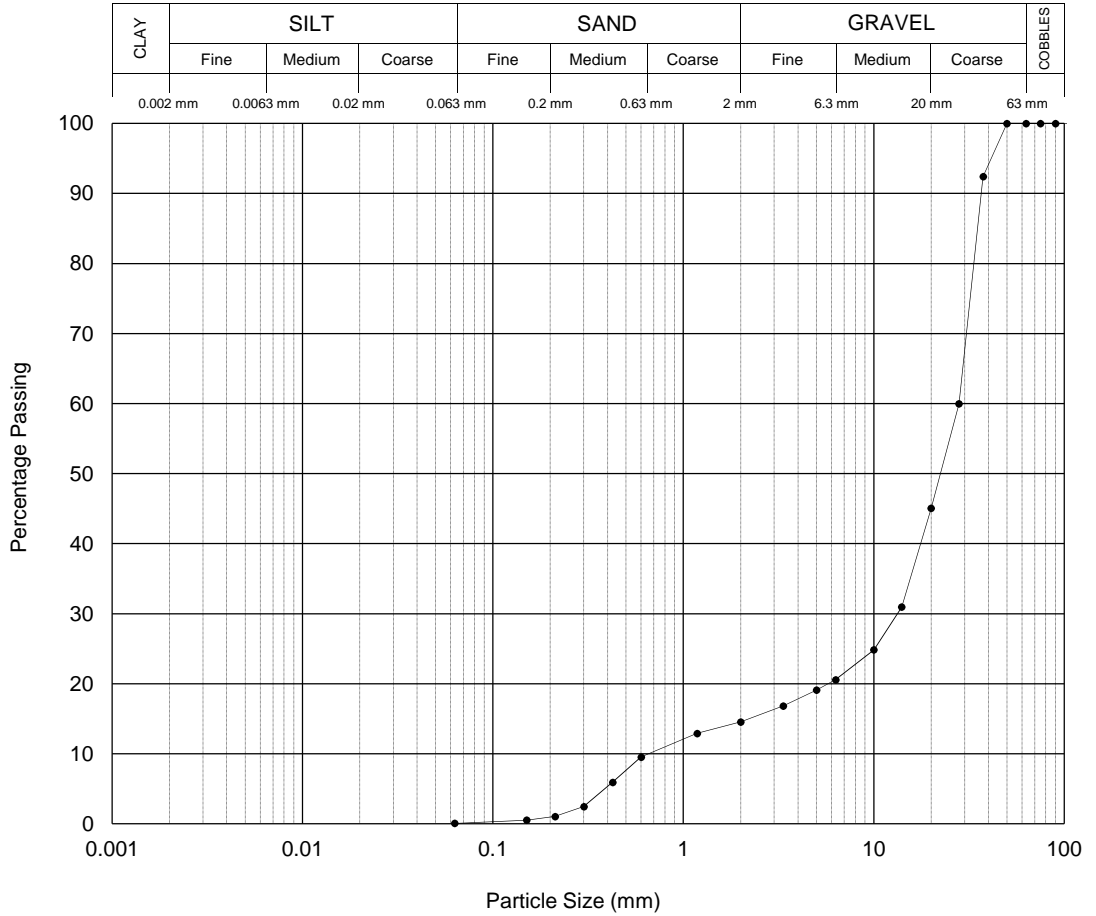


Determination of Particle Size Distribution

BH No.	BH1	Description: Brown sandy flint GRAVEL Insufficient material supplied to be representative in accordance with BS1377 requirements.
Sample Ref.	-	
Depth (m):	4.00 - 5.50	

BS1377 : Part 2 : Clause 9.3 : 1990 Dry Sieving Method

Sieve	
Sieve (mm)	% pass
200	100
125	100
90	100
75	100
63	100
50	100
37.5	92
28	60
20	45
14	31
10	25
6.3	21
5	19
3.35	17
2	15
1.18	13
0.6	10
0.425	6
0.3	2
0.212	1
0.15	1
0.063	0



Particle Proportions	
Cobbles	0.0 %
Gravel	85.5 %
Sand	14.5 %
Silt & Clay	0.1 %

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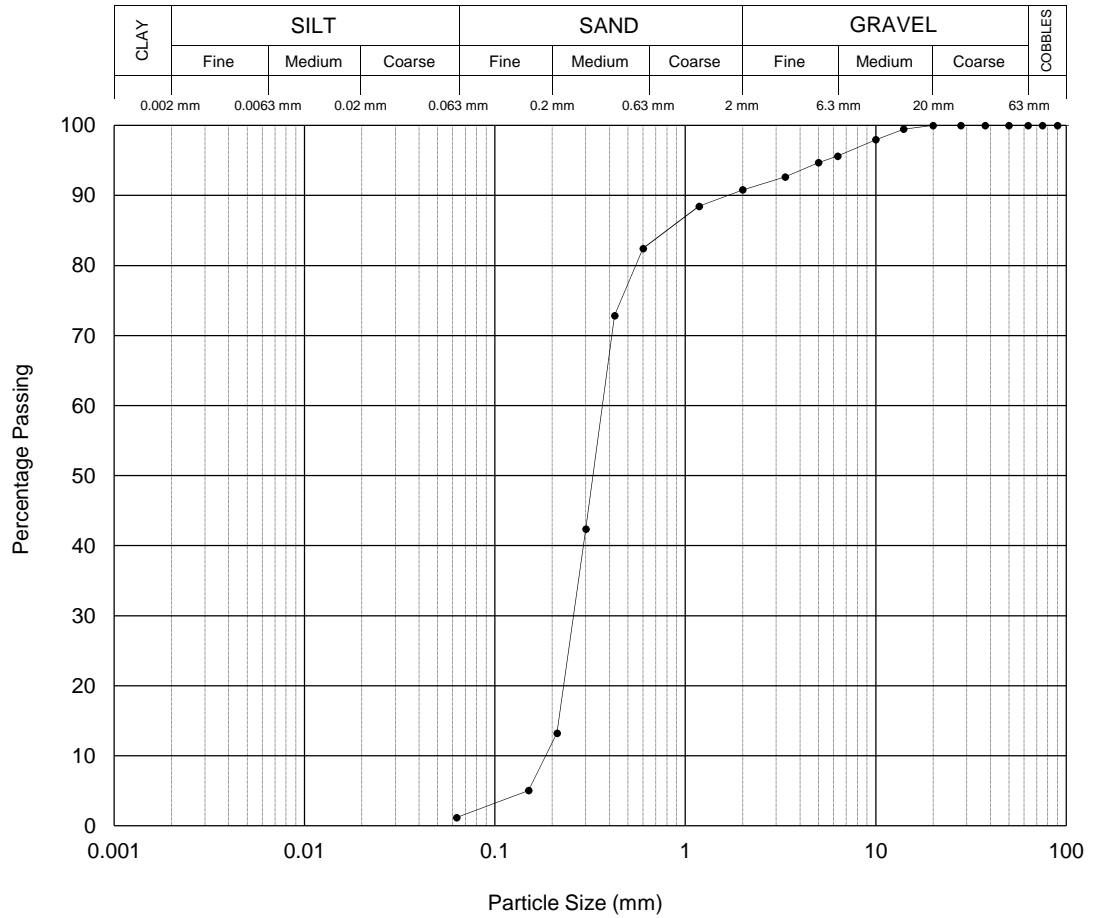
Determination of Particle Size Distribution

BH No.	BH2
Sample Ref.	-
Depth (m):	3.50

Description:
Light grey brown SAND with rare fine to medium gravel

BS1377 : Part 2 : Clause 9.3 : 1990 Dry Sieving Method

Sieve	
Sieve (mm)	% pass
200	100
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	99
10	98
6.3	96
5	95
3.35	93
2	91
1.18	88
0.6	82
0.425	73
0.3	42
0.212	13
0.15	5
0.063	1



Particle Proportions	
Cobbles	0.0 %
Gravel	9.2 %
Sand	89.6 %
Silt & Clay	1.2 %

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J Sturges (Ops Mgr)
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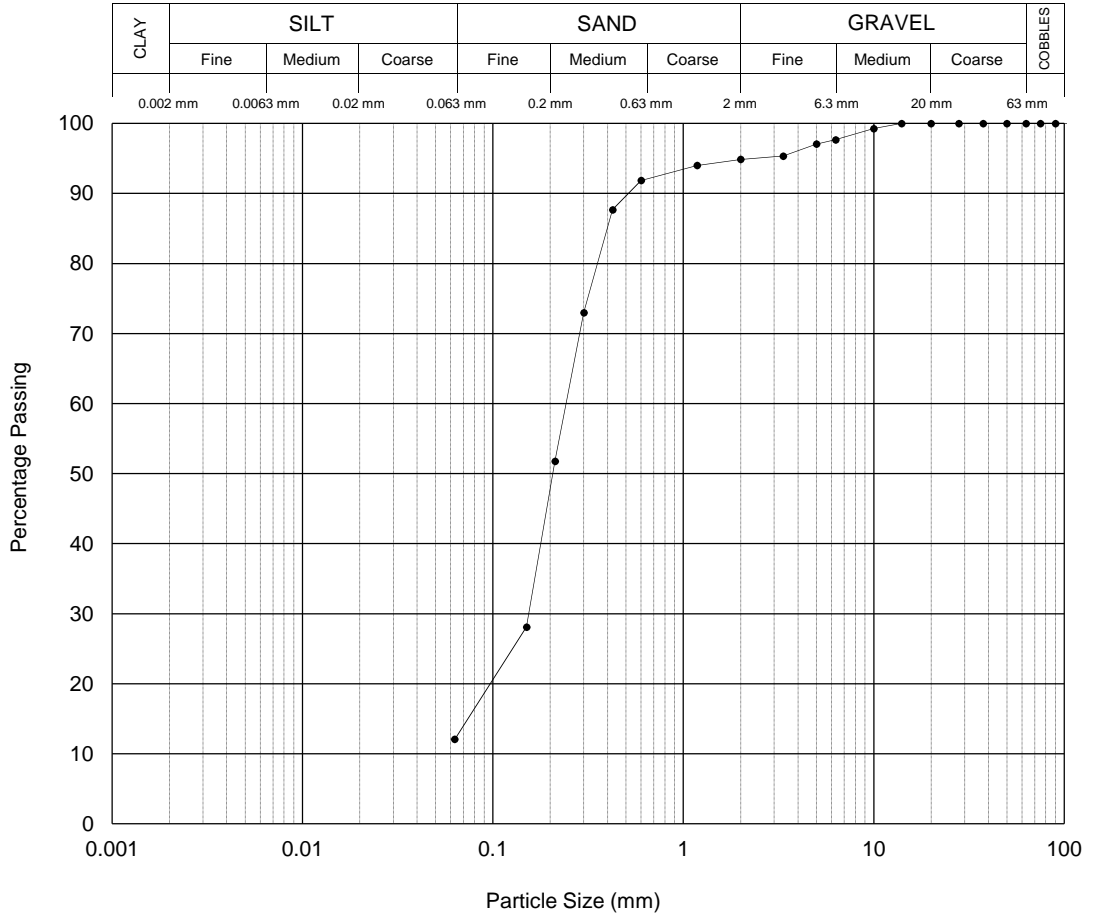
Determination of Particle Size Distribution

BH No.	BH3
Sample Ref.	-
Depth (m):	2.00

Description:
 Grey brown slightly clayey silty SAND with rare fine to medium gravel

BS1377 : Part 2 : Clause 9.2 : 1990 Wet Sieving Method

Sieve	
Sieve (mm)	% pass
200	100
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	100
10	99
6.3	98
5	97
3.35	95
2	95
1.18	94
0.6	92
0.425	88
0.3	73
0.212	52
0.15	28
0.063	12



Particle Proportions	
Cobbles	0.0 %
Gravel	5.1 %
Sand	82.8 %
Silt & Clay	12.1 %

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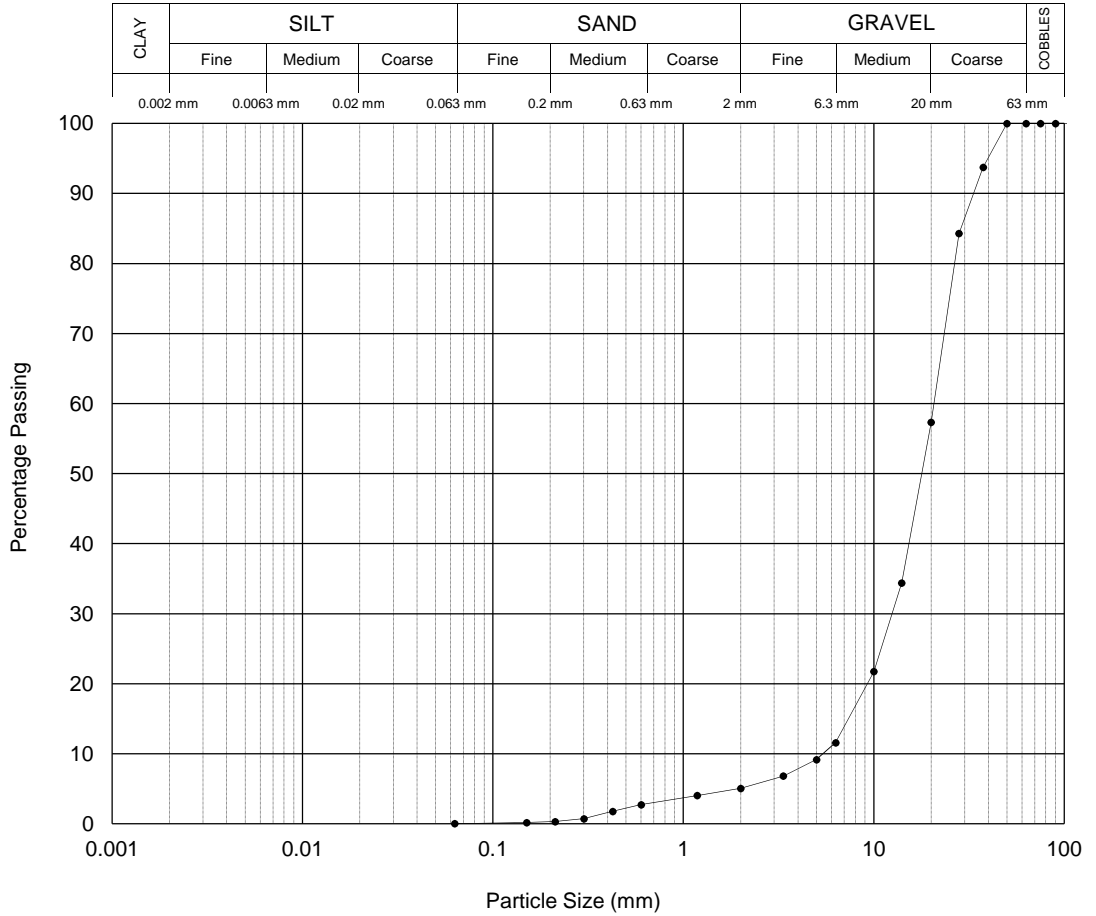
Determination of Particle Size Distribution

BH No.	BH3
Sample Ref.	-
Depth (m):	4.50 - 7.50

Description:
 Brown flint GRAVEL with rare medium to coarse SAND
 Insufficient material supplied to be representative in accordance with BS1377 requirements.

BS1377 : Part 2 : Clause 9.3 : 1990 Dry Sieving Method

Sieve	
Sieve (mm)	% pass
200	100
125	100
90	100
75	100
63	100
50	100
37.5	94
28	84
20	57
14	34
10	22
6.3	12
5	9
3.35	7
2	5
1.18	4
0.6	3
0.425	2
0.3	1
0.212	0
0.15	0
0.063	0



Particle Proportions	
Cobbles	0.0 %
Gravel	94.9 %
Sand	5.0 %
Silt & Clay	0.0 %

Checked and Approved by




 J Sturges (Ops Mgr)
 Date: 11/02/2015

Project Number:
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Project Name:
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Project Ref.: LP851







SUMMARY OF GEOTECHNICAL TESTING

Sample details					Classification Tests					Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Borehole No.	Sample No.	Depth (m)	Type	Description	MC (%)	LL (%)	PL (%)	PI	<425 µm (%)	Bulk (Mg/m³)	Dry (Mg/m³)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Stress (kPa)	Failure Sketch	pH	2:1 W/S SO4 (g/L)	W/S Mg (mg/L)	
BH1	-	1.75	D	Grey brown very sandy silty CLAY															Particle Size Distribution
BH1	-	4.00 - 5.50	D	Brown sandy flint GRAVEL															Particle Size Distribution
BH1	-	7.00	D	Brown sandy gravelly CLAY. Gravel is flint.	19	62	21	41	92										
BH1	-	7.50 - 7.95	U													6.9	0.53		
BH2	-	2.00	D	Yellowish brown slightly clayey silty SAND with rare fine gravel	13	NP	NP	NP	92										
BH2	-	3.50	D	Light grey brown SAND with rare fine to medium gravel															Particle Size Distribution
BH2	-	6.00	D	Brown slightly sandy silty CLAY with rare fine gravel	31	70	23	47	91										
BH2	-	6.10 - 6.55	U	Firm brownish grey slightly sandy silty CLAY with rare fine to medium gravel	29					1.96	1.52	25 50 100	167 172 180	87					
BH2	-	9.00 - 9.45	U	Firm to stiff fissured greyish brown silty CLAY	30					2.01	1.54	90 180 360	207 211 211	105					
BH2	-	10.00	D	Dark brown silty CLAY with rare fine gravel and black staining	31	76	22	54	98										
BH2	-	10.50	D													7.0	1.4		
BH2	-	12.00 - 12.45	U	Firm to stiff fissured brown silty CLAY	31					1.99	1.52	120 240	266 271	134					Sample failed on 2nd stage of multistage test


Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

Checked and Approved by <div style="text-align: center; font-size: 2em; font-family: cursive;">JS</div> J Sturges (Ops Mgr) Date: 13/02/2015	Project Number: GEO / 22225 Project Name: Arlington Road, Twickenham Project Ref.: LP851	
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SUMMARY OF GEOTECHNICAL TESTING

Sample details					Classification Tests					Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments	
Borehole No.	Sample No.	Depth (m)	Type	Description	MC (%)	LL (%)	PL (%)	PI	<425 µm (%)	Bulk (Mg/m³)	Dry (Mg/m³)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Stress (kPa)	Failure Sketch	pH	2:1 W/S SO4 (g/L)	W/S Mg (mg/L)		
BH2	-	18.00 - 18.45	U	Soft to firm grey silty CLAY.	35					1.93	1.43	180 360 720	96 102 140	56						
BH3	-	2.00	D	Grey brown slightly clayey silty SAND with rare fine to medium gravel															Particle Size Distribution	
BH3	-	4.50 - 7.50	D	Brown flint GRAVEL with rare medium to coarse SAND															Particle Size Distribution	
BH3	-	8.10 - 8.60	U	Firm to stiff fissured brown CLAY with rare fine to medium gravel	27					1.98	1.57	80 160 320	172 186 192	92						
BH3	-	11.00 - 11.45	U	Firm to stiff fissured greyish brown silty CLAY	30					1.98	1.53	110 220 440	165 169 202	89						
BH3	-	12.00	D	Dark brown silty CLAY with rare black staining	29	76	23	53	100											
BH3	-	14.00 - 14.45	U	Stiff fissured greyish brown silty CLAY with rare fine to medium pyrite	28					2.04	1.59	140 280 560	204 209 229	107						
BH3	-	15.50	D													7.0	1.7			
BH3	-	18.00	D	Dark brown, black stained silty CLAY	27	72	24	48	100											

Sample type: B (Bulk disturb.) BLK (Block) C (Core) D (Disturbed) LB (Large Bulk dist.) U (Undisturbed)

Checked and Approved by <div style="text-align: center; font-size: 2em; font-family: cursive;">JS</div> J Sturges (Ops Mgr) Date: 13/02/2015	Project Number: <div style="text-align: center; font-weight: bold; font-size: 1.2em;">GEO / 22225</div> Project Name: <div style="text-align: center; font-weight: bold;">Arlington Road, Twickenham</div> <div style="text-align: center; font-weight: bold;">Project Ref.: LP851</div>	
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Quick Undrained Triaxial Compression Test

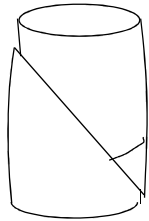
Borehole No.: BH2
 Sample No.: -
 Depth (m): 6.10 - 6.55

Description:
 Firm brownish grey slightly sandy silty CLAY with rare fine to medium gravel

3 Stage Specimen

Specimen Details		Single specimen		
Specimen conditions		Undisturbed		
Length	(mm)	201.8		
Diameter	(mm)	103.1		
Moisture Content	(%)	29		
Bulk Density	(Mg/m ³)	1.96		
Dry Density	(Mg/m ³)	1.52		
Test Details		Stage 1	Stage 2	Stage 3
Latex membrane thickness	(mm)	0.3	0.3	0.3
Membrane correction	(kPa)	0.3	0.4	0.6
Axial displacement rate	(%/min)	2.0	2.0	2.0
Cell pressure	(kPa)	25	50	100
Strain at failure	(%)	4.5	5.9	9.9
Maximum Deviator Stress	(kPa)	167	172	180
Shear Stress Cu	(kPa)	84	86	90

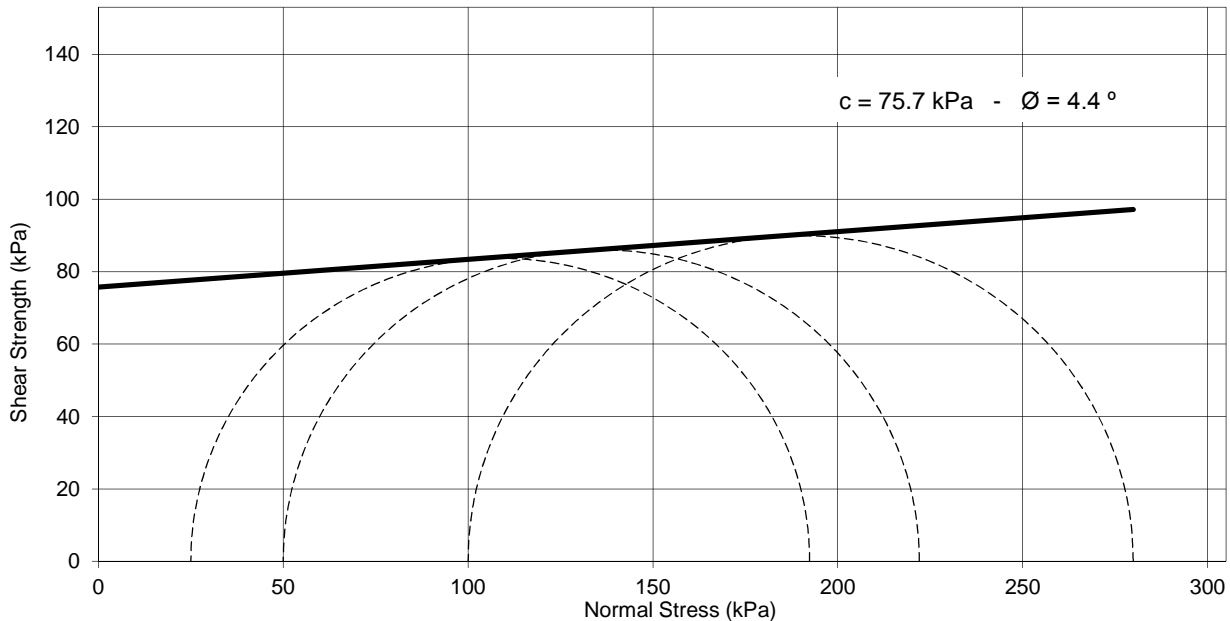
Mode of failure



Orientation of the sample	Vertical
---------------------------	----------

Distance from top of the tube	70 mm
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Sample type	U
-------------	---



Checked and Approved by

JS

J Sturges (Ops Mgr)

Date: 13/02/2015

Project Number:

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Project Name:

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Project Ref.: LP851

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Quick Undrained Triaxial Compression Test

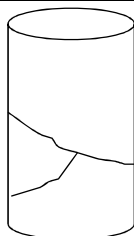
Borehole No.: BH2
 Sample No.: -
 Depth (m): 9.00 - 9.45

Description:
 Firm to stiff fissured greyish brown silty CLAY

3 Stage Specimen

Specimen Details		Single specimen		
Specimen conditions		Undisturbed		
Length	(mm)	202.5		
Diameter	(mm)	101.7		
Moisture Content	(%)	30		
Bulk Density	(Mg/m ³)	2.01		
Dry Density	(Mg/m ³)	1.54		
Test Details		Stage 1	Stage 2	Stage 3
Latex membrane thickness	(mm)	0.3	0.3	0.3
Membrane correction	(kPa)	0.3	0.4	0.5
Axial displacement rate	(%/min)	2.0	2.0	2.0
Cell pressure	(kPa)	90	180	360
Strain at failure	(%)	4.2	5.9	6.9
Maximum Deviator Stress	(kPa)	207	211	211
Shear Stress τ_c	(kPa)	104	105	106

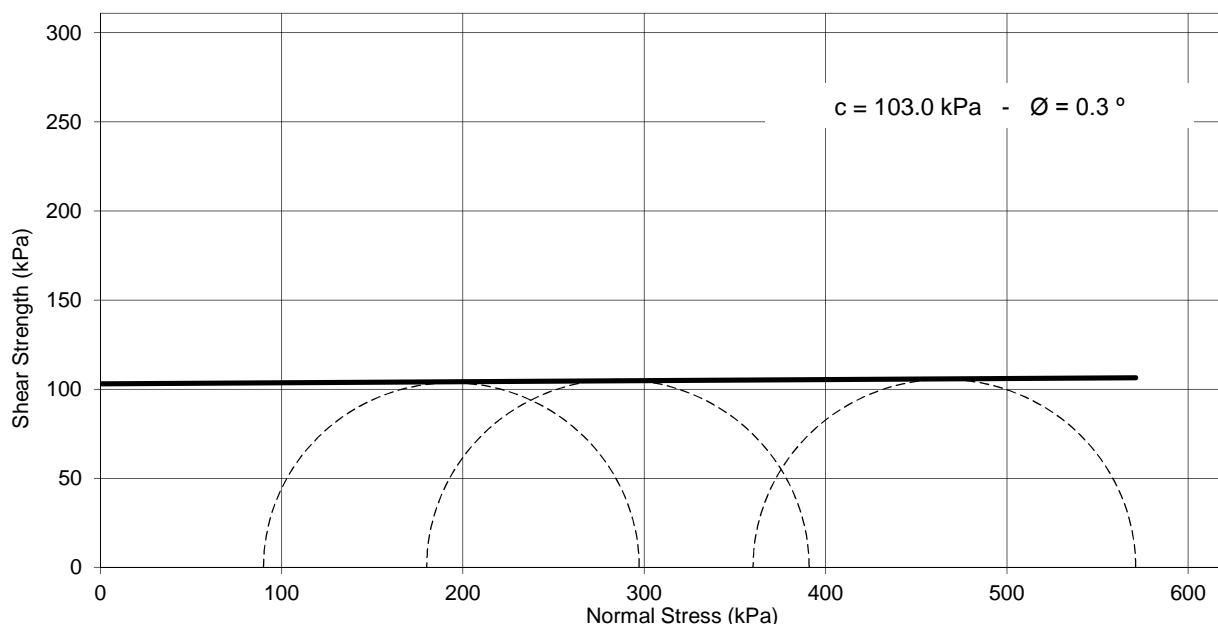
Mode of failure



Orientation of the sample	Vertical
---------------------------	----------

Distance from top of the tube	120 mm
-------------------------------	--------

Sample type	U
-------------	---



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Quick Undrained Triaxial Compression Test

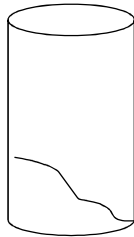
Borehole No.: BH2
 Sample No.: -
 Depth (m): 12.00 - 12.45

Description:
 Firm to stiff fissured brown silty CLAY

2 Stage Specimen

Specimen Details		Single specimen	
Specimen conditions		Undisturbed	
Length	(mm)	177.4	
Diameter	(mm)	101.7	
Moisture Content	(%)	31	
Bulk Density	(Mg/m ³)	1.99	
Dry Density	(Mg/m ³)	1.52	
Test Details		Stage 1	Stage 2
Latex membrane thickness	(mm)	0.3	0.3
Membrane correction	(kPa)	0.4	0.5
Axial displacement rate	(%/min)	2.3	2.3
Cell pressure	(kPa)	120	240
Strain at failure	(%)	5.6	6.8
Maximum Deviator Stress	(kPa)	266	271
Shear Stress Cu	(kPa)	133	135

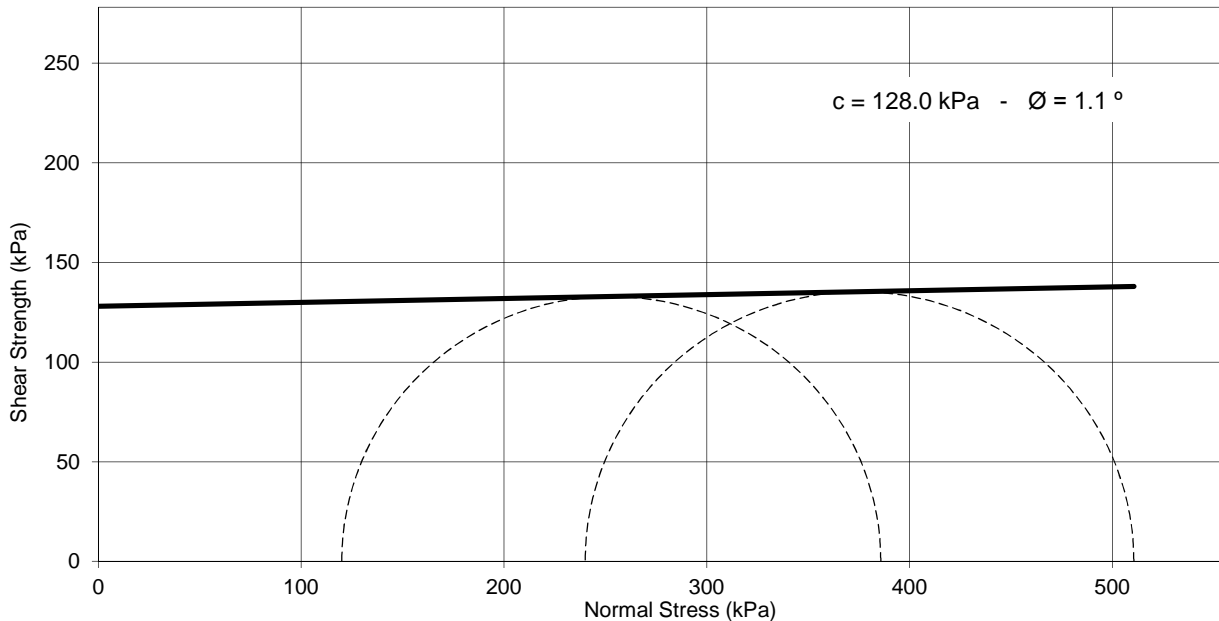
Mode of failure



Orientation of the sample	Vertical
---------------------------	----------

Distance from top of the tube	120 mm
-------------------------------	--------

Sample type	U
-------------	---



Sample failed on 2nd stage of multistage test

Checked and Approved by

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J Sturges (Ops Mgr)

Date: 13/02/2015

Project Number:

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Quick Undrained Triaxial Compression Test

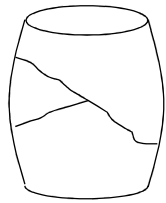
Borehole No.: BH2
 Sample No.: -
 Depth (m): 18.00 - 18.45

Description:
 Soft to firm grey silty CLAY.

3 Stage Specimen

Specimen Details		Single specimen		
Specimen conditions		Undisturbed		
Length	(mm)	202.6		
Diameter	(mm)	101.3		
Moisture Content	(%)	35		
Bulk Density	(Mg/m ³)	1.93		
Dry Density	(Mg/m ³)	1.43		
Test Details		Stage 1	Stage 2	Stage 3
Latex membrane thickness	(mm)	0.3	0.3	0.3
Membrane correction	(kPa)	0.4	0.5	1.1
Axial displacement rate	(%/min)	2.0	2.0	2.0
Cell pressure	(kPa)	180	360	720
Strain at failure	(%)	5.4	7.4	19.7
Maximum Deviator Stress	(kPa)	96	102	140
Shear Stress Cu	(kPa)	48	51	70

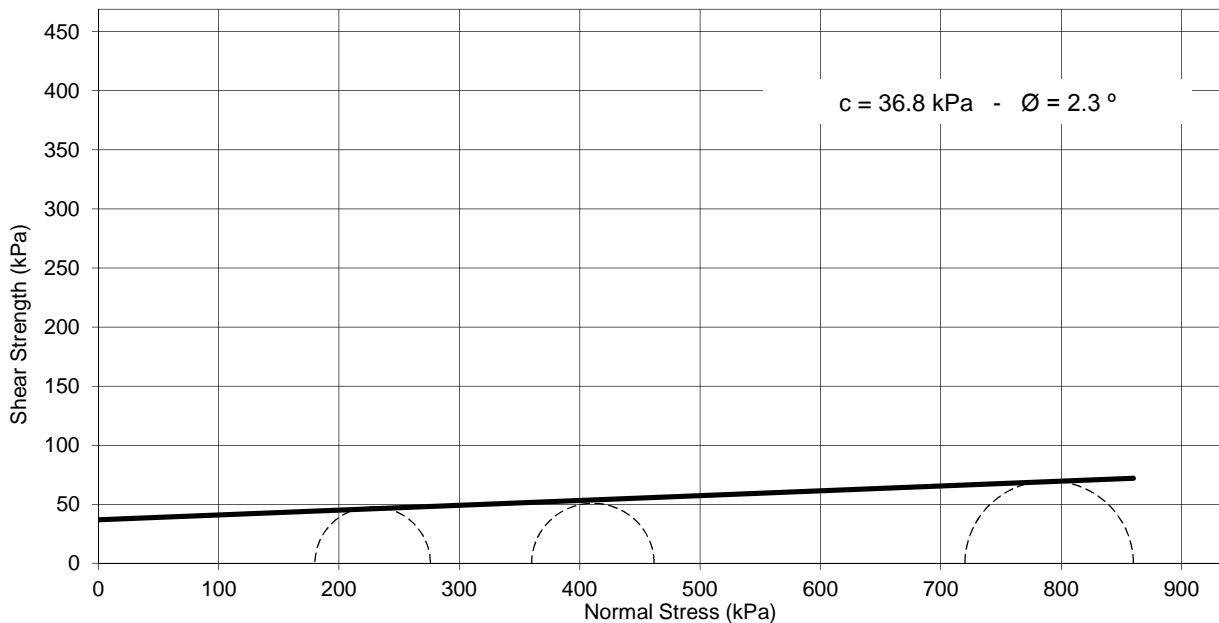
Mode of failure



Orientation of the sample	Vertical
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Distance from top of the tube	80 mm
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Sample type	U
-------------	---



Some water softened patches

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Quick Undrained Triaxial Compression Test

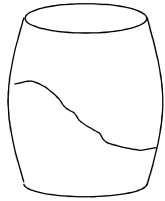
Borehole No.: BH3
 Sample No.: -
 Depth (m): 8.10 - 8.60

Description:
 Firm to stiff fissured brown CLAY with rare fine to medium gravel

3 Stage Specimen

Specimen Details		Single specimen		
Specimen conditions		Undisturbed		
Length	(mm)	202.1		
Diameter	(mm)	101.5		
Moisture Content	(%)	27		
Bulk Density	(Mg/m ³)	1.98		
Dry Density	(Mg/m ³)	1.57		
Test Details		Stage 1	Stage 2	Stage 3
Latex membrane thickness	(mm)	0.3	0.3	0.3
Membrane correction	(kPa)	0.6	0.4	0.5
Axial displacement rate	(%/min)	2.0	2.0	2.0
Cell pressure	(kPa)	80	160	320
Strain at failure	(%)	8.9	5.9	6.9
Maximum Deviator Stress	(kPa)	172	186	192
Shear Stress Cu	(kPa)	86	93	96

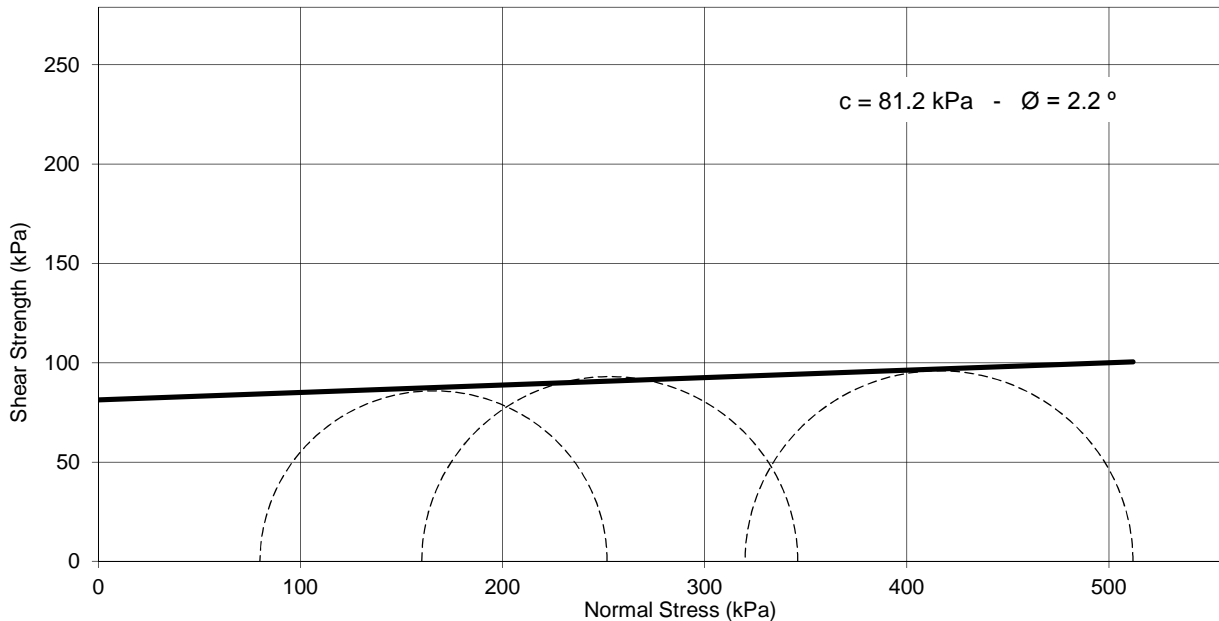
Mode of failure



Orientation of the sample	Vertical
---------------------------	----------

Distance from top of the tube	100 mm
-------------------------------	--------

Sample type	U
-------------	---



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Date: 13/02/2015

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Quick Undrained Triaxial Compression Test

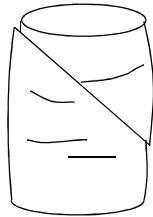
Borehole No.: BH3
 Sample No.: -
 Depth (m): 11.00 - 11.45

Description:
 Firm to stiff fissured greyish brown silty CLAY

3 Stage Specimen

Specimen Details		Single specimen		
Specimen conditions		Undisturbed		
Length	(mm)	161.8		
Diameter	(mm)	103.4		
Moisture Content	(%)	30		
Bulk Density	(Mg/m ³)	1.98		
Dry Density	(Mg/m ³)	1.53		
Test Details		Stage 1	Stage 2	Stage 3
Latex membrane thickness	(mm)	0.3	0.3	0.3
Membrane correction	(kPa)	0.3	0.3	0.7
Axial displacement rate	(%/min)	2.5	2.5	2.5
Cell pressure	(kPa)	110	220	440
Strain at failure	(%)	3.4	4.3	11.7
Maximum Deviator Stress	(kPa)	165	169	202
Shear Stress Cu	(kPa)	83	84	101

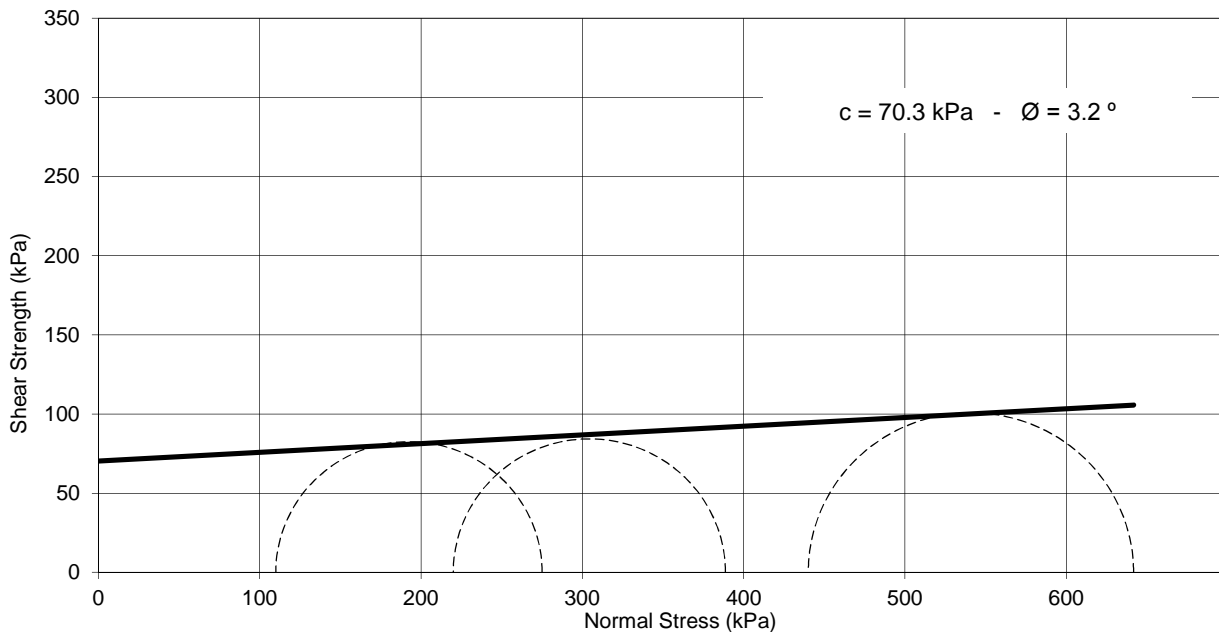
Mode of failure



Orientation of the sample Vertical

Distance from top of the tube 130 mm

Sample type U



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J Sturges (Ops Mgr)

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Project Number:

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Project Name:

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Quick Undrained Triaxial Compression Test

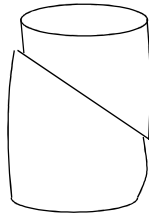
Borehole No.: BH3
 Sample No.: -
 Depth (m): 14.00 - 14.45

Description:
 Stiff fissured greyish brown silty CLAY with rare fine to medium pyrite

3 Stage Specimen

Specimen Details		Single specimen		
Specimen conditions		Undisturbed		
Length	(mm)	202.2		
Diameter	(mm)	101.9		
Moisture Content	(%)	28		
Bulk Density	(Mg/m ³)	2.04		
Dry Density	(Mg/m ³)	1.59		
Test Details		Stage 1	Stage 2	Stage 3
Latex membrane thickness	(mm)	0.3	0.3	0.3
Membrane correction	(kPa)	0.2	0.3	0.5
Axial displacement rate	(%/min)	2.0	2.0	2.0
Cell pressure	(kPa)	140	280	560
Strain at failure	(%)	2.5	3.2	6.4
Maximum Deviator Stress	(kPa)	204	209	229
Shear Stress τ_c	(kPa)	102	104	114

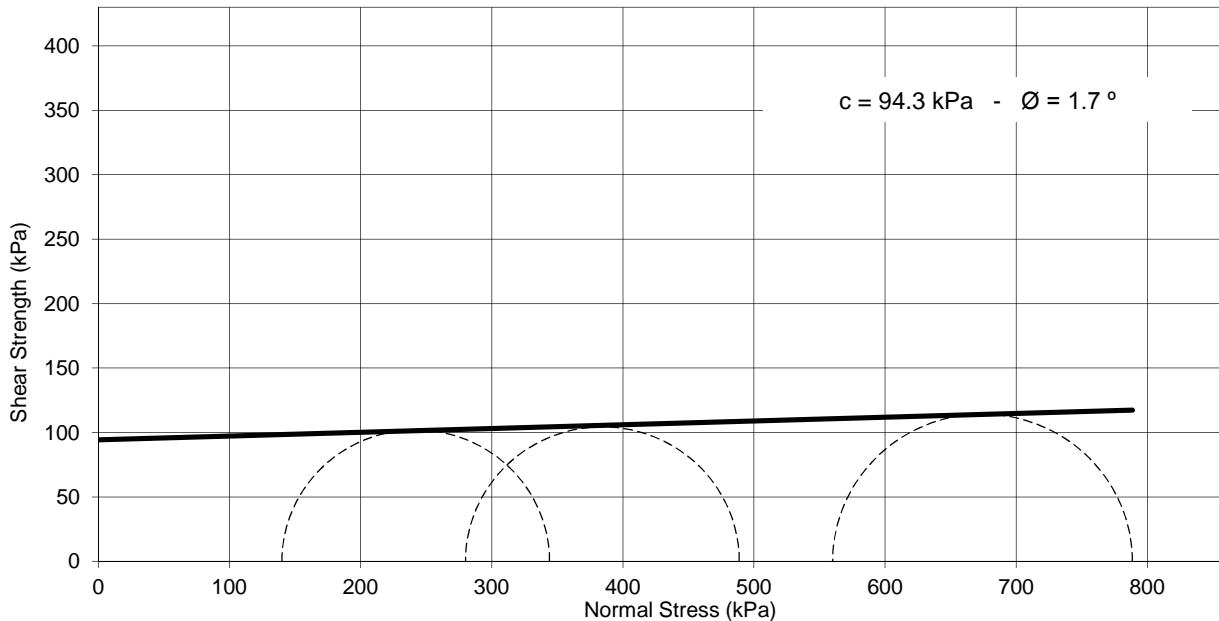
Mode of failure



Orientation of the sample Vertical

Distance from top of the tube 60 mm

Sample type U



Checked and Approved by

JS

J Sturges (Ops Mgr)

Date: 13/02/2015

Project Number:

GEO / 22225

Project Name:

**Arlington Road, Twickenham
 Project Ref.: LP851**

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APPENDIX H

Chemical Laboratory
Test Results

Geoenvironmental Screening Table - Soils

Exceedance of Resi w HGP

Exceedance of both GACs

Determinand	Units	Q	GAC Resi w HGP*	GAC POS Resi*	Max	Made Ground										Natural Soils		Natural Soils Below Ground Water Level		
						WS101	WS102	WS103	WS104	WS104	WS105	BH101	BH103	WS103	BH103	WS101	WS102	WS104	WS105	
						Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)	Depth (m)
pH	Units	0.1	-	-	11	8.23	7.47	8.41	8.12	-	7.67	10.8	8.01	8.66	-	-	-	-	-	-
TOC	%	0.1	-	-	5	2.67	1.16	1.27	5.25	-	4.43	1.36	2.52	1.34	-	-	-	-	-	-
Arsenic	mg/kg	2	37	79	79	24	38	33	75	-	39	21	30	18	-	-	-	-	-	-
Cadmium	mg/kg	1	26	220	2	1	<1	<1	<1	-	<1	2	<1	<1	-	-	-	-	-	-
Chromium (total)	mg/kg	2	910	1500	40	40	22	22	25	-	23	25	27	18	-	-	-	-	-	-
Chromium (VI)	mg/kg	1	21	23	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	-	-	-	-	-	-
Copper	mg/kg	2	2400	12000	156	88	52	50	156	-	116	98	84	54	-	-	-	-	-	-
Lead	mg/kg	2	200	630	594	594	594	594	594	-	411	374	537	209	-	-	-	-	-	-
Mercury	mg/kg	1	40	120	2	2	<1	<1	2	-	<1	2	<1	<1	-	-	-	-	-	-
Nickel	mg/kg	2	130	230	41	23	23	23	38	-	41	22	25	20	-	-	-	-	-	-
Selenium	mg/kg	1	250	1100	1	<1	<1	<1	<1	-	<1	1	<1	<1	-	-	-	-	-	-
Zinc	mg/kg	2	3700	81000	1615	342	121	100	317	-	127	1615	182	96	-	-	-	-	-	-
EMR	%	0.1	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Asbestos	%	0.001	-	-	Presence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
% Stones	% w/w	0.1	-	-	17.4	8.1	17.4	8	7.5	-	14.2	10.4	10.2	8.1	-	-	-	-	-	-
Moisture Content @ <30°C	% w/w	0.1	-	-	19.8	19.2	13.8	18.9	19.8	-	18.5	13.5	16.9	11.6	-	-	-	-	-	-
PAH (USEPA16)	mg/kg	0.1	510	15000	0.9	<0.1	<0.1	<0.1	<0.1	-	0.2	<0.1	<0.1	0.9	-	-	-	-	-	-
Acenaphthene	mg/kg	0.1	420	15000	0.5	<0.1	<0.1	0.2	<0.1	-	0.1	<0.1	<0.1	0.5	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	5400	74000	0.9	0.4	<0.1	0.7	<0.1	-	0.4	0.5	0.4	0.9	-	-	-	-	-	-
Anthracene	mg/kg	0.1	-	-	6.7	2.1	0.1	6.7	0.5	-	1.2	2.1	1.9	1.8	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	5	10	6.9	2.5	0.1	6.9	0.8	-	1.2	1.6	2	1.6	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	-	-	9.0	3.2	0.2	9	0.9	-	1.7	2.2	2.9	2.1	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	-	-	4.1	1.5	<0.1	4.1	0.5	-	0.9	0.8	1.2	1	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.1	-	-	3.2	1.2	<0.1	3.2	0.2	-	0.5	0.8	1	0.8	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	-	-	5.7	2.5	0.1	5.7	0.6	-	1.2	2.1	2.2	1.7	-	-	-	-	-	-
Chrysene	mg/kg	0.1	-	-	1.1	0.4	<0.1	1.1	0.1	-	0.2	0.2	0.4	0.2	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	560	3100	9.6	4.6	0.1	9.6	0.9	-	2.5	4.9	4.2	4	-	-	-	-	-	-
Fluoranthene	mg/kg	0.1	400	9900	2.1	<0.1	<0.1	0.1	<0.1	-	0.2	0.8	<0.1	2.1	-	-	-	-	-	-
Fluorene	mg/kg	0.1	-	-	3.7	1.4	<0.1	3.7	0.4	-	0.7	0.8	1.2	0.9	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	5.6	4900	1.7	<0.1	<0.1	<0.1	0.2	-	0.6	<0.1	<0.1	1.7	-	-	-	-	-	-
Naphthalene (PAH)	mg/kg	0.1	220	3100	5.2	2	<0.1	2.3	0.4	-	1.6	2.8	1.6	5.2	-	-	-	-	-	-
Phenanthrene	mg/kg	0.1	7400	7400	9.0	3.7	0.1	9	0.9	-	2.2	3.8	3.6	3.8	-	-	-	-	-	-
Pyrene	mg/kg	0.1	1200	7400	62.4	25.5	0.8	62.4	6.2	-	15.7	22.8	22.3	29.5	-	-	-	-	-	-
PAH (USEPA16) Total	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SVOC 2014 Soils	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene (SVOC)	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-Chlorophenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-Dichlorobenzene (SVOC)	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene (SVOC)	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroisopropyl)ether	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-Methylphenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
N-nitrosodipropylamine	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-Methylphenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isophenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-Nitrophenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-Dimethylphenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy)methane	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-Dichlorophenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene (SVOC)	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene (SVOC)	mg/kg	0.1	-	-	1.2	-	-	-	<0.1	1.2	-	-	-	<0.1	1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexa chlorobutadiene	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-Chloro-3-Methylphenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	-	-	18.1	-	-	-	<0.1	4.2	-	-	-	<0.1	3.9	0.3	18.1	<0.1	<0.1	<0.1
2,4,5-Trichlorophenol	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chloronaphthalene	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene (SVOC)	mg/kg	0.1	-	-	0.5	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	0.5	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.5	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene (SVOC)	mg/kg	0.1	-	-	0.9	-	-	-	<0.1	<0.1	-	-	-	<0.1	0.9	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	-	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dinitrotoluene	mg/kg	0.5	-	-	<0.5	-	-	-	<0.5	<0.5	-	-	-	<0.5	<0.5					

Geoenvironmental Screening Table - Groundwater

Determinand	Units	Client sample ref:				Max	Date sampled:			
		LOD	EGS	DWS	BH101		BH102	BH103	WS102	
										21/01/15
pH (w)	Units	0.1			7.22	7.15	7.02	7.22	-	
Conductivity (w)	µS/cm	10			1190	988	1190	1010	-	
Sulphate (w)	mg/l	0.1		250	94	94.2	90.5	93.8	-	
Sulphide (w)	mg/l	0.1			<0.1	<0.1	<0.1	<0.1	-	
Cyanide (total) (w)	mg/l	0.05			<0.05	<0.05	<0.05	<0.05	-	
Phenols (screen) (w)	mg/l	0.03	0.077		<0.03	<0.03	<0.03	<0.03	-	
Arsenic (w)	µg/l	0.25	50	10	0.69	0.36	<0.25	0.69	-	
Boron (w)	µg/l	1		1000	231	231	141	178	-	
Cadmium (w)	µg/l	0.05	0.25	5	<0.05	<0.05	<0.05	<0.05	-	
Chromium (w)	µg/l	0.05	4.7	50	0.07	<0.05	0.07	0.07	-	
Copper (w)	µg/l	0.05	1	2000	29	0.51	29.15	0.12	-	
Lead (w)	µg/l	0.05	1.2	10	<0.05	<0.05	<0.05	<0.05	-	
Mercury (w)	µg/l	0.1	0.07	1	<0.10	<0.10	<0.10	<0.10	-	
Nickel (w)	µg/l	0.1	4	20	5.93	5.84	5.93	5.53	-	
Selenium (w)	µg/l	1		10	<1.00	<1.00	<1.00	<1.00	-	
Zinc (w)	µg/l	0.5	10.9	3000	16	16.4	10.9	10.9	-	
Temperature	°C	0.1			19	18.2	18.4	18.6	-	
TPH Banded (Alk/Aro) (w)										
C5-C6 Aliphatic (w)	mg/l	0.01			0.03	<0.01	0.03	<0.01	-	
>C6-C8 Aliphatic (w)	mg/l	0.01			0.36	0.02	0.03	0.36	-	
>C8-C10 Aliphatic (w)	mg/l	0.01			<0.01	<0.01	<0.01	<0.01	-	
>C10-C12 Aliphatic (w)	mg/l	0.01			0.03	<0.01	0.03	0.01	-	
>C12-C16 Aliphatic (w)	mg/l	0.01			0.09	0.02	0.02	0.09	-	
>C16-C21 Aliphatic (w)	mg/l	0.01			0.17	0.12	0.17	0.12	-	
>C21-C36 Aliphatic (w)	mg/l	0.01			3.05	0.12	3.05	0.25	-	
>C36-C44 Aliphatics (w)	mg/l	0.01			1.07	0.02	1.07	0.02	-	
C5-C7 Aromatic (w)	mg/l	0.01			<0.01	<0.01	<0.01	<0.01	-	
>C7-C8 Aromatic (w)	mg/l	0.01			<0.01	<0.01	<0.01	<0.01	-	
>C8-C10 Aromatic (w)	mg/l	0.01			0.01	<0.01	0.01	<0.01	-	
>C10-C12 Aromatic (w)	mg/l	0.01			0.03	<0.01	0.03	0.03	-	
>C12-C16 Aromatic (w)	mg/l	0.01			0.12	0.03	0.04	0.12	-	
>C16-C21 Aromatic (w)	mg/l	0.01			0.45	0.45	0.10	0.06	-	
>C21-C36 Aromatic (w)	mg/l	0.01			1.39	<0.01	1.39	<0.01	-	
>C36-C44 Aromatics (w)	mg/l	0.01			0.38	<0.01	0.38	<0.01	-	
TPH C5-C44	mg/l	0.01		0.01	6.32	0.78	6.32	1.06	-	
TPH Speciated (w)										
DRO (w)	mg/l	0.01			37	-	-	-	37.26	
GRO (w)	mg/l	0.01			2	-	-	-	2.31	
MFO (w)	mg/l	0.01			4	-	-	-	4.33	
SVOC 2014 Waters										
Phenol (w)	µg/l	1			<1	<1	<1	<1	-	
Bis(2-chloroethyl)ether (w)	µg/l	1			<1	<1	<1	<1	-	
2-Chlorophenol (w)	µg/l	1			<1	<1	<1	<1	-	
1,2-Dichlorobenzene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Bis(2-chloroisopropyl)ether (w)	µg/l	1			<1	<1	<1	<1	-	
2-Methylphenol (w)	µg/l	1			<1	<1	<1	<1	-	
N-nitrosodi-n-propylamine (w)	µg/l	1			<1	<1	<1	<1	-	
Hexachloroethane (w)	µg/l	1			<1	<1	<1	<1	-	
4-Methylphenol (w)	µg/l	1			<1	<1	<1	<1	-	
Nitrobenzene (w)	µg/l	1			<1	<1	<1	<1	-	
Isophorone (w)	µg/l	1			<1	<1	<1	<1	-	
2-Nitrophenol (w)	µg/l	1			<1	<1	<1	<1	-	
2,4-Dimethylphenol (w)	µg/l	1			<1	<1	<1	<1	-	
Bis(2-chloroethoxy)methane (w)	µg/l	1			<1	<1	<1	<1	-	
2,4-Dichlorophenol (w)	µg/l	1			<1	<1	<1	<1	-	
1,2,4-Trichlorobenzene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
naphthalene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Hexa chlorobutadiene (w)	µg/l	1			<1	<1	<1	<1	-	
4-Chloro-3-Methylphenol (w)	µg/l	1			<1	<1	<1	<1	-	
2-methylnaphthalene (w)	µg/l	1			2	<1	<1	2	-	
2,4,5-Trichlorophenol (w)	µg/l	1			<1	<1	<1	<1	-	
2-chloronaphthalene (w)	µg/l	1			<1	<1	<1	<1	-	
Acenaphthylene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Dimethyl phthalate (w)	µg/l	5			<5	<5	<5	<5	-	
2,6-dinitrotoluene (w)	µg/l	5			<5	<5	<5	<5	-	
Acenaphthene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Dibenzofuran (w)	µg/l	1			<1	<1	<1	<1	-	
2,4-dinitrotoluene (w)	µg/l	5			<5	<5	<5	<5	-	
4-Nitrophenol (w)	µg/l	10			<10	<10	<10	<10	-	
Fluorene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Diethylphthalate (w)	µg/l	5			<5	<5	<5	<5	-	
4-chlorophenyl-phenylether (w)	µg/l	1			<1	<1	<1	<1	-	
N-nitrosodiphenylamine (w)	µg/l	1			<1	<1	<1	<1	-	
4-Bromophenyl-phenyl ether (w)	µg/l	1			<1	<1	<1	<1	-	
Hexachlorobenzene (w)	µg/l	1			<1	<1	<1	<1	-	
Pentachlorophenol (w)	µg/l	5			<5	<5	<5	<5	-	
Phenanthrene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Anthracene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Carbazole (w)	µg/l	1			<1	<1	<1	<1	-	
Di-n-butylphthalate (w)	µg/l	5			<5	<5	<5	<5	-	
Fluoranthene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Pyrene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Benzyl butyl phthalate (w)	µg/l	5			<5	<5	<5	<5	-	
Benzofluoranthene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Chrysene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
bis(2-ethylhexyl) phthalate (w)	µg/l	5			<5	<5	<5	<5	-	
Di-n-octyl phthalate (w)	µg/l	5			<5	<5	<5	<5	-	
Benzofluoranthene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Benzokilfluoranthene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Benzofluoranthene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Indeno(1,2,3-cd)pyrene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
Dibenzo(a,h)anthracene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
1,3-Dichlorobenzene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
1,4-Dichlorobenzene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
2,4,6-Trichlorophenol (w)	µg/l	1			<1	<1	<1	<1	-	
4,6-Dinitro-2-Methylphenol (w)	µg/l	10			<10	<10	<10	<10	-	
Benzo(g,h,i)perylene (SVOC) (w)	µg/l	1			<1	<1	<1	<1	-	
VOC (w)										
Vinyl Chloride (w)	µg/l	5			<5	<5	<5	<5	<5	
Bromomethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Trichlorofluoromethane (w)	µg/l	5			<5	<5	<5	<5	<5	
1,1-Dichloroethane (w)	µg/l	5			6	<5	<5	<5	6	
2,2-Dichloropropane (w)	µg/l	5			<5	<5	<5	<5	<5	
Bromochloromethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Chloroform (w)	µg/l	5			<5	<5	<5	<5	<5	
1,1,1-Trichloroethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Carbon tetrachloride (w)	µg/l	5			<5	<5	<5	<5	<5	
1,1-Dichloropropane (w)	µg/l	5			<5	<5	<5	<5	<5	
Benzene (w)	µg/l	5	10	1	6	<5	<5	<5	6	
1,2-Dichloroethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Trichloroethylene (w)	µg/l	5			<5	<5	<5	<5	<5	
1,2-Dichloropropane (w)	µg/l	5			<5	<5	<5	<5	<5	
Dibromomethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Bromodichloromethane (w)	µg/l	5			<5	<5	<5	<5	<5	
cis-1,3-Dichloropropene (w)	µg/l	5			<5	<5	<5	<5	<5	
Toluene (w)	µg/l	5	74	700	747	<5	<5	<5	747	
trans-1,3-Dichloropropene (w)	µg/l	5			<5	<5	<5	<5	<5	
1,1,2-Trichloroethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Tetrachloroethylene (w)	µg/l	5			<5	<5	<5	<5	<5	
1,3-Dichloropropane (w)	µg/l	5			<5	<5	<5	<5	<5	
1,2-Dibromoethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Chlorobenzene (w)	µg/l	5			45	<5	<5	<5	45	
1,1,1,2-Tetrachloroethane (w)	µg/l	5			<5	<5	<5	<5	<5	
Ethylbenzene (w)	µg/l	5	200	300	72	<5	<5	<5	72	
m,p-Xylene (w)	µg/l	5			241	<5	<5	<5	241	
o-Xylene (w)	µg/l	5			132	<5	<5	<5	132	
Sum of Xylenes	µg/l	10	30	500	373	<10	<10	<10	373	
Styrene (w)	µg/l	5	50	20	7	<5	<5	<5	7	
Bromoforn (w)	µg/l	5			<5	<5	<5	<5	<5	
iso-Propylbenzene (w)	µg/l	5			22	<5	<5	<5	22	
Bromobenzene (w)	µg/l	5			<5	<5	<5	<5	<5	
1,2,3-Trichloropropane (w)	µg/l	5			24	<5				



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 29/12/14
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198370	C198371	C198372	C198373	C198374
Client sample ref:	WS104 0.23-0.3m	WS104 0.50m	WS104 3.80m	WS105 0.3-0.4m	WS105 3.10m
Date sampled:	22/12/14	22/12/14	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD					
Deviation Assessment										
Deviation(s)	C. Review	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH	AN5a	Units	Y	Y	0.1	-	7.67	-	10.8	-
TOC	AN48b	%	N	N	0.1	-	4.43	-	1.36	-
Arsenic	AN8b	mg/kg	Y	Y	2	-	39	-	21	-
Cadmium	AN8a	mg/kg	Y	N	1	-	<1	-	2	-
Chromium (total)	AN8b	mg/kg	Y	Y	2	-	23	-	25	-
Chromium (VI)	AN7	mg/kg	Y	N	1	-	<1	-	<1	-
Copper	AN8b	mg/kg	Y	Y	2	-	116	-	98	-
Lead	AN8b	mg/kg	Y	Y	2	-	411	-	374	-
Mercury	AN8a	mg/kg	Y	N	1	-	<1	-	2	-
Nickel	AN8b	mg/kg	Y	Y	2	-	41	-	22	-
Selenium	AN8a	mg/kg	Y	N	1	-	<1	-	1	-
Zinc	AN8b	mg/kg	Y	Y	2	-	127	-	1615	-
EMR	EMR	%	N	N/A	0.1	-	<0.1	-	<0.1	-
Asbestos	ASB001	%	Y	N/A	0.001	-	NAD	-	NAD	-
% Stones	Stones	% w/w	N	N/A	0.1	-	14.2	-	10.4	-
Moisture Content @ <30 °C	AN1	% w/w	Y	N/A	0.1	-	18.5	-	13.5	-
Sample Description	MCERTS ver4		N	N/A		-	7ACF	-	4A	-
PAH (USEPA16)										
Acenaphthene _M	GCM501	mg/kg	Y	Y	0.1	-	0.2	-	<0.1	-
Acenaphthylene _M	GCM501a	mg/kg	Y	Y	0.1	-	0.1	-	<0.1	-
Anthracene _M	GCM501	mg/kg	Y	Y	0.1	-	0.4	-	0.5	-
Benz(a)anthracene _M	GCM501	mg/kg	Y	Y	0.1	-	1.2	-	2.1	-
Benzo(a)pyrene _M	GCM501	mg/kg	Y	Y	0.1	-	1.2	-	1.6	-
Benzo(b)fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	-	1.7	-	2.2	-
Benzo(ghi)perylene _M	GCM501	mg/kg	Y	Y	0.1	-	0.9	-	0.8	-
Benzo(k)fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	-	0.5	-	0.8	-
Chrysene _M	GCM501	mg/kg	Y	Y	0.1	-	1.2	-	2.1	-
Dibenz(a,h)anthracene _M	GCM501	mg/kg	Y	Y	0.1	-	0.2	-	0.2	-
Fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	-	2.5	-	4.9	-
Fluorene _M	GCM501	mg/kg	Y	Y	0.1	-	0.2	-	0.2	-
Indeno(1,2,3-cd)pyrene _M	GCM501a	mg/kg	Y	Y	0.1	-	0.7	-	0.8	-
Naphthalene (PAH) _M	GCM501	mg/kg	Y	Y	0.1	-	0.6	-	<0.1	-
Phenanthrene _M	GCM501	mg/kg	Y	Y	0.1	-	1.6	-	2.8	-
Pyrene _M	GCM501	mg/kg	Y	Y	0.1	-	2.2	-	3.8	-
PAH (USEPA16) Total _M	GCM501	mg/kg	Y	Y	0.1	-	15.7	-	22.8	-



Test Certificate

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The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
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Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198370	C198372	C198374
Client sample ref:	WS104 0.23-0.3m	WS104 3.80m	WS105 3.10m
Date sampled:	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD			
SVOC 2014 Soils								
Phenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-Chlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,4-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Bis(2-chloroisopropyl)ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
N-nitrosodi-n-propylamine _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Hexachloroethane _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Nitrobenzene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Isophorone _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-Nitrophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4-Dimethylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy)methane _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4-Dichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Naphthalene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	1.2	<0.1	<0.1
Hexa chlorobutadiene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-Chloro-3-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene _M	SOP04	mg/kg	Y	N	0.1	4.2	<0.1	<0.1
2,4,5-Trichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-chloronaphthalene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Acenaphthylene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Dimethyl phthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Acenaphthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Dibenzofuran _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4-dinitrotoluene _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
4-Nitrophenol _M	SOP04c	mg/kg	Y	N	1	<1.0	<1.0	<1.0
Fluorene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	1.2	<0.1	<0.1
Diethylphthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-chlorophenyl-phenylether _M	SOP04	mg/kg	Y	N	0.1	0.2	<0.1	<0.1
2-methyl-4,6-dinitrophenol _M	SOP04c	mg/kg	Y	N	1	<1.0	<1.0	<1.0
N-nitrosodiphenylamine _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-Bromophenyl-phenyl ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Pentachlorophenol _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Phenanthrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	1.9	<0.1	<0.1
Anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Carbazole _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Di-n-butylphthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	1.4	<0.1	<0.1
Pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	1.4	<0.1	<0.1
Benzyl butyl phthalate _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Benzo(a)anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.4	<0.1	<0.1
Chrysene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.5	<0.1	<0.1
Bis(2-ethylhexyl) phthalate _M	SOP04b	mg/kg	Y	N	0.5	11.8	4.5	1.6
Di-n-octyl phthalate _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Benzo(b)fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.6	<0.1	<0.1
Benzo(k)fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.3	<0.1	<0.1
Benzo(a)pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.3	<0.1	<0.1
Indeno(1,2,3-cd)pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.3	<0.1	<0.1
Dibenzo(a,h)anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4,6-Trichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.3	<0.1	<0.1



Test Certificate

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The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 31/12/14, 06/01/15, 07/01/15, 08/01/15, 01/07/15, 01/08/15
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198370	C198372	C198374
Client sample ref:	WS104 0.23-0.3m	WS104 3.80m	WS105 3.10m
Date sampled:	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD			
TPH Banded(Aliphatic) (C6-C44)								
>C7-C8 Aromatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
>C6-C8 Aliphatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
C5-C6 Aliphatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
C5-C7 Aromatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
>C8-C10 Aliphatic _M	AN51	mg/kg	N	N	10	180	<10	<10
>C8-C10 Aromatic _M	AN51	mg/kg	N	N	10	28	<10	<10
>C10-C12 Aliphatic _M	AN51	mg/kg	N	N	10	1218	<10	<10
>C10-C12 Aromatic _M	AN51	mg/kg	N	N	10	62	<10	<10
>C12-C16 Aliphatic _M	AN51	mg/kg	N	N	10	3112	<10	<10
>C12-C16 Aromatic _M	AN51	mg/kg	N	N	10	412	<10	<10
>C16-C21 Aliphatic _M	AN51	mg/kg	N	N	10	2306	<10	<10
>C16-C21 Aromatic _M	AN51	mg/kg	N	N	10	412	<10	<10
>C21-C36 Aliphatic _M	AN51	mg/kg	N	N	10	3042	68	28
>C21-C36 Aromatic _M	AN51	mg/kg	N	N	10	512	<10	<10
>C36-C44 Aliphatic _M	AN51	mg/kg	N	N	10	154	10	10
>C36-C44 Aromatic _M	AN51	mg/kg	N	N	10	14	<10	<10



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Lab sample ref:	C198370	C198372	C198374
Client sample ref:	WS104 0.23-0.3m	WS104 3.80m	WS105 3.10m
Date sampled:	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD			
VOC 2014 Soils								
Vinyl chloride _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10	<10
Bromomethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Trichlorofluoromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
1,1-Dichloroethene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
trans-1,2-Dichloroethene _M	SOP01 U	µg/kg	Y	N	10	36	<10	<10
1,1-Dichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
2,2-Dichloropropane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
cis-1,2-Dichloroethene _M	SOP01 M	µg/kg	Y	N	10	170	<10	<10
Bromochloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Chloroform _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,1,1-Trichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Carbon tetrachloride _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,1-Dichloropropene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Benzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,2-Dichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Trichloroethylene _M	SOP01 NUM	µg/kg	N	N	10	40	<10	<10
1,2-Dichloropropane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Dibromomethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Bromodichloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
cis-1,3-Dichloropropene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Toluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
trans-1,3-Dichloropropene _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10	<10
1,1,2-Trichloroethane _M	SOP01 U	µg/kg	Y	N	10	11	<10	<10
Tetrachloroethylene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,3-Dichloropropane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Dibromochloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
1,2-Dibromoethane _M	SOP01 50 NUM	µg/kg	N	N	10	<50	<10	<10
Chlorobenzene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Ethylbenzene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
m,p-xylene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
o-Xylene _M	SOP01 M	µg/kg	Y	N	10	67	<10	<10
Styrene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Bromoform _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10	<10
iso-Propylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Bromobenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,2,3-Trichloropropane _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10	<10
n-Propylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
2-Chlorotoluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,3,5-Trimethylbenzene _M	SOP01 U	µg/kg	Y	N	10	385	<10	<10
4-Chlorotoluene _M	SOP01 50 U	µg/kg	Y	N	10	69	<10	<10
tert-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	63	<10	<10
1,2,4-Trimethylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
sec-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,3-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,4-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
n-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,2-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,2-Dibromo-3-chloro-propane _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10	<10
1,2,4-Trichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Hexachlorobutadiene _M	SOP01 NUM	µg/kg	N	N	10	<10	<10	<10
1,1,1,2-Tetrachloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Naphthalene (VOC) _M	SOP01 NUM	µg/kg	N	N	10	<10	<10	<10
p-Isopropyltoluene _M	SOP01 U	µg/kg	Y	N	10	63	<10	<10



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Sample Type: Solid

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File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198375	C198376	C198377	C198378	C198379
Client sample ref:	WS103 0.40m	WS103 1.00m	WS102 0.50m	WS102 1.00m	WS102 3.70m
Date sampled:	22/12/14	22/12/14	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD
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Deviation Assessment										
Deviation(s)	C. Review	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

pH	AN5a	Units	Y	Y	0.1	8.12	-	7.47	8.41	-
TOC	AN48b	%	N	N	0.1	5.25	-	1.16	1.27	-
Arsenic	AN8b	mg/kg	Y	Y	2	79	-	38	33	-
Cadmium	AN8a	mg/kg	Y	N	1	<1	-	<1	<1	-
Chromium (total)	AN8b	mg/kg	Y	Y	2	25	-	22	22	-
Chromium (VI)	AN7	mg/kg	Y	N	1	<1	-	<1	<1	-
Copper	AN8b	mg/kg	Y	Y	2	156	-	52	50	-
Lead	AN8b	mg/kg	Y	Y	2	7880	-	642	204	-
Mercury	AN8a	mg/kg	Y	N	1	2	-	<1	<1	-
Nickel	AN8b	mg/kg	Y	Y	2	38	-	23	23	-
Selenium	AN8a	mg/kg	Y	N	1	<1	-	<1	<1	-
Zinc	AN8b	mg/kg	Y	Y	2	317	-	121	100	-
EMR	EMR	%	N	N/A	0.1	<0.1	-	<0.1	<0.1	-
Asbestos	ASB001	%	Y	N/A	0.001	NAD	-	NAD	NAD	-
% Stones	Stones	% w/w	N	N/A	0.1	7.5	-	17.4	8.0	-
Moisture Content @ <30 °C	AN1	% w/w	Y	N/A	0.1	19.8	-	13.8	18.9	-
Sample Description	MCERTS ver4.		N	N/A		4A	-	5A	5A	-

PAH (USEPA16)										
Acenaphthene _M	GCM501	mg/kg	Y	Y	0.1	<0.1	-	<0.1	<0.1	-
Acenaphthylene _M	GCM501a	mg/kg	Y	Y	0.1	<0.1	-	<0.1	0.2	-
Anthracene _M	GCM501	mg/kg	Y	Y	0.1	<0.1	-	<0.1	0.7	-
Benz(a)anthracene _M	GCM501	mg/kg	Y	Y	0.1	0.5	-	0.1	6.7	-
Benzo(a)pyrene _M	GCM501	mg/kg	Y	Y	0.1	0.6	-	0.1	6.9	-
Benzo(b)fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	0.9	-	0.2	9.0	-
Benzo(ghi)perylene _M	GCM501	mg/kg	Y	Y	0.1	0.5	-	<0.1	4.1	-
Benzo(k)fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	0.2	-	<0.1	3.2	-
Chrysene _M	GCM501	mg/kg	Y	Y	0.1	0.6	-	0.1	5.7	-
Dibenz(a,h)anthracene _M	GCM501	mg/kg	Y	Y	0.1	0.1	-	<0.1	1.1	-
Fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	0.9	-	0.1	9.6	-
Fluorene _M	GCM501	mg/kg	Y	Y	0.1	<0.1	-	<0.1	0.1	-
Indeno(1,2,3-cd)pyrene _M	GCM501a	mg/kg	Y	Y	0.1	0.4	-	<0.1	3.7	-
Naphthalene (PAH) _M	GCM501	mg/kg	Y	Y	0.1	0.2	-	<0.1	<0.1	-
Phenanthrene _M	GCM501	mg/kg	Y	Y	0.1	0.4	-	<0.1	2.3	-
Pyrene _M	GCM501	mg/kg	Y	Y	0.1	0.9	-	0.1	9.0	-
PAH (USEPA16) Total _M	GCM501	mg/kg	Y	Y	0.1	6.2	-	0.8	62.4	-



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 31/12/14, 06/01/15, 07/01/15, 08/01/15, 01/07/15, 01/08/15
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198375	C198376	C198379
Client sample ref:	WS103 0.40m	WS103 1.00m	WS102 3.70m
Date sampled:	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD			
SVOC 2014 Soils								
Phenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,3-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-Chlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,4-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,2-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Bis(2-chloroisopropyl)ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
N-nitrosodi-n-propylamine _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Hexachloroethane _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Nitrobenzene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Isophorone _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-Nitrophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4-Dimethylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy)methane _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4-Dichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
1,2,4-Trichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Naphthalene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Hexa chlorobutadiene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-Chloro-3-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	18.1
2,4,5-Trichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-chloronaphthalene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Acenaphthylene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	0.5
Dimethyl phthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Acenaphthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Dibenzofuran _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4-dinitrotoluene _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
4-Nitrophenol _M	SOP04c	mg/kg	Y	N	1	<1.0	<1.0	<1.0
Fluorene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	2.2
Diethylphthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-chlorophenyl-phenylether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2-methyl-4,6-dinitrophenol _M	SOP04c	mg/kg	Y	N	1	<1.0	<1.0	<1.0
N-nitrosodiphenylamine _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
4-Bromophenyl-phenyl ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Pentachlorophenol _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Phenanthrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	4.8
Anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Carbazole _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Di-n-butylphthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.9	<0.1	0.2
Pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.6	<0.1	0.5
Benzyl butyl phthalate _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Benzo(a)anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.4	<0.1	<0.1
Chrysene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.5	<0.1	<0.1
Bis(2-ethylhexyl) phthalate _M	SOP04b	mg/kg	Y	N	0.5	1.5	0.6	<0.5
Di-n-octyl phthalate _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5	<0.5
Benzo(b)fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.5	<0.1	<0.1
Benzo(k)fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.5	<0.1	<0.1
Benzo(a)pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.5	<0.1	<0.1
Indeno(1,2,3-cd)pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.2	<0.1	<0.1
Dibenzo(a,h)anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
2,4,6-Trichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.4	<0.1	<0.1



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 31/12/14, 06/01/15, 07/01/15, 08/01/15, 01/07/15, 01/08/15
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198375	C198376	C198379
Client sample ref:	WS103 0.40m	WS103 1.00m	WS102 3.70m
Date sampled:	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD			
TPH Banded(Al/Aro) (C6-C44)								
>C7-C8 Aromatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
>C6-C8 Aliphatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
C5-C6 Aliphatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
C5-C7 Aromatic _M	AN15a-1	mg/kg	N	N	1	<1	<1	<1
>C8-C10 Aliphatic _M	AN51	mg/kg	N	N	10	<10	<10	296
>C8-C10 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10	42
>C10-C12 Aliphatic _M	AN51	mg/kg	N	N	10	<10	<10	1070
>C10-C12 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10	186
>C12-C16 Aliphatic _M	AN51	mg/kg	N	N	10	15	<10	3210
>C12-C16 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10	558
>C16-C21 Aliphatic _M	AN51	mg/kg	N	N	10	42	<10	2462
>C16-C21 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10	690
>C21-C36 Aliphatic _M	AN51	mg/kg	N	N	10	165	56	2124
>C21-C36 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10	378
>C36-C44 Aliphatic _M	AN51	mg/kg	N	N	10	12	12	122
>C36-C44 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10	<10



Test Certificate

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The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
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Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198375	C198376	C198379
Client sample ref:	WS103 0.40m	WS103 1.00m	WS102 3.70m
Date sampled:	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD			
VOC 2014 Soils								
Vinyl chloride _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10	<10
Bromomethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Trichlorofluoromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
1,1-Dichloroethene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
trans-1,2-Dichloroethene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,1-Dichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
2,2-Dichloropropane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
cis-1,2-Dichloroethene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Bromochloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Chloroform _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,1,1-Trichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Carbon tetrachloride _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,1-Dichloropropene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Benzene _M	SOP01 U	µg/kg	Y	N	10	135	18	<10
1,2-Dichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Trichloroethylene _M	SOP01 NUM	µg/kg	N	N	10	<10	<10	<10
1,2-Dichloropropane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Dibromomethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Bromodichloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
cis-1,3-Dichloropropene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Toluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
trans-1,3-Dichloropropene _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10	<10
1,1,2-Trichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Tetrachloroethylene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,3-Dichloropropane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Dibromochloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
1,2-Dibromoethane _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10	<10
Chlorobenzene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	<10
Ethylbenzene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	34
m,p-xylene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	106
o-Xylene _M	SOP01 M	µg/kg	Y	N	10	<10	<10	724
Styrene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Bromoform _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10	<10
iso-Propylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Bromobenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,2,3-Trichloropropane _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10	<10
n-Propylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	297
2-Chlorotoluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,3,5-Trimethylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	638
4-Chlorotoluene _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10	<10
tert-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	124
1,2,4-Trimethylbenzene _M	SOP01 U	µg/kg	Y	N	10	19	<10	164
sec-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	578
1,3-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,4-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
n-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
1,2-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	30
1,2-Dibromo-3-chloro-propane _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10	<10
1,2,4-Trichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Hexachlorobutadiene _M	SOP01 NUM	µg/kg	N	N	10	<10	<10	<10
1,1,1,2-Tetrachloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10	<10
Naphthalene (VOC) _M	SOP01 NUM	µg/kg	N	N	10	<10	<10	<10
p-Isopropyltoluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10	124



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 31/12/14, 06/01/15, 07/01/15, 08/01/15, 01/07/15, 01/08/15
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198380	C198381	C198382	C198383	C198384
Client sample ref:	WS101 0.40m	WS101 3.00m	BH101 0.40m	BH103 0.40m	BH103 0.80m
Date sampled:	22/12/14	22/12/14	22/12/14	22/12/14	22/12/14
Sample matrix (see notes page):	S	S	S	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD
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Deviation Assessment

Deviation(s)	C. Review	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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pH	AN5a	Units	Y	Y	0.1	8.23	-	8.01	8.66	-
TOC	AN48b	%	N	N	0.1	2.67	-	2.52	1.34	-
Arsenic	AN8b	mg/kg	Y	Y	2	24	-	30	18	-
Cadmium	AN8a	mg/kg	Y	N	1	1	-	<1	<1	-
Chromium (total)	AN8b	mg/kg	Y	Y	2	40	-	27	18	-
Chromium (VI)	AN7	mg/kg	Y	N	1	<1	-	<1	<1	-
Copper	AN8b	mg/kg	Y	Y	2	88	-	84	54	-
Lead	AN8b	mg/kg	Y	Y	2	504	-	537	209	-
Mercury	AN8a	mg/kg	Y	N	1	2	-	<1	<1	-
Nickel	AN8b	mg/kg	Y	Y	2	23	-	25	20	-
Selenium	AN8a	mg/kg	Y	N	1	<1	-	<1	<1	-
Zinc	AN8b	mg/kg	Y	Y	2	342	-	182	96	-
EMR	EMR	%	N	N/A	0.1	<0.1	-	<0.1	<0.1	-
Asbestos	ASB001	%	Y	N/A	0.001	Chrysotile (Loose fibres)	-	NAD	Chrysotile (Loose fibres)	-
% Stones	Stones	% w/w	N	N/A	0.1	8.1	-	10.2	8.1	-
Moisture Content @ <30°C	AN1	% w/w	Y	N/A	0.1	19.2	-	16.9	11.6	-
Sample Description	MCERTS ver4		N	N/A		4AE	-	4A	4AF	-

PAH (USEPA16)

Acenaphthene _M	GCM501	mg/kg	Y	Y	0.1	<0.1	-	<0.1	0.9	-
Acenaphthylene _M	GCM501a	mg/kg	Y	Y	0.1	<0.1	-	<0.1	0.5	-
Anthracene _M	GCM501	mg/kg	Y	Y	0.1	0.4	-	0.4	0.9	-
Benz(a)anthracene _M	GCM501	mg/kg	Y	Y	0.1	2.1	-	1.9	1.8	-
Benzo(a)pyrene _M	GCM501	mg/kg	Y	Y	0.1	2.5	-	2.0	1.6	-
Benzo(b)fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	3.2	-	2.9	2.1	-
Benzo(ghi)perylene _M	GCM501	mg/kg	Y	Y	0.1	1.5	-	1.2	1.0	-
Benzo(k)fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	1.2	-	1.0	0.8	-
Chrysene _M	GCM501	mg/kg	Y	Y	0.1	2.5	-	2.2	1.7	-
Dibenz(a,h)anthracene _M	GCM501	mg/kg	Y	Y	0.1	0.4	-	0.4	0.2	-
Fluoranthene _M	GCM501	mg/kg	Y	Y	0.1	4.6	-	4.2	4.0	-
Fluorene _M	GCM501	mg/kg	Y	Y	0.1	<0.1	-	<0.1	2.1	-
Indeno(1,2,3-cd)pyrene _M	GCM501a	mg/kg	Y	Y	0.1	1.4	-	1.2	0.9	-
Naphthalene (PAH) _M	GCM501	mg/kg	Y	Y	0.1	<0.1	-	<0.1	1.7	-
Phenanthrene _M	GCM501	mg/kg	Y	Y	0.1	2.0	-	1.6	5.2	-
Pyrene _M	GCM501	mg/kg	Y	Y	0.1	3.7	-	3.6	3.8	-
PAH (USEPA16) Total _M	GCM501	mg/kg	Y	Y	0.1	25.5	-	22.3	29.5	-



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 31/12/14, 06/01/15, 07/01/15, 08/01/15, 01/07/15, 01/08/15
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198381	C198384
Client sample ref:	WS101 3.00m	BH103 0.80m
Date sampled:	22/12/14	22/12/14
Sample matrix (see notes page):	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD		
SVOC 2014 Soils							
Phenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Bis(2-chloroethyl)ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
1,3-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2-Chlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
1,4-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
1,2-Dichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Bis(2-chloroisopropyl)ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
N-nitrosodi-n-propylamine _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Hexachloroethane _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
4-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Nitrobenzene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Isophorone _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2-Nitrophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2,4-Dimethylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Bis(2-chloroethoxy)methane _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2,4-Dichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
1,2,4-Trichlorobenzene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Naphthalene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	1.0
Hexa chlorobutadiene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
4-Chloro-3-Methylphenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2-methylnaphthalene _M	SOP04	mg/kg	Y	N	0.1	0.3	3.9
2,4,5-Trichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2-chloronaphthalene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Acenaphthylene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Dimethyl phthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2,6-dinitrotoluene _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5
Acenaphthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.9
Dibenzofuran _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2,4-dinitrotoluene _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5
4-Nitrophenol _M	SOP04c	mg/kg	Y	N	1	<1.0	<1.0
Fluorene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.8
Diethylphthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
4-chlorophenyl-phenylether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2-methyl-4,6-dinitrophenol _M	SOP04c	mg/kg	Y	N	1	<1.0	<1.0
N-nitrosodiphenylamine _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
4-Bromophenyl-phenyl ether _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Hexachlorobenzene _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Pentachlorophenol _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5
Phenanthrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.1	1.9
Anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.2
Carbazole _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Di-n-butylphthalate _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	1.2
Pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	0.1	1.1
Benzyl butyl phthalate _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5
Benzo(a)anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.4
Chrysene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.4
Bis(2-ethylhexyl) phthalate _M	SOP04b	mg/kg	Y	N	0.5	<0.5	0.8
Di-n-octyl phthalate _M	SOP04b	mg/kg	Y	N	0.5	<0.5	<0.5
Benzo(b)fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.2
Benzo(k)fluoranthene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.2
Benzo(a)pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	0.2
Indeno(1,2,3-cd)pyrene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Dibenzo(a,h)anthracene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
2,4,6-Trichlorophenol _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1
Benzo(g,h,i)perylene (SVOC) _M	SOP04	mg/kg	Y	N	0.1	<0.1	<0.1



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 31/12/14, 06/01/15, 07/01/15, 08/01/15, 01/07/15, 01/08/15
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198381	C198384
Client sample ref:	WS101 3.00m	BH103 0.80m
Date sampled:	22/12/14	22/12/14
Sample matrix (see notes page):	S	S

Determinand	Method	Units	ISO17025	MCERTS	LOD		
TPH Banded(Al/Aro) (C6-C44)							
>C7-C8 Aromatic _M	AN15a-1	mg/kg	N	N	1	<1	<1
>C6-C8 Aliphatic _M	AN15a-1	mg/kg	N	N	1	<1	<1
C5-C6 Aliphatic _M	AN15a-1	mg/kg	N	N	1	<1	<1
C5-C7 Aromatic _M	AN15a-1	mg/kg	N	N	1	<1	<1
>C8-C10 Aliphatic _M	AN51	mg/kg	N	N	10	<10	14
>C8-C10 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10
>C10-C12 Aliphatic _M	AN51	mg/kg	N	N	10	<10	170
>C10-C12 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10
>C12-C16 Aliphatic _M	AN51	mg/kg	N	N	10	72	856
>C12-C16 Aromatic _M	AN51	mg/kg	N	N	10	<10	78
>C16-C21 Aliphatic _M	AN51	mg/kg	N	N	10	78	808
>C16-C21 Aromatic _M	AN51	mg/kg	N	N	10	18	52
>C21-C36 Aliphatic _M	AN51	mg/kg	N	N	10	160	556
>C21-C36 Aromatic _M	AN51	mg/kg	N	N	10	<10	76
>C36-C44 Aliphatic _M	AN51	mg/kg	N	N	10	10	26
>C36-C44 Aromatic _M	AN51	mg/kg	N	N	10	<10	<10



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham LPO0851
Date Tested: 31/12/14, 06/01/15, 07/01/15, 08/01/15, 01/07/15, 01/08/15
Date Reported: 8 January, 2015
Date Received: 29 December, 2014
Sample Type: Solid

Certificate No: 14/5298/G/S/C1
File No: 14/5298/G/S
Client Ref: LPO2953

Lab sample ref:	C198381	C198384
Client sample ref:	WS101 3.00m	BH103 0.80m
Date sampled:	22/12/14	22/12/14
Sample matrix (see notes page):	S	S

Determinand	Method	Units	ISO17025	M/CERTS	LOD		
VOC 2014 Soils							
Vinyl chloride _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10
Bromomethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Trichlorofluoromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10
1,1-Dichloroethene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
trans-1,2-Dichloroethene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,1-Dichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
2,2-Dichloropropane _M	SOP01 M	µg/kg	Y	N	10	<10	<10
cis-1,2-Dichloroethene _M	SOP01 M	µg/kg	Y	N	10	<10	<10
Bromochloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10
Chloroform _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,1,1-Trichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Carbon tetrachloride _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,1-Dichloropropene _M	SOP01 M	µg/kg	Y	N	10	<10	<10
Benzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,2-Dichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Trichloroethylene _M	SOP01 NUM	µg/kg	N	N	10	<10	<10
1,2-Dichloropropane _M	SOP01 M	µg/kg	Y	N	10	<10	<10
Dibromomethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Bromodichloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10
cis-1,3-Dichloropropene _M	SOP01 M	µg/kg	Y	N	10	<10	<10
Toluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
trans-1,3-Dichloropropene _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10
1,1,2-Trichloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Tetrachloroethylene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,3-Dichloropropane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Dibromochloromethane _M	SOP01 M	µg/kg	Y	N	10	<10	<10
1,2-Dibromoethane _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10
Chlorobenzene _M	SOP01 M	µg/kg	Y	N	10	<10	<10
Ethylbenzene _M	SOP01 M	µg/kg	Y	N	10	<10	<10
m,p-xylene _M	SOP01 M	µg/kg	Y	N	10	<10	<10
o-Xylene _M	SOP01 M	µg/kg	Y	N	10	<10	<10
Styrene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Bromoform _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10
iso-Propylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Bromobenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,2,3-Trichloropropane _M	SOP01 50 NUM	µg/kg	N	N	10	<10	<10
n-Propylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
2-Chlorotoluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,3,5-Trimethylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	14
4-Chlorotoluene _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10
tert-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,2,4-Trimethylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	47
sec-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,3-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,4-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10
n-Butylbenzene _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,2-Dichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10
1,2-Dibromo-3-chloro-propane _M	SOP01 50 U	µg/kg	Y	N	10	<10	<10
1,2,4-Trichlorobenzene (VOC) _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Hexachlorobutadiene _M	SOP01 NUM	µg/kg	N	N	10	<10	<10
1,1,1,2-Tetrachloroethane _M	SOP01 U	µg/kg	Y	N	10	<10	<10
Naphthalene (VOC) _M	SOP01 NUM	µg/kg	N	N	10	<10	98
p-Isopropyltoluene _M	SOP01 U	µg/kg	Y	N	10	<10	<10

- Notes
- The laboratory has tested the materials/items supplied by the client as sampled in accordance with the client's own requirements.
 - Sampling location details and sample information were supplied with the sample.
 - Bulk Analysis carried out in accordance with DIHM ASB/01 which is based on Health & Safety Executive procedure
Appendix 2: Asbestos in Bulk Materials: Sampling and Identification by polarised light microscopy (PLM) set out in HSG248.
 - Asbestos material identification is based on visual examination only. Comments are not covered by UKAS accreditation.
 - NAD denotes - 'No Asbestos Detected'.

Signed for, and on behalf of Exova (UK) Ltd.

Prepared by:

Claire McLaughlin

C McLaughlin
Administrator

Approved by:

Julie McElroy

J McElroy
Laboratory Manager



0568



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham - LP00851

Date Tested: 29/01/15, 02/02/15
Date Reported: 2 February, 2015
Date Received: 23 January, 2015
Sample Type: Liquid

Certificate No: 15/0313/G/W/C1
File No: 15/0313/G/W
Client Ref: LPO3010

Lab sample ref:	C200375	C200376	C200377	C200378
Client sample ref:	BH101	BH102	BH103	WS102
Date sampled:	21/01/15	21/01/15	21/01/15	21/01/15
Sample matrix :	Liquid	Liquid	Liquid	Liquid

Determinand	Method	Units	ISO17025	LOD				
Deviation Assessment								
Deviation(s)	C. Review	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH (w)	AN5b	Units	Y	0.1	7.15	7.02	7.22	-
Conductivity (w)	AN28	µS/cm	Y	10	988	1190	1010	-
Sulphate (w)	AN50b	mg/l	Y	0.1	94.2	90.5	93.8	-
Sulphide (w)	AN45a	mg/l	Y	0.1	<0.1	<0.1	<0.1	-
Cyanide (total) (w)	AN45h	mg/l	Y	0.05	<0.05	<0.05	<0.05	-
Phenols (screen) (w)	AN45c	mg/l	Y	0.03	<0.03	<0.03	<0.03	-
Arsenic (w)	AN47e	µg/l	Y	0.25	0.36	<0.25	0.69	-
Boron (w)	AN47c	µg/l	Y	1	231	141	178	-
Cadmium (w)	AN47a	µg/l	Y	0.05	<0.05	<0.05	<0.05	-
Chromium (w)	AN47a	µg/l	Y	0.05	<0.05	0.07	0.07	-
Copper (w)	AN47a	µg/l	Y	0.05	0.51	29.15	0.12	-
Lead (w)	AN47a	µg/l	Y	0.05	<0.05	<0.05	<0.05	-
Mercury (w)	AN47b	µg/l	Y	0.1	<0.10	<0.10	<0.10	-
Nickel (w)	AN47b	µg/l	Y	0.1	5.84	5.93	5.53	-
Selenium (w)	AN47c	µg/l	Y	1	<1.00	<1.00	<1.00	-
Zinc (w)	AN47g	µg/l	Y	0.5	16.4	10.9	10.9	-
Temperature	Probe	°C	N	0.1	18.2	18.4	18.6	-
TPH Banded (Ali/Aro) (w)								
>C6-C8 Aliphatic (w)	AN15-1	mg/l	N	0.01	0.02	0.03	0.36	-
>C7-C8 Aromatic (w)	AN15-1	mg/l	N	0.01	<0.01	<0.01	<0.01	-
C5-C6 Aliphatic (w)	AN15-1	mg/l	N	0.01	<0.01	0.03	<0.01	-
C5-C7 Aromatic (w)	AN15-1	mg/l	N	0.01	<0.01	<0.01	<0.01	-
>C8-C10 Aliphatic (w)	AN34	mg/l	N	0.01	<0.01	<0.01	<0.01	-
>C8-C10 Aromatic (w)	AN34	mg/l	N	0.01	<0.01	0.01	<0.01	-
>C10-C12 Aliphatic (w)	AN34	mg/l	N	0.01	<0.01	0.03	0.01	-
>C10-C12 Aromatic (w)	AN34	mg/l	N	0.01	<0.01	0.03	0.03	-
>C12-C16 Aliphatic (w)	AN34	mg/l	N	0.01	0.02	0.02	0.09	-
>C12-C16 Aromatic (w)	AN34	mg/l	N	0.01	0.03	0.04	0.12	-
>C16-C21 Aliphatic (w)	AN34	mg/l	N	0.01	0.12	0.17	0.12	-
>C16-C21 Aromatic (w)	AN34	mg/l	N	0.01	0.45	0.1	0.06	-
>C21-C36 Aliphatic (w)	AN34	mg/l	N	0.01	0.12	3.05	0.25	-
>C21-C36 Aromatic (w)	AN34	mg/l	N	0.01	<0.01	1.39	<0.01	-
>C36-C44 Aliphatics(w)	AN34	mg/l	N	0.01	0.02	1.07	0.02	-
>C36-C44 Aromatics(w)	AN34	mg/l	N	0.01	<0.01	0.38	<0.01	-
TPH Speciated (w)								
DRO (w)	AN34	mg/l	Y	0.01	-	-	-	37.26
GRO (w)	AN34	mg/l	Y	0.01	-	-	-	2.31
MRO (w)	AN34	mg/l	Y	0.01	-	-	-	4.33



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham - LP00851
Date Tested: 29/01/15, 02/02/15
Date Reported: 2 February, 2015
Date Received: 23 January, 2015
Sample Type: Liquid

Certificate No: 15/0313/G/W/C1
File No: 15/0313/G/W
Client Ref: LPO3010

Lab sample ref:	C200375	C200376	C200377
Client sample ref:	BH101	BH102	BH103
Date sampled:	21/01/15	21/01/15	21/01/15
Sample matrix :	Liquid	Liquid	Liquid

Determinand	Method	Units	ISO 17025	LOD			
SVOC 2014 Waters							
Phenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Bis(2-chloroethyl)ether (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2-Chlorophenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
1,2-Dichlorobenzene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Bis(2-chloroisopropyl)ether (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2-Methylphenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
N-nitrosodi-n-propylamine (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Hexachloroethane (w)	SOP04d	µg/l	Y	1	<1	<1	<1
4-Methylphenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Nitrobenzene (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Isophorone (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2-Nitrophenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2,4-Dimethylphenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Bis(2-chloroethoxy)methane (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2,4-Dichlorophenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
1,2,4-Trichlorobenzene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
naphthalene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Hexa chlorobutadiene (w)	SOP04d	µg/l	Y	1	<1	<1	<1
4-Chloro-3-Methylphenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2-methylnaphthalene (w)	SOP04d	µg/l	Y	1	<1	<1	2
2,4,5-Trichlorophenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2-chloronaphthalene (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Acenaphthylene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Dimethyl phthalate (w)	SOP04e	µg/l	Y	5	<5	<5	<5
2,6-dinitrotoluene (w)	SOP04e	µg/l	Y	5	<5	<5	<5
Acenaphthene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Dibenzofuran (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2,4-dinitrotoluene (w)	SOP04e	µg/l	Y	5	<5	<5	<5
4-Nitrophenol (w)	SOP04f	µg/l	Y	10	<10	<10	<10
Fluorene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Diethylphthalate (w)	SOP04e	µg/l	Y	5	<5	<5	<5
4-chlorophenyl-phenylether (w)	SOP04d	µg/l	Y	1	<1	<1	<1
N-nitrosodiphenylamine (w)	SOP04d	µg/l	Y	1	<1	<1	<1
4-Bromophenyl-phenyl ether (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Hexachlorobenzene (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Pentachlorophenol (w)	SOP04e	µg/l	Y	5	<5	<5	<5
Phenanthrene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Anthracene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Carbazole (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Di-n-butylphthalate (w)	SOP04e	µg/l	Y	5	<5	<5	<5
Fluoranthene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Pyrene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Benzyl butyl phthalate (w)	SOP04e	µg/l	Y	5	<5	<5	<5
Benzo(a)anthracene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Chrysene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
bis(2-ethylhexyl) phthalate (w)	SOP04e	µg/l	Y	5	<5	<5	<5
Di-n-octyl phthalate (w)	SOP04e	µg/l	Y	5	<5	<5	<5
Benzo(b)fluoranthene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Benzo(k)fluoranthene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Benzo(a)pyrene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Indeno(1,2,3-cd)pyrene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
Dibenzo(a,h)anthracene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
1,3-Dichlorobenzene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
1,4-Dichlorobenzene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1
2,4,6-Trichlorophenol (w)	SOP04d	µg/l	Y	1	<1	<1	<1
4,6-Dinitro-2-Methylphenol (w)	SOP04f	µg/l	Y	10	<10	<10	<10
Benzo(g,h,i)perylene (SVOC) (w)	SOP04d	µg/l	Y	1	<1	<1	<1



Test Certificate

Client: Leap Environmental Ltd
The Atrium, Curtis Road, Dorking, Surrey, RH4 1XA
Site: Arlington Road, Twickenham - LP00851
Date Tested: 29/01/15, 02/02/15
Date Reported: 2 February, 2015
Date Received: 23 January, 2015
Sample Type: Liquid

Certificate No: 15/0313/G/W/C1
File No: 15/0313/G/W
Client Ref: LPO3010

Lab sample ref:	C200375	C200376	C200377	C200378
Client sample ref:	BH101	BH102	BH103	WS102
Date sampled:	21/01/15	21/01/15	21/01/15	21/01/15
Sample matrix:	Liquid	Liquid	Liquid	Liquid

Determinand	Method	Units	ISO 17025		LOD			
			Y	5	<5	<5	<5	<5
VOC (w)								
Vinyl Chloride (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Bromomethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Trichlorofluoromethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,1-Dichloroethane (w)	AN15	µg/l	Y	5	<5	<5	<5	6
2,2-Dichloropropane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Bromochloromethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Chloroform (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,1,1-Trichloroethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Carbon tetrachloride (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,1-Dichloropropene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Benzene (w)	AN15	µg/l	Y	5	<5	<5	<5	6
1,2-Dichloroethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Trichloroethylene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,2-Dichloropropane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Dibromomethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Bromodichloromethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
cis-1,3-Dichloropropene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Toluene (w)	AN15	µg/l	Y	5	<5	<5	<5	747
trans-1,3-Dichloropropene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,1,2-Trichloroethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Tetrachloroethylene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,3-Dichloropropane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,2-Dibromoethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Chlorobenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	45
1,1,1,2-Tetrachloroethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Ethylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	72
m,p-Xylene (w)	AN15	µg/l	Y	5	<5	<5	<5	241
o-Xylene (w)	AN15	µg/l	Y	5	<5	<5	<5	132
Styrene (w)	AN15	µg/l	Y	5	<5	<5	<5	7
Bromoform (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
iso-Propylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	22
Bromobenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,2,3-Trichloropropane (w)	AN15	µg/l	Y	5	<5	<5	<5	24
n-Propylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	44
2-Chlorotoluene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,3,5-Trimethylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	116
4-Chlorotoluene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
tert-Butylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,2,4-Trimethylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	365
sec-Butylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	25
1,3-Dichlorobenzene (VOC) (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,4-Dichlorobenzene (VOC) (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
n-Butylbenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	52
1,2-Dichlorobenzene (VOC) (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,2-Dibromo-3-chloro-propane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,2,4-Trichlorobenzene (VOC) (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Hexachlorobutadiene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,2,3-Trichlorobenzene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
1,1-Dichloroethylene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
4-isopropyltoluene (w)	AN15	µg/l	Y	5	<5	<5	<5	31
Chlorodibromomethane (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
cis-1,2-Dichloroethylene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5
Naphthalene (VOC) (w)	AN15	µg/l	Y	5	<5	<5	<5	160
trans-1,2-Dichloroethylene (w)	AN15	µg/l	Y	5	<5	<5	<5	<5

Notes

1. Tests marked * indicate subcontracted analyses.
2. The laboratory has tested the material/items supplied by the client as sampled in accordance with the client's own requirements.
3. Results reported for metals are 'dissolved' unless otherwise stated.
4. Dates of testing for all parameters are available upon request.

Signed for, and on behalf of Exova (UK) Ltd.

Prepared by:

F Barr
Administrator

Approved by:


J McElroy
Laboratory Manager



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APPENDIX I

**Groundwater Monitoring
Results**

			Groundwater Monitoring Record						
			Location						
			WS102	BH102	BH101	BH103			
Date:	21-01-2015	Well Diameter (mm)	50	50	50	50			
Project No:	LP00851	Borehole Depth (m)	2.97	5.55	4.15	7.56			
Site:	Arlington Road Works, Twickenham	Water Level (mbgl)	2.575	2.730	2.925	3.035			
Engineer:	AJ & GW	Volume Purged (l)	<1	30	30	25			
Sampling Method	Low flow watterra with electric pump	Samples Taken	2x Vials. Part-filled glass bottle	2x Glass Bottles. 1x Plastic bottle. 2x Vials	2x Glass Bottles. 1x Plastic bottle. 2x Vials	2x Glass Bottles. 1x Plastic bottle. 2x Vials			
		Notes on sample appearance	Very silty, due to low volumes in well.	Silty, opaque. Pale brown. Slight sheen.	Silty, opaque orange brown. Slight sheen.	Silty, translucent, pale brown. Oily sheen.			
Weather Conditions	Overcast. Cold. Light breeze.	Other	Left to recharge for 30 mins, but still not enough to fill bottle.						
Air Temperature		pH	n/a	5.6	5.8	5.9			
		Temperature (°C)	n/a	13	13	13			
		EC (µS/cm)	n/a	1120	1010	980			
		TDS (ppm)	n/a	560	500	520			
		D.O.	Broken meter						

APPENDIX J

**Details of Field
Monitoring Equipment**

Photoionization Detector

A PhoCheck Tiger portable photoionization detector (PID) has been used in this investigation.

The PID measures the concentration of photoionizable chemicals in a gas stream. A 10.6eV ultraviolet lamp generates photons which ionize molecules with an ionization potential of 10.6eV or less in the gas stream. Many of the chemicals considered pollutants, including most hydrocarbons are ionized. It should be noted that substances with an ionization potential greater than 10.6eV (eg methane) pass through the detector without ionization. The ionized molecules generate an electric current which is proportional to the concentration of ionized molecules in the detector cell.

The PID is calibrated to isobutylene and the reading quoted is therefore in ppm isobutylene equivalent unless otherwise stated. Where the composition of the pollutant gas is known and is a single compound then the instrument may be directly calibrated to provide quantitative results. Alternatively the instrument's own library of calibration values may be used to provide semi quantitative results.

In general where the composition is unknown or is a mixture of compounds then the readings are regarded as qualitative only. The instrument is used primarily to highlight samples for laboratory testing. The instrument is also used effectively to highlight areas of relative contamination and thereby highlight hotspots or migration pathways.

In this investigation soil samples of about 0.5-1.0kg in weight have been placed in a plastic bag and agitated. The PID has then been used to monitor VOCs released within the bag using a dedicated probe which pierces the bag.

Each reading presented in this report represents the peak value recorded over a five minute period unless otherwise stated.