug/l	
rom >EC16-EC22 rom_>EC21-EC36	ug/l	<lod< td=""><td>790 1330</td><td></td><td>WHO Petroleum DWG 2008 WHO Petroleum DWG 2008</td><td>90 ug/l 90 ug/l</td><td></td></lod<>	790 1330		WHO Petroleum DWG 2008 WHO Petroleum DWG 2008	90 ug/l 90 ug/l	
romatics >EC35-EC44 PH (C8-C40)	ug/l	<lod <lod< td=""><td>270 2560</td><td>18</td><td>WHO Petroleum DWG 2008 LOD</td><td>90 ug/l LOD</td><td></td></lod<></lod 	270 2560	18	WHO Petroleum DWG 2008 LOD	90 ug/l LOD	
PCBs	ug/l						
otal 7 PCBs CB 101	ug/l ug/l	<lod <lod< td=""><td>#N/A #N/A</td><td>19</td><td>USEPA RSL (tapwater) LOD</td><td>0.044 ug/l LOD</td><td></td></lod<></lod 	#N/A #N/A	19	USEPA RSL (tapwater) LOD	0.044 ug/l LOD	
#N/A #N/A	#N/A #N/A	<lod< td=""><td>#N/A #N/A</td><td>56</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>#N/A #N/A #N/A #N/A</td><td></td></lod<>	#N/A #N/A	56	USEPA RSL (tapwater) USEPA RSL (tapwater)	#N/A #N/A #N/A #N/A	
CB 118	#N/A	<lod< td=""><td>#N/A #N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<>	#N/A #N/A	56	USEPA RSL (tapwater)	#N/A #N/A	
#N/A CB 138	#N/A ug/l	<lod <lod< td=""><td>#N/A #N/A</td><td>19</td><td>USEPA RSL (tapwater) LOD</td><td>#N/A #N/A LOD</td><td></td></lod<></lod 	#N/A #N/A	19	USEPA RSL (tapwater) LOD	#N/A #N/A LOD	
CB 153 #N/A	#N/A	<lod <lod< td=""><td>#N/A #N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<></lod 	#N/A #N/A	56	USEPA RSL (tapwater)	#N/A #N/A	
#N/A #N/A	#N/A	<lod <lod< td=""><td>#N/A #N/A</td><td>56</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>#N/A #N/A #N/A #N/A</td><td></td></lod<></lod 	#N/A #N/A	56	USEPA RSL (tapwater) USEPA RSL (tapwater)	#N/A #N/A #N/A #N/A	
#N/A CB 180	#N/A ug/l	<lod <lod< td=""><td>#N/A #N/A</td><td>56 19</td><td>USEPA RSL (tapwater) LOD</td><td>#N/A #N/A LOD</td><td></td></lod<></lod 	#N/A #N/A	56 19	USEPA RSL (tapwater) LOD	#N/A #N/A LOD	
#N/A CB 28	#N/A ug/l	<lod <lod< td=""><td>#N/A #N/A</td><td>19</td><td>USEPA RSL (tapwater) LOD</td><td>#N/A #N/A LOD</td><td></td></lod<></lod 	#N/A #N/A	19	USEPA RSL (tapwater) LOD	#N/A #N/A LOD	
CB 52 #N/A	ug/l #N/A	<lod< td=""><td>#N/A #N/A</td><td>56</td><td>LOD USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td>\vdash</td></lod<>	#N/A #N/A	56	LOD USEPA RSL (tapwater)	#N/A #N/A	\vdash
#N/A #N/A	#N/A #N/A	<lod <lod< td=""><td>#N/A #N/A</td><td>56</td><td>USEPA RSL (tapwater) LOD</td><td>#N/A #N/A LOD</td><td></td></lod<></lod 	#N/A #N/A	56	USEPA RSL (tapwater) LOD	#N/A #N/A LOD	
Phenol henol	ua/l	<lod< td=""><td><lod< td=""><td>18</td><td>WFD England/Wales. 2015 - Freshwater</td><td>7.7 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WFD England/Wales. 2015 - Freshwater</td><td>7.7 ug/l</td><td></td></lod<>	18	WFD England/Wales. 2015 - Freshwater	7.7 ug/l	
Chlorophenol Methylphenol	ug/l ug/l	<lod <lod< td=""><td><lod <lod< td=""><td>18</td><td>LOD LOD</td><td>0.1 ug/l LOD</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18</td><td>LOD LOD</td><td>0.1 ug/l LOD</td><td></td></lod<></lod 	18	LOD LOD	0.1 ug/l LOD	
4-Dichlorophenol	ug/l	<tod <tod< td=""><td><lod <lod< td=""><td>18</td><td>AGAC AGAC</td><td>0.3 ug/l LOD</td><td></td></lod<></lod </td></tod<></tod 	<lod <lod< td=""><td>18</td><td>AGAC AGAC</td><td>0.3 ug/l LOD</td><td></td></lod<></lod 	18	AGAC AGAC	0.3 ug/l LOD	
-Nitrophenol 4.5-Trichlorophenol -Chloro-3-methylohenol	ua/l ua/l	<tod <tod< td=""><td><lod< td=""><td>18</td><td>AGAC AGAC AGAC</td><td>1200 ug/l</td><td></td></lod<></td></tod<></tod 	<lod< td=""><td>18</td><td>AGAC AGAC AGAC</td><td>1200 ug/l</td><td></td></lod<>	18	AGAC AGAC AGAC	1200 ug/l	
Chloro-3-methylphenol Methylphenol	ug/l ug/l	<lod< td=""><td><lod <lod< td=""><td>18</td><td>LOD</td><td>1400 ug/l LOD</td><td></td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18</td><td>LOD</td><td>1400 ug/l LOD</td><td></td></lod<></lod 	18	LOD	1400 ug/l LOD	
Nitrophenol 4-Dimethylphenol	ug/l ug/l	<lod< td=""><td><lod <lod< td=""><td>18</td><td>LOD LOD</td><td>LOD</td><td></td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18</td><td>LOD LOD</td><td>LOD</td><td></td></lod<></lod 	18	LOD LOD	LOD	
4,6-Trichlorophenol	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>AGAC</td><td>200 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>AGAC</td><td>200 ug/l</td><td></td></lod<>	18	AGAC	200 ug/l	
Poly Aromatic Hydrocarbons cenaphthene	ug/l	<lod< td=""><td>0.14</td><td></td><td>AECOM DWG (WHO method)</td><td>18 ug/l</td><td></td></lod<>	0.14		AECOM DWG (WHO method)	18 ug/l	
cenaphthylene nthracene	ug/l ug/l	<lod< td=""><td>0.13 0.32</td><td>12 12</td><td>AECOM DWG (WHO method) WFD England/Wales. 2015 - AA-EQS Inl.</td><td>18 ug/l 0.1 ug/l</td><td>Ł</td></lod<>	0.13 0.32	12 12	AECOM DWG (WHO method) WFD England/Wales. 2015 - AA-EQS Inl.	18 ug/l 0.1 ug/l	Ł
enzo(a)anthracene enzo(a)pyrene	ug/l ug/l	<lod <lod< td=""><td>1.58</td><td>12</td><td>AECOM DWG (WHO method) WFD England/Wales. 2015 - AA-EQS Inl.</td><td>3.5 ug/l 0.00017 ug/l</td><td></td></lod<></lod 	1.58	12	AECOM DWG (WHO method) WFD England/Wales. 2015 - AA-EQS Inl.	3.5 ug/l 0.00017 ug/l	
enzo(k)fluoranthene enzo(k)fluoranthene	ug/l	<tod <tod< td=""><td>0.91 3.24</td><td></td><td>WFD England/Wales. 2015 - MAC-EQS III WFD England/Wales. 2015 - MAC-EQS I</td><td>0.017 ug/l 0.017 ug/l</td><td></td></tod<></tod 	0.91 3.24		WFD England/Wales. 2015 - MAC-EQS III WFD England/Wales. 2015 - MAC-EQS I	0.017 ug/l 0.017 ug/l	
enzo(b)fluoranthene enzo(ghi)perylene	ug/l ug/l	<lod <lod< td=""><td>2.33 0.65</td><td>12</td><td>WFD England/Wales. 2015 - MAC-EQS I WFD England/Wales. 2015 - MAC-EQS I</td><td>0.017 ug/l 0.0082 ug/l</td><td></td></lod<></lod 	2.33 0.65	12	WFD England/Wales. 2015 - MAC-EQS I WFD England/Wales. 2015 - MAC-EQS I	0.017 ug/l 0.0082 ug/l	
hrysene benzo(ah)anthracene	ug/l ug/l	<lod <lod< td=""><td>2.28 0.16</td><td>12</td><td>AECOM DWG (WHO method) AECOM DWG (WHO method)</td><td>7 ug/l 0.07 ug/l</td><td></td></lod<></lod 	2.28 0.16	12	AECOM DWG (WHO method) AECOM DWG (WHO method)	7 ug/l 0.07 ug/l	
uoranthene uorene	ug/l ug/l	<tod <tod< td=""><td>2.93 0.11</td><td>12</td><td>WFD England/Wales. 2015 - AA-EQS Inl. AECOM DWG (WHO method)</td><td>0.0063 ug/l 12 ug/l</td><td></td></tod<></tod 	2.93 0.11	12	WFD England/Wales. 2015 - AA-EQS Inl. AECOM DWG (WHO method)	0.0063 ug/l 12 ug/l	
deno(123cd)pyrene	ug/l	<lod< td=""><td>0.11</td><td>12</td><td>LOD</td><td>LOD</td><td></td></lod<>	0.11	12	LOD	LOD	
aohthalene henanthrene	ug/l	<lod <lod< td=""><td>0.1 0.83 3.74</td><td>11</td><td>WFD England/Wales. 2015 - AA-EQS Inl AECOM DWG (WHO method)</td><td>2 ug/l 4 ug/l</td><td></td></lod<></lod 	0.1 0.83 3.74	11	WFD England/Wales. 2015 - AA-EQS Inl AECOM DWG (WHO method)	2 ug/l 4 ug/l	
rene #N/A	ug/l #N/A	<lod< td=""><td>#N/A</td><td>56</td><td>AECOM DWG (WHO method) LOD</td><td>9 ug/l LOD</td><td></td></lod<>	#N/A	56	AECOM DWG (WHO method) LOD	9 ug/l LOD	
SVOCs	ug/l	<lod< td=""><td>18.64</td><td>12</td><td>AGAC</td><td>#\$1/A ==\$1/A</td><td></td></lod<>	18.64	12	AGAC	#\$1/A ==\$1/A	
#N/A entachlorophenol	#N/A ug/l	<lod <lod< td=""><td>#N/A <lod< td=""><td>18</td><td>WFD England/Wales. 2015 - AA-EQS Inl</td><td>#N/A #N/A 0.4 ug/l</td><td></td></lod<></td></lod<></lod 	#N/A <lod< td=""><td>18</td><td>WFD England/Wales. 2015 - AA-EQS Inl</td><td>#N/A #N/A 0.4 ug/l</td><td></td></lod<>	18	WFD England/Wales. 2015 - AA-EQS Inl	#N/A #N/A 0.4 ug/l	
#N/A 4-Dinitrotoluene	#N/A ug/l	<lod <lod< td=""><td>#N/A <lod< td=""><td>56 18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<></td></lod<></lod 	#N/A <lod< td=""><td>56 18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<>	56 18	USEPA RSL (tapwater) USEPA RSL (tapwater)	#N/A #N/A	
6-Dinitrotoluene Chloronaphthalene	ug/l ug/l	<lod <lod< td=""><td><lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>0.048 ug/l 750 ug/l</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>0.048 ug/l 750 ug/l</td><td></td></lod<></lod 	18	USEPA RSL (tapwater) USEPA RSL (tapwater)	0.048 ug/l 750 ug/l	
Methylnaphthalene Ntroaniline	ug/l ug/l	<lod< td=""><td><lod 4<="" td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>164200 ug/l 190 ug/l</td><td>ΗĒ</td></lod></td></lod<>	<lod 4<="" td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>164200 ug/l 190 ug/l</td><td>ΗĒ</td></lod>	18	USEPA RSL (tapwater) USEPA RSL (tapwater)	164200 ug/l 190 ug/l	ΗĒ
Nitroaniline Methylphenol	ug/l	<lod <lod< td=""><td><lod <lod< td=""><td>18 18</td><td>LOD USEPA RSL (tapwater)</td><td>LOD 1900 ug/l</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18 18</td><td>LOD USEPA RSL (tapwater)</td><td>LOD 1900 ug/l</td><td></td></lod<></lod 	18 18	LOD USEPA RSL (tapwater)	LOD 1900 ug/l	
Nitroaniline Nitrophenol	ug/l ug/l	<lod< td=""><td><lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) LOD</td><td>3.8 ug/l LOD</td><td>Ł</td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) LOD</td><td>3.8 ug/l LOD</td><td>Ł</td></lod<></lod 	18	USEPA RSL (tapwater) LOD	3.8 ug/l LOD	Ł
zobenzene #N/A	#N/A	<lod <lod< td=""><td><lod #N/A</lod </td><td>18 56</td><td>USEPA RSL (tapwater) LOD</td><td>0.12 ug/l LOD</td><td></td></lod<></lod 	<lod #N/A</lod 	18 56	USEPA RSL (tapwater) LOD	0.12 ug/l LOD	
arbazole -n-butyl phthalate	ug/l ug/l	<lod <lod< td=""><td><lod 8<="" td=""><td>18</td><td>LOD SEPA WAT-SG-53 Fresh EQS - AA - 201</td><td>LOD 8 ug/l</td><td></td></lod></td></lod<></lod 	<lod 8<="" td=""><td>18</td><td>LOD SEPA WAT-SG-53 Fresh EQS - AA - 201</td><td>LOD 8 ug/l</td><td></td></lod>	18	LOD SEPA WAT-SG-53 Fresh EQS - AA - 201	LOD 8 ug/l	
-n-Octyl phthalate	ug/l	<lod< td=""><td><lod 1.8</lod </td><td>18</td><td>SEPA WAT-SG-53 Fresh EQS - AA - 201 USEPA RSL (tapwater)</td><td>20 ug/l</td><td></td></lod<>	<lod 1.8</lod 	18	SEPA WAT-SG-53 Fresh EQS - AA - 201 USEPA RSL (tapwater)	20 ug/l	
benzofuran exachlorobenzene	ug/l ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>WFD England/Wales. 2015 - MAC-EQS I</td><td>7.9 ug/l 0.05 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WFD England/Wales. 2015 - MAC-EQS I</td><td>7.9 ug/l 0.05 ug/l</td><td></td></lod<>	18	WFD England/Wales. 2015 - MAC-EQS I	7.9 ug/l 0.05 ug/l	
exachlorocyclopentadiene s/2-chloroethyllether	ua/l	<lod< td=""><td><lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL</td><td>0.41 ua/l 2500 ua/l</td><td></td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater) USEPA RSL</td><td>0.41 ua/l 2500 ua/l</td><td></td></lod<></lod 	18	USEPA RSL (tapwater) USEPA RSL	0.41 ua/l 2500 ua/l	
s(2-ethylhexyl) phthalate #N/A	ug/l #N/A	<lod <lod< td=""><td><lod #N/A</lod </td><td>56</td><td>WFD England/Wales. 2015 - AA-EQS Inl USEPA RSL (tapwater)</td><td>1.3 ug/l #N/A #N/A</td><td></td></lod<></lod 	<lod #N/A</lod 	56	WFD England/Wales. 2015 - AA-EQS Inl USEPA RSL (tapwater)	1.3 ug/l #N/A #N/A	
Nitrophenol Chloroaniline	ug/l ug/l	<tod <tod< td=""><td><lod <lod< td=""><td>18 18</td><td>LOD</td><td>LOD</td><td>E</td></lod<></lod </td></tod<></tod 	<lod <lod< td=""><td>18 18</td><td>LOD</td><td>LOD</td><td>E</td></lod<></lod 	18 18	LOD	LOD	E
	ug/l ug/l	<lod <lod< td=""><td><lod <lod< td=""><td>18</td><td>WHO DWG 2011 USEPA RSL (tapwater)</td><td>30 ug/l 78 ug/l</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18</td><td>WHO DWG 2011 USEPA RSL (tapwater)</td><td>30 ug/l 78 ug/l</td><td></td></lod<></lod 	18	WHO DWG 2011 USEPA RSL (tapwater)	30 ug/l 78 ug/l	
itrobenzene ophorone		<lod< td=""><td><lod< td=""><td>18</td><td>WHO DWG 2011</td><td>0.6 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WHO DWG 2011</td><td>0.6 ug/l</td><td></td></lod<>	18	WHO DWG 2011	0.6 ug/l	
ophorone exachlorobutadiene	ug/l			10		0.33 110//	
ophorone exachlorobutadiene exachloroethane #N/A #N/A	ug/l ug/l #N/A #N/A	<lod <lod< td=""><td><lod #N/A #N/A</lod </td><td>56</td><td>USEPA RSL (tapwater) LOD WFD England/Wales, 2015 - AA-EQS Inl</td><td>0.33 ua/l LOD #N/A #N/A</td><td></td></lod<></lod 	<lod #N/A #N/A</lod 	56	USEPA RSL (tapwater) LOD WFD England/Wales, 2015 - AA-EQS Inl	0.33 ua/l LOD #N/A #N/A	
	ua/l #N/A	<lod< td=""><td><lod #N/A</lod </td><td>56 56 18</td><td>LOD</td><td>LOD</td><td></td></lod<>	<lod #N/A</lod 	56 56 18	LOD	LOD	

Exploratory Hole			BH102	BH108	BH108	BH111	BH112	HP01	HP02	WS204	WS205	WS206	WS210	WS211	WS212	WS214	WS220	W\$220	WS223
Depth			2 Glacial	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 #N/A	#N/A	#N/A	Sands and Gravels #N/A	Made Ground #N/A	Made Ground #N/A	Made Ground #N/A	Made Ground	Made Ground #N/A	Made Ground	Made Ground #N/A	Made Ground #N/A	Made Ground #N/A	Made Ground #N/A	Made Ground #N/A	Made Ground #N/A	Made Ground #N/A	Made Ground	Made Ground	Made Ground #N/A
1,2,4-Trichlorobenzene #N/A #N/A	ug/l #N/A #N/A	<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	<3 #N/A #N/A	#N/A #N/A	<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	<3 #N/A #N/A	<3 #N/A #N/A
#N/A #N/A 1,3-Dichlorobenzene	#N/A #N/A ug/l	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A	#N/A #N/A	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <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 #N/A #N/A	#N/A #N/A	<0.5 #N/A #N/A	<0.5 #N/A #N/A	<0.5 #N/A #N/A	<0.5 #N/A #N/A	<0.5 #N/A #N/A	#N/A #N/A	#N/A #N/A	<0.5 #N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	<10.0 #N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A	<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
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
Carbon tetrachloride Chlorobenzene	Ngu Ngu Ngu	<2	থ থ	<2 <2	<3 <2 <2	<2 <2	থ থ	<3 <2 <2	<3 <2 <2	<3 <2 <2	43 42 42	<3 <2 <2	<2	<3 <2 <2	3 2 2	<3 <2 <2	<2 <2	<2	<3 <2 <2
1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane	ug/l ug/l ua/l	<2 <2	थ थ थ			<2 <2	<2 <2	<2 <2 <2	<2 <2 <2		42 42 42	<2 <2 <2	<2	<2 <2 <2	42 42 42	<2 <2 <2	<2	<2 <2	<2 <2 <2
1,4-Dichlorobenzene Tetrachloroethene (PCE)	ug/l ug/l ug/l	<3	ব ব ব			<3	<3	<3	<3 <3		ଣ ଶ			ব ব ব			<3	<3 <3	ও ও
1,1-Dichloroethane 1,1-Dichloroethene (1,1 DCE)	ug/l ug/l ug/l ug/l	<3		<3		<3		<3	<3 <3 <3		ব ব ব		<3		র র র		<3 <3	থ থ	ଫ ଫ ଫ ଫ
1.2.4-Trimethylbenzene	ua/l ua/l ug/l	<3	থ থ	<3 <3	<3 <3	<3	<3 <3	থ থ থ	<3 <3 <2	<3	এ এ এ	<3	<3 <3	-ସ -ସ	ও ও ও	ය ය	<3 <3	<3 <3	ପ ପ ପ ପ
1,2-Dichlorobenzene 1,2-Dichloroethane	ug/l ug/l ug/l	<3	<3 <2	<3	<3	<3 <2	<3 <2	<3	<3 <2 <2	<3 <2	3 2	<3 <2	<3 <2	<3	<3 <2	<3	<3 <2	<3 <2	3 2 2
1,3,5-Trimethylbenzene 1,3-Dichloropropane	ug/l ug/l	<3 <2	थ थ र	<3 <2 <1	<3 <2 <1	ও ও ব	<3 <2 <1	<3 <2 <1	<3 <2 <1	<3 <2	3 2 1	<3 <2	<3 <2	<3 <2	<3 <2	-3 -2	<3 <2	<3 <2 <1	<3 <2 <1
2-Chlorotoluene 4-Chlorotoluene Bromobenzene	υ <u>α</u> Λ υ <u>α</u> Λ υ <u>α</u> Λ	43 43 42	<3 <3 <2	ব্র ব্র ব্	এ এ থ	থ থ	द्ध द्ध द्य	-এ -এ -থ	<3 <3 <2	<3 <3 <2	এ এ থ	ব ব ব	<3 <3 <2	ব ব ব	3 3 2	ব ব	<3 <3 <2	<3 <3 <2	-3 -3 -2
Bromodichloromethane Bromoform	Ngu Ngu Ngu	<2 <2	थ थ थ	<2 <2	<2 <2	<2 <2	<2 <2	<2 <2 <2	<2 <2 <2	<2 <2	2 2 2	<2 <2	<2	<2	<2	<2	<2 <2	<2 <2	<2 <2 <2
cis-1-3-Dichloropropene	ug/l ug/l ug/l #N/A		<3 <2 <3 #N/A					<3 <2 <3 #N/A	<3 <2 <3 #N/A	<3 <2 <3 #N/A	<3 <2 <3 #N/A	<3 <2 <3 #N/A		<3 <2 <3 #N/A	<3 <2 <3 #N/A	<3 <2 <3 #N/A	<2 <3		<3 <2 <3 #N/A
4-Isopropyltoluene Styrene	ua/l ug/l ug/l	3 <2 <2	43 42	<3 <2	3 <2	<3	<3 <2 <2	3 <2 <2	<3 <2 <2	<3 <2	3 -2	3 <2	<3 <2	<3 <2 <2	3 -2	43 42	<3 <2	<3	43 42 42
1,1,2,2-Tetrachloroethane Bromomethane	ug/l ug/l ug/l	<4 <1 <3	<4 <1 <3	<4 <1 <3	<4 <1 <3	<4		<4 <1 <3	<4 <1 <3	<4 <1 <3	<4 <1 <3	<4 <1 <3	<4	<4 <1 <3	<4 <1 <3	<1 <3	<4	<4	<4 <1 <3
#N/A Chloromethane Isopropylbenzene	#N/A ug/l ug/l	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3		#N/A <3 <3	#N/A <3	#N/A <3 <3	<3	#N/A <3 <3	#N/A <3 <3
sec-Butylbenzene tert-Butylbenzene	ηδη ηδη ηδη		<2 <3 <3	<3		থ থ			<2 <3 <3	<2 <3 <3	-2 -3 -3	<2 <3 <3	<3 <3	<2 <3 <3		<2 <3 <3	<3 <3	<3	43 43
Dichloromethane (DCM)	ug/l ug/l ug/l #N/A	<3 <3 <3 #N/A	<3 <3 #N/A	<3	<3 <3 #N/A	<3	<3 <3 <3 #N/A	<3 <3 <3 #N/A	<3 <3 <3 #N/A	<3 <3 #N/A	<3 <3 <3 #N/A	<3 <3 #N/A	<3	<3 <3 #N/A	<3 <3 <3 #N/A	<3 <3 #N/A	<3	<3	<3 <3 <3 #N/A
#N/A 1.2.3-Trichlorobenzene	#N/A ua/l ug/l	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3	#N/A	#N/A <3	#N/A <3 <3	#N/A <3	#N/A	#N/A	#N/A <3 <3	#N/A <3 <3	#N/A <3 <3
1,2-Dibromo-3-chloropropane #N/A #N/A	ug/l #N/A #N/A	<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	<2 #N/A #N/A	#N/A #N/A	<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	<2 #N/A #N/A	<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 ug/l	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <3	#N/A #N/A <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 <3	#N/A #N/A <3	#N/A #N/A <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
Propylbenzene #N/A #N/A	#N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A	#N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A	#N/A #N/A	#N/A #N/A	<3 #N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A	<3 #N/A #N/A
1,2-Dibromo-3-chloropropane Others #N/A	ug/I #N/A	<2 #N/A	<2 #N/A	<2 #N/A	<2 #N/A	<2 #N/A	<2 #N/A	#N/A	<2 #N/A	<2 #N/A	#N/A	<2 #N/A	<2 #N/A	#N/A	<2 #N/A	<2 #N/A	<2 #N/A	<2 #N/A	<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/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A
#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A	#N/A #N/A #N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Carbon Interfection	Determinant	Unit	Minimum	Maximum	Count	Source	AGAC	Exceedances of AECOM GACs
1.9. Telephone		221/4	100	******			100	
## 186 160	1,2,4-Trichlorobenzene	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>1.1 ug/l</td><td>1</td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>1.1 ug/l</td><td>1</td></lod<>	18	USEPA RSL (tapwater)	1.1 ug/l	1
1.00 1.00	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td>56</td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
MADE	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	
## 1995 1995	1,3-Dichlorobenzene	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td>56</td></lod<></td></lod<>	<lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	18	LOD	LOD	56
## 1500 STORESTONE CONTROL 1500 STORESTONE			<lod <lod< td=""><td></td><td>56 56</td><td>LOD</td><td></td><td>56</td></lod<></lod 		56 56	LOD		56
Column			<lod< td=""><td></td><td></td><td></td><td></td><td></td></lod<>					
## 15 ## 15	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>AECOM (modified LQM/CIEH S4ULs)</td><td>#N/A #N/A</td><td>56</td></lod<>	#N/A	56	AECOM (modified LQM/CIEH S4ULs)	#N/A #N/A	56
March Marc	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	
## 1. Proceedings	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td>56</td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
## 1. A 1. A 1. A 1. A 1. A 1. A 1. A 1.	#N/A	#N/A	I <lod< td=""><td>#N/A</td><td>56</td><td>WHO DWG 2011</td><td>#N/A #N/A</td><td>56</td></lod<>	#N/A	56	WHO DWG 2011	#N/A #N/A	56
## 150 Fig. 1, 100 Fig. 1,		#N/A #N/A	<lod< td=""><td></td><td>56 56</td><td>WHO DWG 2011 USEPA RSL (tapwater)</td><td></td><td>56</td></lod<>		56 56	WHO DWG 2011 USEPA RSL (tapwater)		56
## 1.00 ## 1.0			<lod< td=""><td></td><td>56</td><td>USEPA RSL (tapwater)</td><td></td><td></td></lod<>		56	USEPA RSL (tapwater)		
Mathematics	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td>56</td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
Validation Val	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td></td></lod<>	#N/A	56	LOD	LOD	
Colorate Colorate	VUUS							
Charlesteened	Trichloroethene (TCE)		<lod< td=""><td><lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<>	18	LOD	LOD	
1.1.2 First photographics	Carbon tetrachloride Chlorobenzene		<lod <lod< td=""><td><lod <lod< td=""><td>18 18</td><td>WS Regs 2010 (Eng/Wal) WHO DWG 2011</td><td>3 ug/l 300 ug/l</td><td></td></lod<></lod </td></lod<></lod 	<lod <lod< td=""><td>18 18</td><td>WS Regs 2010 (Eng/Wal) WHO DWG 2011</td><td>3 ug/l 300 ug/l</td><td></td></lod<></lod 	18 18	WS Regs 2010 (Eng/Wal) WHO DWG 2011	3 ug/l 300 ug/l	
1.50c/attentument 1.50	Chloroform	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>WFD England/Wales. 2015 - AA-EQS Inl</td><td>2.5 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WFD England/Wales. 2015 - AA-EQS Inl</td><td>2.5 ug/l</td><td></td></lod<>	18	WFD England/Wales. 2015 - AA-EQS Inl	2.5 ug/l	
	1.1.1-Trichloroethane	ua/l	<lod< td=""><td><lod< td=""><td>18</td><td>WHO DWG 2011</td><td>2000 ua/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WHO DWG 2011</td><td>2000 ua/l</td><td></td></lod<>	18	WHO DWG 2011	2000 ua/l	
11-06/2006/000-000-000-000-000-000-000-000-000-	1 4-Dichlorohenzene	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>WHO DWG 2011</td><td>300 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WHO DWG 2011</td><td>300 ug/l</td><td></td></lod<>	18	WHO DWG 2011	300 ug/l	
11-06/2006/000-000-000-000-000-000-000-000-000-	1,1,2-Trichloroethane	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>0.28 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>0.28 ug/l</td><td></td></lod<>	18	USEPA RSL (tapwater)	0.28 ug/l	
11.054999090000000000000000000000000000000	1.1-Dichloroethene (1.1 DCE)						2.7 ug/l LOD	
12-08containum	1.1-Dichloropropene	ug/l	<lod< td=""><td><lod< td=""><td>18 18</td><td>LOD USEPA PSI (tanwater)</td><td>LOD</td><td></td></lod<></td></lod<>	<lod< td=""><td>18 18</td><td>LOD USEPA PSI (tanwater)</td><td>LOD</td><td></td></lod<>	18 18	LOD USEPA PSI (tanwater)	LOD	
1.5 Emergeneers	1.2.4-Trimethylbenzene	ua/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>26100 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>26100 ug/l</td><td></td></lod<>	18	USEPA RSL (tapwater)	26100 ug/l	
1.5 Emergeneers	1,2-Dichlorobenzene	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>WHO DWG 2011</td><td>1000 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WHO DWG 2011</td><td>1000 ug/l</td><td></td></lod<>	18	WHO DWG 2011	1000 ug/l	
1.5 Trient-Biscone oil 1.60 1	1,2-Dichloropropane	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>WHO DWG 2011</td><td>40 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>WHO DWG 2011</td><td>40 ug/l</td><td></td></lod<>	18	WHO DWG 2011	40 ug/l	
2-00-center 10-00 1-00	1,3,5-Trimethylbenzene 1,3-Dichloropropane	ug/l ug/l	<lod< td=""><td><lod <lod< td=""><td>18 18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>120 ug/l 370 ug/l</td><td></td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18 18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td>120 ug/l 370 ug/l</td><td></td></lod<></lod 	18 18	USEPA RSL (tapwater) USEPA RSL (tapwater)	120 ug/l 370 ug/l	
Content	2,2-Dichloropropane	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<>	18	LOD	LOD	
Suppose	4-Chlorotoluene	ua/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>250 ua/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>250 ua/l</td><td></td></lod<>	18	USEPA RSL (tapwater)	250 ua/l	
Bigrordon Secretarion Se	Bromochloromethane	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>83 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>83 ug/l</td><td></td></lod<>	18	USEPA RSL (tapwater)	83 ug/l	
Sch-2-Debinsterland School	Bromodichloromethane Bromoform		<lod< td=""><td><lod <lod< td=""><td>18 18</td><td>LOD</td><td></td><td></td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18 18</td><td>LOD</td><td></td><td></td></lod<></lod 	18 18	LOD		
## 1	cis-1-2-Dichloroethene							
6-biographiculature	Dibromomethane	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>8 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>8 ug/l</td><td></td></lod<>	18	USEPA RSL (tapwater)	8 ug/l	
United Color Col	4-Isopropvitoluene	ua/l	<lod< td=""><td><lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<>	18	LOD	LOD	
Semontariane	trans-1-3-Dichloropropene	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<>	18	LOD	LOD	
Section Company Comp	Bromomethane	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>0.076 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>0.076 ug/l</td><td></td></lod<>	18	USEPA RSL (tapwater)	0.076 ug/l	
Checombinate	#N/A		<lod< td=""><td></td><td>56</td><td>LOD</td><td>21000 ug/l LOD</td><td>56</td></lod<>		56	LOD	21000 ug/l LOD	56
Debtomolishumonthrane sqr st. COD st.	Chloromethane		<lod< td=""><td><lod< td=""><td></td><td>LOD</td><td></td><td></td></lod<></td></lod<>	<lod< td=""><td></td><td>LOD</td><td></td><td></td></lod<>		LOD		
See Supplementary See Supplement S	Dichlorodifluoromethane sec-Butylbenzene		<lod <lod< td=""><td></td><td>18 18</td><td>USEPA RSL (tapwater) USEPA RSL (tapwater)</td><td></td><td></td></lod<></lod 		18 18	USEPA RSL (tapwater) USEPA RSL (tapwater)		
Debtommarker (DCM)	tert-Butylbenzene	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>690 ug/l</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>690 ug/l</td><td></td></lod<>	18	USEPA RSL (tapwater)	690 ug/l	
#NA	Dichloromethane (DCM)	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<>	18	LOD	LOD	
1.2-Tichichothecores	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td></td></lod<>	#N/A	56	LOD	LOD	
1.2-Discontino-3-chilosoprograme	#N/A 1.2.3-Trichlorobenzene	#N/A ug/l	<lod< td=""><td></td><td>18</td><td>USEPA RSL (tapwater)</td><td>7 ug/l</td><td>56</td></lod<>		18	USEPA RSL (tapwater)	7 ug/l	56
##NA #NA #NA 4.CD #NA 55 (USEPA RS). (Ingrester) ##NA #NA 19 5	1,2,4-Trichlorobenzene 1,2-Dibromo-3-chloropropane		<lod< td=""><td><lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>1.1 ug/l 1 ug/l</td><td></td></lod<></lod </td></lod<>	<lod <lod< td=""><td>18</td><td>USEPA RSL (tapwater)</td><td>1.1 ug/l 1 ug/l</td><td></td></lod<></lod 	18	USEPA RSL (tapwater)	1.1 ug/l 1 ug/l	
## BNA	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	
#NA #NA 6.00 #NA 56 USEPA RS, (taywater) #NA #NA 1.00 #NA 6.00 #NA	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
BNA	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td>56</td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	56
## BNA #NA 4.00 ##A 55 LOD LOD 55 ##NA #NA 4.00 ##A 55 LOD LOD 59 ##NA #NA 4.00 ##A 4.00 ##A 55 LOD LOD 59 ##NA #NA 4.00 ##A 4.00 ##A 55 LOD LOD 59 ##NA #NA 4.00 ##A 4.00 ##A 55 LOD LOD 59 ##NA #NA 4.00 ##A 55 LOD LOD 59 #	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>USEPA RSL (tapwater)</td><td>#N/A #N/A</td><td></td></lod<>	#N/A	56	USEPA RSL (tapwater)	#N/A #N/A	
## 8/10 ## 19/10 ## 1	Dibromochloromethane	ug/l	<lod< td=""><td><lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<></td></lod<>	<lod< td=""><td>18</td><td>LOD</td><td>LOD</td><td></td></lod<>	18	LOD	LOD	
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td></td><td></td></lod<>	#N/A	56	LOD		
BNA	#N/A Propylbenzene		<lod< td=""><td>#N/A <lod< td=""><td>56 18</td><td>USEPA RSL (tapwater)</td><td></td><td>56</td></lod<></td></lod<>	#N/A <lod< td=""><td>56 18</td><td>USEPA RSL (tapwater)</td><td></td><td>56</td></lod<>	56 18	USEPA RSL (tapwater)		56
12-Ditromo-3-chicoproposes UgF 4-LOD 4-LOD 18	#N/A				56	LOD		
BNA	1,2-Dibromo-3-chloropropane		<lod< td=""><td></td><td>18</td><td>COD</td><td>1 200</td><td></td></lod<>		18	COD	1 200	
BNA		#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
BNA	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56 56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56 56	LOD	LOD	56
SPA			<lod <lod< td=""><td></td><td>56 56</td><td>LOD</td><td></td><td>56</td></lod<></lod 		56 56	LOD		56
## ## ## ## ## ## ## ## ## ## ## ## ##			<lod< td=""><td></td><td>56</td><td>LOD</td><td></td><td></td></lod<>		56	LOD		
## 8NA #NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.CD #PAA 55 LOD LOD 55 MAA 8NA 4.C	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## BNA # BNA 4.CD ##VA 56 LOD LOD 55 ##NA #BNA 4.CD ##VA 56 LOD LOD 55 ##NA BNA 4.CD ##VA 56 LOD LO	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
BNA	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A #N/A		<lod< td=""><td></td><td>56 56</td><td>LOD</td><td>LOD</td><td></td></lod<>		56 56	LOD	LOD	
## ## ## ## ## ## ## ## ## ## ## ## ##			<lod< td=""><td></td><td>56</td><td>LOD</td><td></td><td>56</td></lod<>		56	LOD		56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
BNA	#N/A	#N/A	4L0D	#N/A	56	LOD		56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>58</td></lod<>	#N/A	56	LOD	LOD	58
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
BNA	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56 56</td><td>LOD</td><td>LOD</td><td></td></lod<>	#N/A	56 56	LOD	LOD	
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
## ## ## ## ## ## ## ## ## ## ## ## ##	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
BNA			<lod< td=""><td></td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>		56	LOD	LOD	56
#NA #NA 4.CD #NA 56.LDD LDD 59 #NA #NA 4.CD #NA 56.LDD LDD 59 #NA #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59 #NA #NA 4.CDD #NA 56.LDD LDD 59	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
8N/A	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
#NA #NA 4.CD #NA 56.LDD LOD 55 #NA #NA 4.CD #NA 56.LDD LOD 55 #NA #NA 4.CD #NA 56.LDD LOD 55 #NA #NA 4.CD #NA 56.LDD LOD 55	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>58</td></lod<>	#N/A	56	LOD	LOD	58
#N/A #N/A d_OD #N/A 56 LOD LOD 56 #N/A #N/A d_OD #N/A 56 LOD LOD 56	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
	#N/A	#N/A	<lod< td=""><td>#N/A</td><td>56</td><td>LOD</td><td>LOD</td><td>56</td></lod<>	#N/A	56	LOD	LOD	56
			<lod< td=""><td></td><td></td><td></td><td></td><td></td></lod<>					

Capabilities on project:

Appendix F – Groundwater Screening Assessment

Stockport Bus Station Groundwater Testing

> Threshold Value > 2x Threshold Value

>10 x Threshold value

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 Determinant	Unit		Sandstone							
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 Chromium III	mg/l mg/l									
Chromium Copper	ug/l ug/l	<1.5 <7	<1.5 <7	<1.5 <7	<1.5 <7	<1.5 <7	<1.5 <7	<1.5 <7	<1.5 <7	<1.5 <7
Lead	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Mercury Mercury	ug/l ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1 <1
Nickel Selenium	ug/l ug/l	<2 <3	<3	<2	<3	<3 <3	<2	<2	<3	<2
Vanadium	ug/l	<1.5	1.8	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Zinc Boron	ug/l ug/l	<3 <12	5 73	15 57	<3 146	<3 61	<3 62	<3	<3	<3 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 Sulphide	pH units 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		-		2					_
Total Organic Carbon Sulphate	mg/l mg/l	<2 <0.05	92.76	<2 71.35	<2 169.71	<2 62.72	<2 38.55	<2 25.69	49 31.61	<2 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 o-Xylene	ug/l 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 <0.5	<0.5 <0.5
p/m-Xylene Methyl Tertiary Butyl Ether	ug/l	<1 <0.1	<1 <0.1	<1	<1 <0.1	<1	<1 <0.1	<1 <0.1	<1	<1
Aliphatics	ug/l					<0.1			<0.1	<0.1
Ali_>C5-C6 Ali_>C6-C9	ug/l ug/l	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5
Ali >C8-C11 Ali >C10-C13	ug/l	<5 <5	<5 <5	<5	<5	<5	<5	<5 <5	<5	<5
Ali_>C10-C13 Ali_>C12-C17	ug/l ug/l	<10	<10	<10	<5 <10	<5 <10	<5 <10	<10	1280	<5 <10
Ali_>C16-C22 Ali_>C21-C36	ug/l ug/l	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10
Aliphatics >C35-C44	ug/l	<10	<10	<10	<10	<10	<10	<10	1299	<10
Arom_>EC5-EC7	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arom_>EC7-EC9 Arom_>EC8-EC11	ug/l 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	<10	<10	<10	<10	<10	<10	<10	80	<10
Arom_>EC12-EC17 Arom_>EC16-EC22	ug/l ug/l	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10
Arom_>EC21-EC36 PCBS	ug/l	<10	<10	<10	<10	<10	<10	<10	80	<10
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 PCB 118	ug/l 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
PCB 138 PCB 153	ug/l 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
PCB 153 PCB 180	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB 28 PCB 52	ug/l 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
Phenol				1	1				4	
Phenol 2-Chlorophenol	ug/l 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 2-Nitrophenol	ug/l 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 <0.5	<0.5 <0.5
2,4,5-Trichlorophenol 4-Chloro-3-methylphenol	ug/l 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 <0.5	<0.5 <0.5
4-Methylphenol	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-Nitrophenol 2,4-Dimethylphenol	ug/l ug/l	<10 <1	<10 <1	<10 <1	<10 <1	<10	<10 <1	<10 <1	<10 <1	<10 <1
2,4,6-Trichlorophenol	ug/l	<1	<1		<1	<1	<1	<1	<1	<1
Poly Aromatic Hydrocarbons										
Acenaphthene Acenaphthylene	ug/l ug/l	<0.013 <0.013	<0.013 <0.013	<0.013 <0.013	<0.013 <0.013	<0.013 <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 Benzo(a)pyrene	ug/l ug/l	<0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.015 <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 Benzo(b)fluoranthene	ug/l ug/l	<0.018 <0.01	<0.018 <0.01	<0.018 <0.01	<0.018 <0.01	<0.018 <0.01	<0.018 <0.01	<0.018 <0.01	<0.018 <0.01	<0.018 <0.01
Benzo(ghi)perylene Chrysene	ug/l ug/l	<0.011 <0.011	<0.011 <0.011	<0.011 <0.011	<0.011 <0.011	<0.011 <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 Fluorene	ug/l ug/l	<0.012 <0.014	<0.012 <0.014	<0.012 <0.014	<0.012 <0.014	<0.012 <0.014	<0.012 <0.014	<0.012 <0.014	<0.012 <0.014	<0.012 <0.014
Indeno(123cd)pyrene Naphthalene	ug/l ug/l	<0.011 <0.1	<0.011 <0.1	<0.011 <0.1	<0.011 <0.1	<0.011 <0.1	<0.011 <0.1	<0.011 <0.1	<0.011	<0.011 <0.1
Phenanthrene	ug/l	<0.011	0.02	0.02	<0.011	<0.011	<0.011	<0.011	0.02	<0.011
Pyrene PAH 17 Total	ug/l ug/l	<0.013 <0.195	<0.013 <0.195	<0.195	<0.013 <0.195	<0.013 <0.195	<0.013 <0.195	<0.013 <0.195	<0.195	<0.013 <0.195
SVOCs Pentachlorophenol		<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-Dinitrotoluene	ug/l ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dinitrotoluene 2-Chloronaphthalene	ug/l ug/l	<1	<1		<1	<1	<1	<1	<1	<1
2-Methylnaphthalene	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Nitroaniline 3-Nitroaniline	ug/l ug/l	<1 <1	<1 <1		<1 <1	<1	<1	<1	<1 <1	<1 <1
4-Methylphenol 4-Nitroaniline	ug/l ug/l	<1 <0.5	<1 <0.5	<1	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5
4-Nitrophenol	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10
Azobenzene Carbazole	ug/l 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 <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 Dibenzofuran	ug/l ug/l	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5
Hexachlorobenzene Hexachlorocyclopentadiene	ug/l ug/l	<1	<1 <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

	Name	Date
Author:	WH	
Checked By:		
Approved By:		

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

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 Hexachlorobutadiene	ug/l ug/l	<0.5	<0.5 <3	<0.5	<0.5	<0.5	<0.5 <3	<0.5	<0.5	<0.5
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 ug/l	<1 <1	<1	<1	<1	<1	<1	<1	<1	<1
4-Bromophenylphenylether 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 Trichloroethene (TCF)	ug/l ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 <3	<0.1
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	<3 <3
1,4-Dichlorobenzene Tetrachloroethene (PCE)	ug/l 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 1,2-Dibromoethane	ug/l ug/l	<3	<3	<3	<3	<3 2	<3	<3	<2	<3
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 4-Chlorotoluene	ug/l 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 <2	<3	<3	<3 <2	<3
cis-1-3-Dichloropropene Dibromomethane	ug/l 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 <3	<1 <3	<1	<1	<1	<1	<1	<1
Chloroethane Chloromethane	ug/l ug/l	<3	<3	<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) Trichlorofluoromethane	ug/l ug/l	<3	<3	<3	<3	<3 <3	<3	<3	<3	<3 <3
1,2,3-Trichlorobenzene	ug/l	<3	<3	<3	<3	<3	<3	<3	<3	<3
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 1,2-Dibromo-3-chloropropane	ug/l ug/l	<3	<3	<3	<3	<3 <2	<3	<3	<3 <2	<3
Others	ugn	\ <u></u>	\ <u></u>	~~	~~	~~	~_	~_	~	~
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 m/n grocol	ug/l ug/l	<0.5	<0.5 <0.5							
m/p-cresol 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

2-Nitrophenol	Source AGAC	1
4-Chloroaniline	SILOD	1
4-Chloroaniline	SILOD	1
4-Chloroaniline	SILOD	1
Nitrobenzene	SUSEPA RSL (tapwater) 78 ug/1	1
Hexachlorobutadiene	SWHO DWG 2011	1
Hexachloroethane	SUSEPA RSL (tapwater) 0.33 ug/l	1
Buylbenzyl phthalate	9 WFD EnglandWales. 2015 - Freshwater	1
Dimethyl phthalate	SEPA WAT-SG-53 Fresh EQS - AA - 201 200 ug/l QLD QD QD QD QD QD QD Q	1
Dimethyl phthalate	SLOD	1
4-Bromophenylphenylether	SUSEPA RSL (tapwater) 13 ug/l	1
1.2.4-Trichlorobenzene	SUSEPA RSL (tapwater)	1
1.3-Dichlorobenzene	9 LOD LOD 9 LOD 59 ug/l 9 AGAC LOD 100 100 100 100 100 100 100 100 100 10	1
Bis 2-chloroethoxy methane Ug/l <lod <lod="" <lod<="" td="" =""><td> SUSEPA RSL (tapwater) S9 ug/l </td><td>1</td></lod>	SUSEPA RSL (tapwater) S9 ug/l	1
4-Chlorophenylphenylether ug/l cLOD	9 AGAC LOD 9 LOD LOD 10D 10D 10D 10D 10D 10D 10D 10D 10D 10	1
Vivin/ Chloride	SUDD	1
Trichloroethene (TCE)	SUDD	1
Carbon tetrachloride	9 WS Regs 2010 (Eng/Wal) 3 ug/1 9 WHO DWG 2011 300 ug/1 9 WFD England/Wales, 2015 - AA-EQS Inis 2.5 ug/1 9 USEPA RSL (tapwater) 2.50 ug/1 9 USEPA RSL (tapwater) 2000 ug/1 9 USEPA RSL (tapwater) 300 ug/1 9 UWFD DWG 2011 300 ug/1 9 UWFD England/Wales, 2015 - AA-EQS Inis 10 ug/1 9 USEPA RSL (tapwater) 2.28 ug/1 9 USEPA RSL (tapwater) 2.7 ug/1 9 USEPA RSL (tapwater) 1.00 ug/1 9 USEPA RSL (tapwater) 2.00075 ug/1 9 USEPA RSL (tapwater) 26100 ug/1 9 USEPA RSL (tapwater) 26100 ug/1 9 USEPA RSL (tapwater) 26100 ug/1 9 USEPA RSL (tapwater) 26100 ug/1 9 USEPA RSL (tapwater) 26100 ug/1 9 USEPA RSL (tapwater) 0.4 ug/1 9 USEPA WSL (tapwater) 1000 ug/1 9 USEPA WSL (tapwater) 10	1
Chlorobenzene	SWHO DWG 2011 300 ug/l	1
Chloroform	9 WFD EnglandWates. 2015 - AA-EQS Init 2.5 ug1 9 USEPA RSL (tapwater) 2000 ug/1 9 UND WHO DWG 2011 2000 ug/1 9 UND WHO DWG 2011 300 ug/1 9 WFD EnglandWates. 2015 - AA-EQS Init 10 ug/1 9 WFD EnglandWates. 2015 - AA-EQS Init 10 ug/1 9 USEPA RSL (tapwater) 2.28 ug/1 9 USEPA RSL (tapwater) 2.7 ug/1 9 U.OD LOD 1.0D 1.0D 1.0D 1.0D 1.0D 1.0D 1.0D 1.0	1
1,1,1,2-Tetrachloroethane	9 USEPA RSL (tapwater) 0.57 ug/l 9 WHO DWG 2011 2000 ug/l 9 LOD LOD 9 WHO DWG 2011 3000 ug/l 9 WFD England/Males. 2015 - AA-EQS Ink 10 ug/l 9 USEPA RSL (tapwater) 0.28 ug/l 9 LOD LOD 1 LOD 9 USEPA RSL (tapwater) 2.7 ug/l 9 LOD LOD 9 USEPA RSL (tapwater) 0.00075 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	1
1,1,1-frichloroethane	9 WHO DWG 2011 2000 ug/l 9 LOD 100 100 100 100 ug/l 9 WHO DWG 2011 300 ug/l 9 WES PA RSL (tapwater) 2.7 ug/l 9 USEPA RSL (tapwater) 2.7 ug/l 9 USEPA RSL (tapwater) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	
1.3-Dichlorobenzene	9 LOD LOD 300 ug/l 300 ug/l 300 ug/l 9 WHO DWG 2011 300 ug/l 9 WFD England/Wales. 2015 - AA-EQS Inla 10 ug/l 9 USEPA RSL (tapwater) 0.28 ug/l 9 USEPA RSL (tapwater) 2.7 ug/l 9 LOD LOD LOD LOD LOD SUSEPA RSL (tapwater) 0.00075 ug/l 9 USEPA RSL (tapwater) 0.00075 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	
1.4-Dichlorobenzene	SWHO DWG 2011 300 upf	
Tetrachloroethene (PCE)	9 WFD England/Wales. 2015 - AA-EQS Inla 10 ug/l 9 USEPA RSL (tapwater)	
1.1.2-Trichloroethane	9 USEPA RSL (tapwater) 0.28 ug/l 9 USEPA RSL (tapwater) 2.7 ug/l 9 LOD LOD 9 LOD LOD 9 LOD LOD 9 USEPA RSL (tapwater) 0.00075 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	
1.1-Dichloroethane	9 USEPA RSL (tapwater) 2.7 ug/l 9 LOD LOD 9 LOD LOD 9 LOD LOD 9 LOD LOD 9 USEPA RSL (tapwater) 0.00075 ug/l 9 USEPA RSL (tapwater) 28100 ug/l 9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	
1.1-Dichloroethene (1.1 DCE)	9 LOD LOD 9 LOD LOD USEPA RSL (tapwater) 0.00075 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	
1.1-Dichloropropene ug/l <t.od< td=""> <t.od< td=""> 1.2-2-Trindthylbenzene ug/l <t.od< td=""> <t.od< td=""> 1.2-2-Trindthylbenzene ug/l <t.od< td=""> <t.od< td=""> 1.2-Dichloropenzene ug/l <t.od< td=""> <t.od< td=""> 1.2-Dichloropenzene ug/l <t.od< td=""> <t.od< td=""> 1.2-Dichloropenzene ug/l <t.od< td=""> <t.od< td=""> 1.2-Dichloropropane ug/l <t.od< td=""> <t.od< td=""> 1.3-Dichloropropane ug/l <t.od< td=""> <t.od< td=""> 2.2-Dichloropropane ug/l <t.od< td=""> <t.od< td=""> 2.2-Dichloropropane ug/l <t.od< td=""> <t.od< td=""> 2.2-Dichloropropane ug/l <t.od< td=""> <t.od< td=""> 4-Chlorotoluene ug/l <t.od< td=""> <t.od< td=""> 4-Chlorotoluene ug/l <t.od< td=""> <t.od< td=""> Bromochloromethane ug/l <t.od< td=""> <t.od< td=""> Bromochloromethane ug/l <t.od< td=""> <t.od< td=""> Bromodofinomethane ug/l <t.od< td=""> <t.od< td=""> usi-1-2-Dichloropropene ug/</t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<>	9 USEPA RSL (tapwater) 0.00075 ug/l 9 USEPA RSL (tapwater) 26100 ug/l 9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	
1.2.3-Trichloropropane	9 USEPA RSL (tapwater) 26100 ug/l 9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	
1,2,4-frimethylbenzene	9 WHO DWG 2011 0.4 ug/l 9 WHO DWG 2011 1000 ug/l	
1.2 Dichlorobenzene	9 WHO DWG 2011 1000 ug/l	
1,2-Dichloroethane	9 WHO DWG 2011 1000 ug/l 9 WS Regs 2010 (Eng/Wal) 3 ug/l	
1.2-Dichloropropane	9 WS Regs 2010 (Eng/Wal) 3 ug/l	
1.3.5-trimethylbenzene		
1.3-Dichloropropane	9 WHO DWG 2011 40 ug/l	
2.2-Dichloropropane	9 USEPA RSL (tapwater) 120 ug/l	
2-Chirotoluene	9 USEPA RSL (tapwater) 370 ug/l	
4-Chlorotoluene	9 USEPA RSL (tapwater) 240 ug/l	
Bromocherzene	9 USEPA RSL (tapwater) 250 ug/l	
Bromochloromethane	9 USEPA RSL (tapwater) 62 ug/l	_
Bromodich oromethane	9 USEPA RSL (tapwater) 83 ug/l	
cis-1-2-Dichloroethene ug/l <t.od< th=""> <t.od< th=""> cis-1-3-Dichloropropene ug/l <t.od< td=""> <t.od< td=""> Dibromomethane ug/l <t.od< td=""> <t.od< td=""> 4-Isopropyltoluene ug/l <t.od< td=""> <t.od< td=""> Styrene ug/l <t.od< td=""> <t.od< td=""></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<></t.od<>	9 LOD LOD	
cis-1-2-Dichloroethene ug/l <lod< th=""> <lod< th=""> cis-1-3-Dichloropropene ug/l <lod< td=""> <lod< td=""> Dibromomethane ug/l <lod< td=""> <lod< td=""> 4-Isopropyltoluene ug/l <lod< td=""> <lod< td=""> Styrene ug/l <lod< td=""> <lod< td=""></lod<></lod<></lod<></lod<></lod<></lod<></lod<></lod<></lod<></lod<>	9 LOD LOD	
Dibromomethane	9 LOD LOD	
4-Isopropyltoluene ug/l <lod< td=""> <lod< td=""> Styrene ug/l <lod< td=""> <lod< td=""></lod<></lod<></lod<></lod<>	9 LOD LOD	
Styrene ug/l <lod <lod<="" td=""><td>9 USEPA RSL (tapwater) 8 ug/l</td><td></td></lod>	9 USEPA RSL (tapwater) 8 ug/l	
Styrene Iua/I I <lod i="" td="" ="" <=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
tors 4.0 Dishlarana	9 WHO DWG 2011 20 ug/l	$-\!\!\!\!+\!\!\!\!-$
trans-1-3-Dichloropropene ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td>$-\!\!\!\!-\!\!\!\!\!-$</td></lod>	9 LOD LOD	$-\!\!\!\!-\!\!\!\!\!-$
1,1,2,2-Tetrachloroethane ug/l <lod< td=""> <lod< td=""> Bromomethane ug/l <lod< td=""> <lod< td=""></lod<></lod<></lod<></lod<>	9 USEPA RSL (tapwater) 7 ug/l 9 USEPA RSL (tapwater) 0.076 ug/l	
Bromomethane	9 USEPA RSL (tapwater) 0.076 ug/l 9 USEPA RSL (tapwater) 21000 ug/l	-+-
Chloromethane ug/l <lod <lod<="" td=""><td>9 USEPA RSL (tapwater) 21000 ug/l</td><td></td></lod>	9 USEPA RSL (tapwater) 21000 ug/l	
Isopropylbenzene ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td>\neg</td></lod>	9 LOD LOD	\neg
Dichlorodifluoromethane ug/l <lod <lod<="" td=""><td>9 USEPA RSL (tapwater) 200 ug/l</td><td></td></lod>	9 USEPA RSL (tapwater) 200 ug/l	
sec-Butylbenzene ug/l <lod <lod<="" td=""><td>9 USEPA RSL (tapwater) 2000 ug/l</td><td></td></lod>	9 USEPA RSL (tapwater) 2000 ug/l	
tert-Butylbenzene ug/l <lod <lod<="" td=""><td>9 USEPA RSL (tapwater) 690 ug/l</td><td></td></lod>	9 USEPA RSL (tapwater) 690 ug/l	
trans-1-2-Dichloroethene ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
Dichloromethane (DCM) ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
Trichlorofluoromethane ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
1,2,3-Trichlorobenzene ug/l <lod <lod<="" td=""><td>9 USEPA RSL (tapwater) 7 ug/l</td><td></td></lod>	9 USEPA RSL (tapwater) 7 ug/l	
1,2,4-Trichlorobenzene ug/l <lod <lod<="" td=""><td>9 USEPA RSL (tapwater) 1.1 ug/l</td><td></td></lod>	9 USEPA RSL (tapwater) 1.1 ug/l	
1,2-Dibromo-3-chloropropane ug/l <lod <lod<="" td=""><td>9 WHO DWG 2011 1 ug/l 9 LOD LOD</td><td></td></lod>	9 WHO DWG 2011 1 ug/l 9 LOD LOD	
n-Butylbenzene ug/l <lod <lod<="" td=""><td>9 LOD LOD 9 LOD LOD</td><td></td></lod>	9 LOD LOD 9 LOD LOD	
Dibromochloromethane ug/l <lod <lod="" td="" ="" <=""><td>9 USEPA RSL (tapwater) 660 ug/l</td><td>-+-</td></lod>	9 USEPA RSL (tapwater) 660 ug/l	-+-
1,2-Dibromo-3-chloropropane	g USEPA RSL (tapwater) 660 ug/l	
1,2 Statistics of disorphopatics Jugit (COD) (COD)	<u> </u>	
1-naphthol ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
2-isopropylphenol ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
Catechol ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td>\neg</td></lod>	9 LOD LOD	\neg
Resorcinol ug/l <lod <lod<="" td=""><td></td><td></td></lod>		
Xylenols ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
m/p-cresol ug/l <lod <lod<="" td=""><td>9 LOD LOD 9 LOD LOD</td><td></td></lod>	9 LOD LOD 9 LOD LOD	
o-cresol ug/l <lod <lod<="" td=""><td></td><td></td></lod>		
Total cresols ug/l <lod <lod<="" td=""><td>9 LOD LOD</td><td></td></lod>	9 LOD LOD	
2,3,5-trimethyl phenol ug/l <lod <lod<="" td=""><td>9 LOD LOD 47 LOD LOD</td><td></td></lod>	9 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 SR2¹ and SR3². 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 guidance³ which introduced a four category approach to determining whether land <u>in England and Wales</u> is contaminated or not on the grounds of significant possibility of significant harm (SPOSH). **Figure 1** presents a graphical representation of the categories.

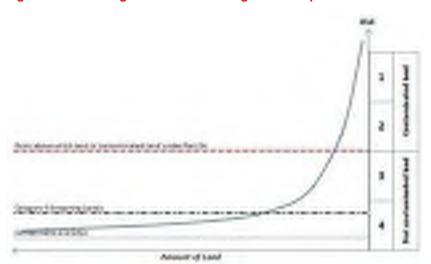


Figure 1: Four Categories for Determining if Land Represent a SPOSH

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: Applications in Real Environments (CL:AIRE),SP1010⁴ and endorsed by Defra⁵ 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 context⁶.

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 SR4⁷ to produce a set of minimal risk GACs. The chemical-specific data within two key publications were considered during their production: CL:AIRE 2010⁸ and LQM 2015⁹. 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:

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

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 rates¹⁰ and the consumption rates for homegrown produce¹¹ 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.

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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 10° C (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 Resource¹², 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 2010¹³.

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/CIEH¹⁴.

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:

- à Green Vegetables Ryan et al. (1988);
- a Root Vegetables Trapp (2002);
- Tuber Vegetables Trapp et al. (2007); and
- a 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.

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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 oversimplifications 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 1992¹⁵ 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.

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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 2010¹⁶ 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;
- à 2-, 3- and 4-methylphenol (total cresols);
- à aldrin and dieldrin; and
- à α- and β-endosulphan.

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

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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 µgkg⁻¹bwday⁻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:

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

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 Report¹ 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, 2016²). 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 C665³) 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.

The Victoria 150-182 The Quays Salford M50 3SP Tel: +44 161 886 2400 Tel: +44 161 886 2401 wsp.com

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.



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.	Low
	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. 	
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%.	Moderate
	WSP note the general absence of organic material recorded on the logs.	
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.	Very Low
	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.	

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).	Low
	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%	

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:

Solution | GSV = Maximum steady concentration (%) of carbon dioxide (CO₂) or methane (CH₄) / 100 x maximum steady flow rate (or limit of detection if no flow rate detected) (I/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 (I/hr)	Peak CO ₂ (%v/v)	GSV (I/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 (I/hr)	Peak CO ₂ (%v/v)	GSV (I/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 CO₂ 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 (CH₄), carbon dioxide (CO₂), oxygen (O₂) 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 Readin	g
	Min	Max	Min	Мах
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 (I/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:

Security 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.

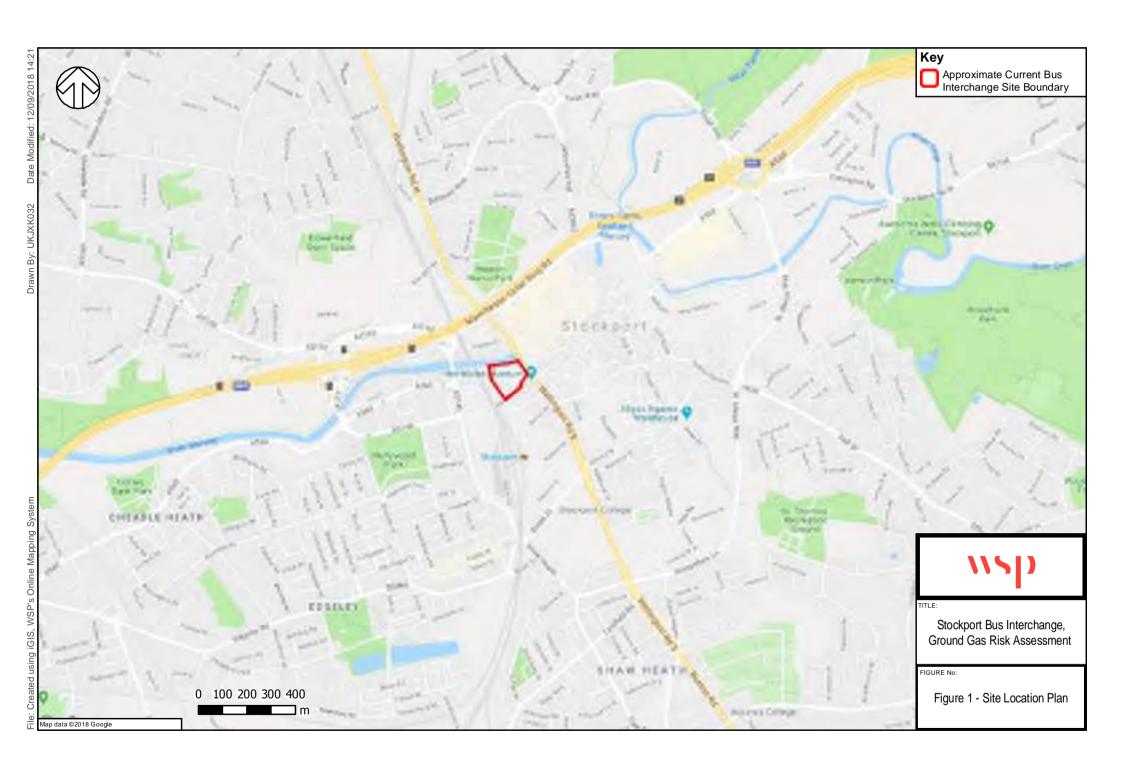
9.0 CONCLUSIONS

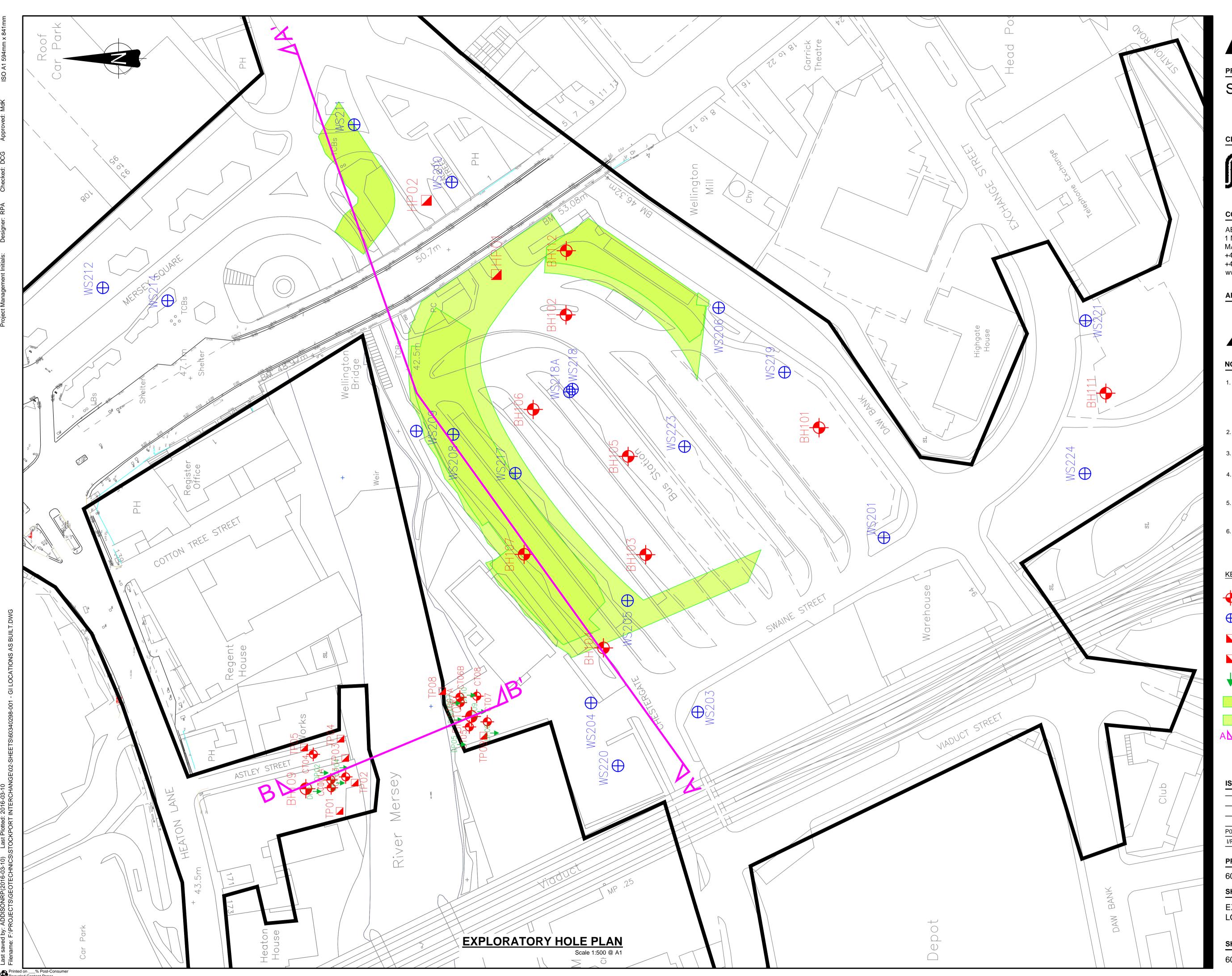
Based on our review of the extended ground gas monitoring dataset and the ground model, it is recommended that an appropriate classification of risk for the development with respect to ground gas is Characteristic Situation 1 i.e. no special ground gas precautions are required.

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);
- Solutions 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



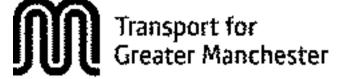




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NOTES

- 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.
- 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

KFY

104 BOREHOLE

VS220

WS220 WINDOW SAMPLE

P09 TRIAL PIT

N HPO2 HAND DU

HP02 HAND DUG PIT

DP08 DYNAMIC PROBE

EXTENTS OF PROPOSED BUILDING

EXTENTS OF PROPOSED ROOF

A' GEOLOGICAL SECTIONLINE

ISSUE/REVISION

P01	MAR 2016	FIRST ISSUE
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60340298

SHEET TITLE

EXPLORATORY HOLE LOCATION PLAN

SHEET NUMBER

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

PRE-REPORT DATA CHECK

9	All Response Zone depths are complete.
9	All visit dates match in the Monitoring Results and Monitoring Visit tables.
9	All visit dates match in the Dip and Monitoring Visit tables.
9	All event names match in the Monitoring Point and Dips tables



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	ulated						

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

Sheet 1 of 2

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	Respons (n			Flow hr)	Borehole Differential Pressure	Meth (% '			Dioxide v/v)	Оху (% ⁻	rgen v/v)	C	Other Gases (ppmV)	5	Depth to Water	Depth to Base	Thickness of product	Sampled ?
	Тор	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	со	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



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	ulated						

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

Sheet 2 of 2

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)				Borehole Methane Differential (% v/v) Pressure		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Other Gases (ppmV)			Depth to Water	Depth to Base	Thickness of product	Sampled ?	
	Тор	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	со	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



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	ulated			

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

Sheet 1 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

EquipmentSerialNoCalibratedGas Analyser11941YesInterface ProbeWPS000116Yes

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.

Bore	ehole	Response Zone (m)				Borehole Differential Pressure	Methane Carbon Dioxide (% v/v) (% v/v)		Oxygen (% v/v)		Other Gases (ppmV)			Depth to Water	Depth to Base	Thickness of product	Sampled ?		
	ĺ	Тор	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	СО	m	m	mm	Y/N
BH	101	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
BH	102	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
BH	103	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
BH	104	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
BH	105	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
BH	106	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
BH	112	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
ws	203	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
ws	206	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
ws	208	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
ws	209	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
ws	211	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
ws	212	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
ws	214	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



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 as a contract of the co	ulated			

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

EquipmentSerialNoCalibratedGas Analyser11941YesInterface ProbeWPS000116Yes

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)		e Gas Flow (I/hr)						1		1		Borehole Differential Pressure	I	nane v/v)	ı	Dioxide v/v)	Oxy (% '	gen v/v)	C	Other Gases (ppmV)	s	Depth to Water	Depth to Base	Thickness of product	Sampled ?
	Тор	Base	Initial	Steady	Pa	Initial	Steady	Initial	Steady	Initial	Steady	PID	H2S	СО	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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