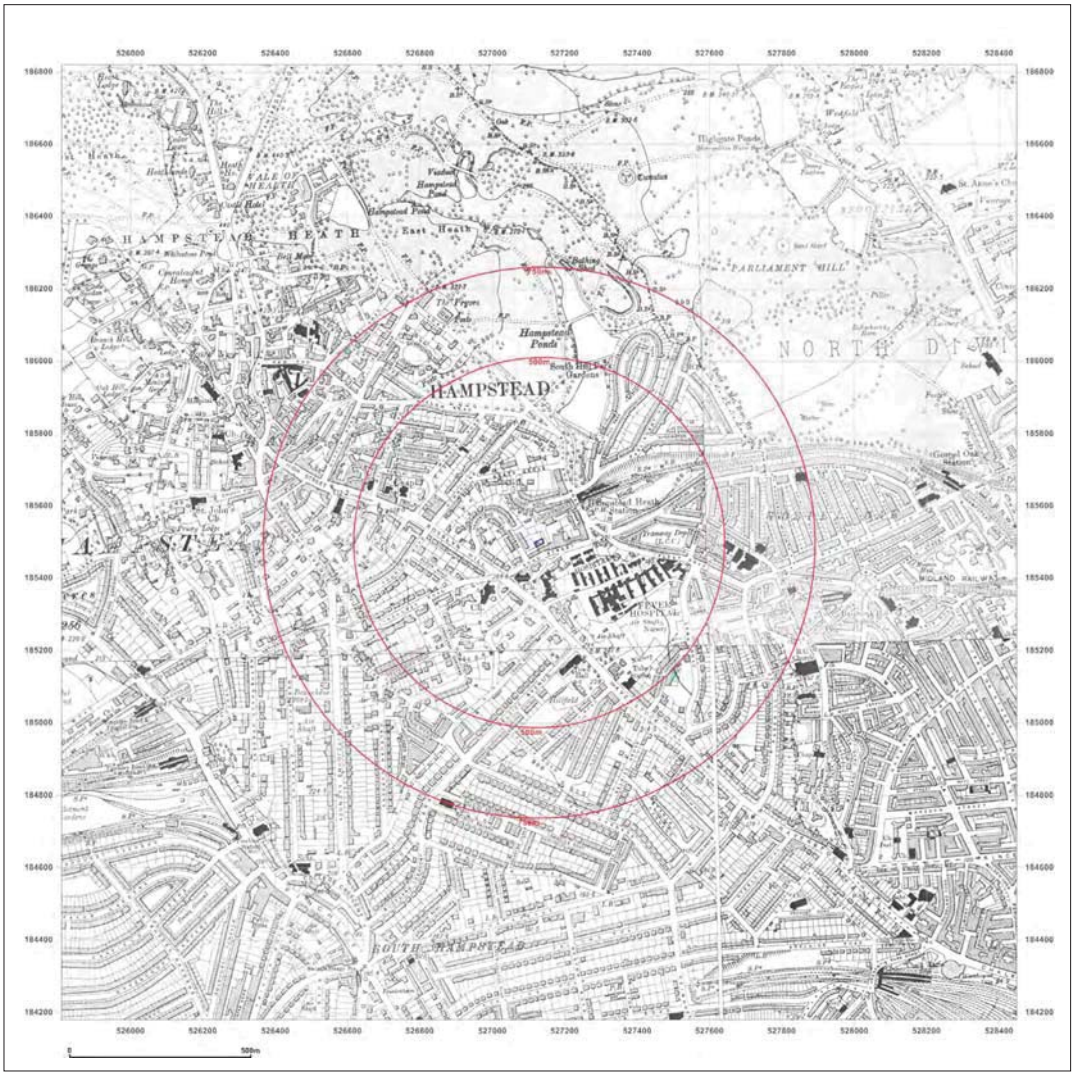

Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: County Series
Map date: **1920**
Scale: 1:10,560
Printed at: 1:10,560

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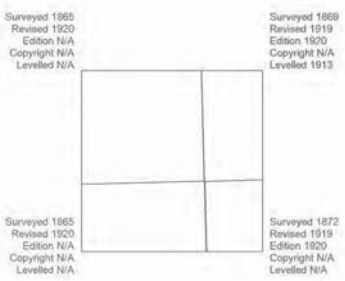

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T: 08444 159000
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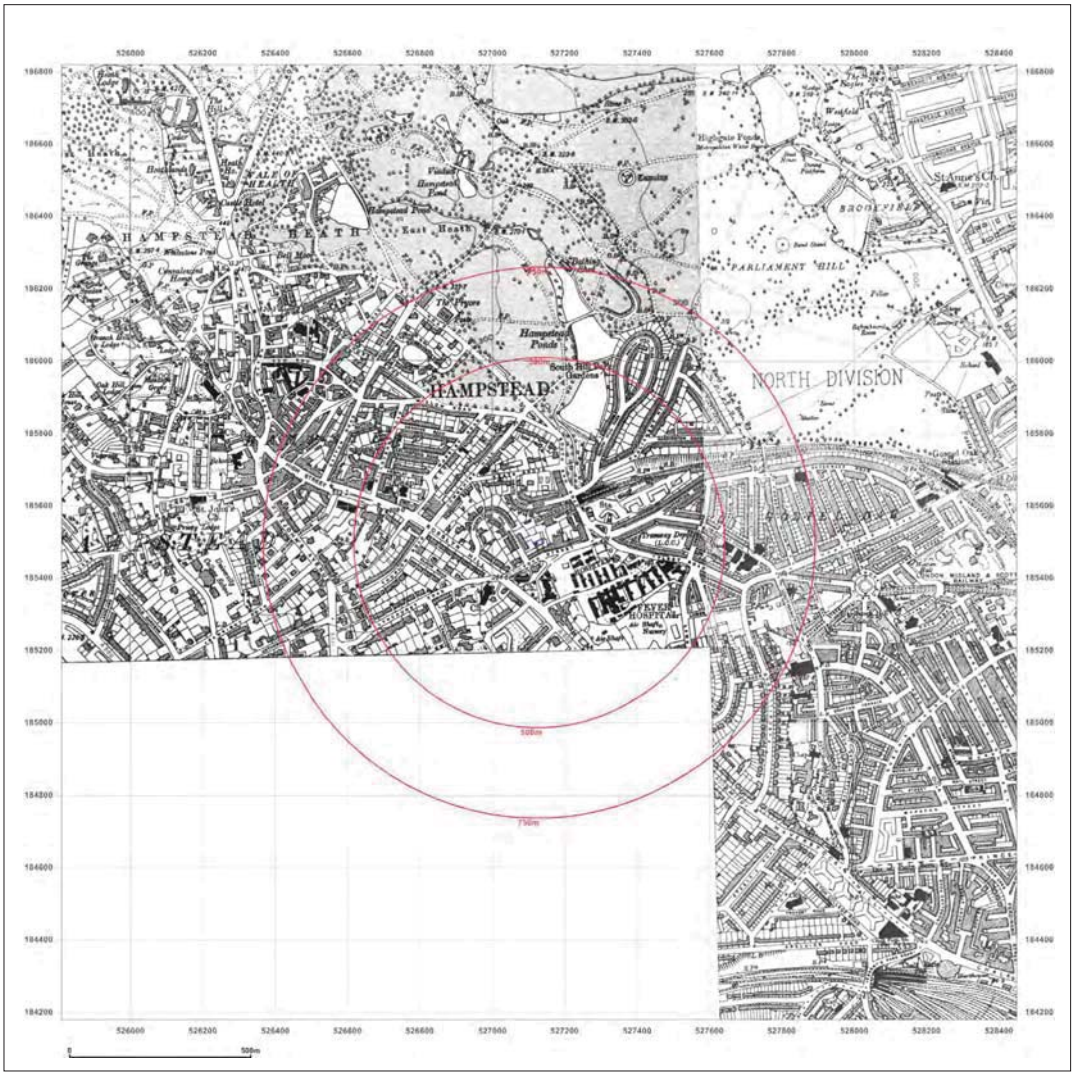
Production date: 15 December 2016

To view map legend click here *Legend*



Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: County Series
Map date: **1938**
Scale: 1:10,560
Printed at: 1:10,560

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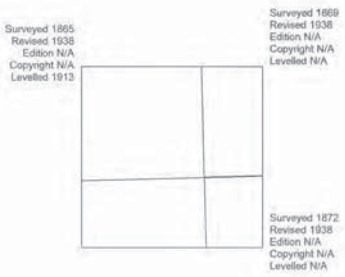

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T: 08444 159000
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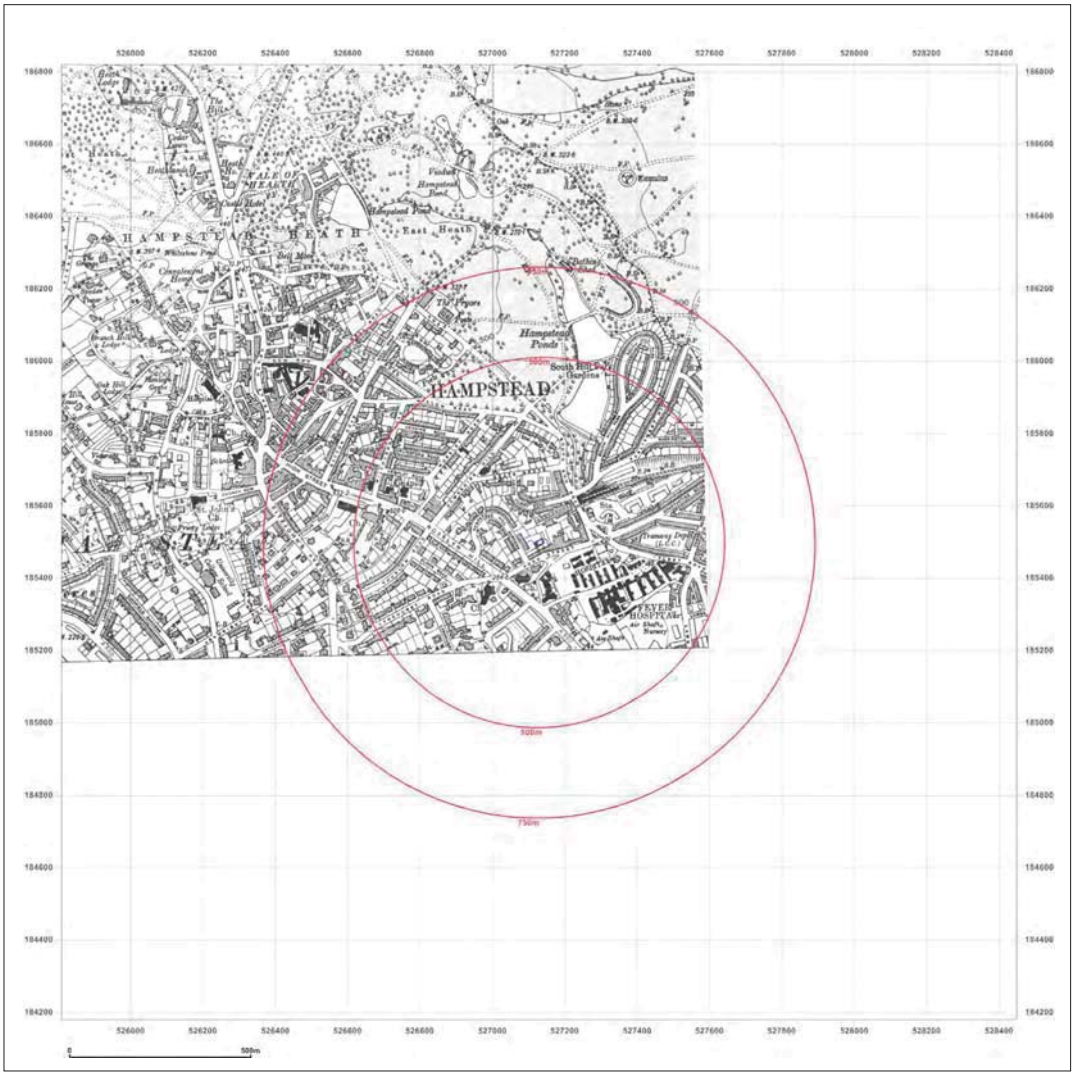
Production date: 15 December 2016

To view map legend click here *Legend*



Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: County Series
Map date: **1938**
Scale: 1:10,560
Printed at: 1:10,560

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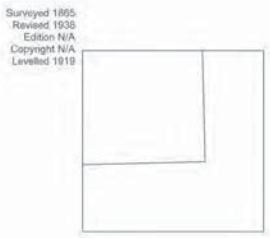

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W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*

Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: Provisional
Map date: **1951**
Scale: 1:10,560
Printed at: 1:10,560

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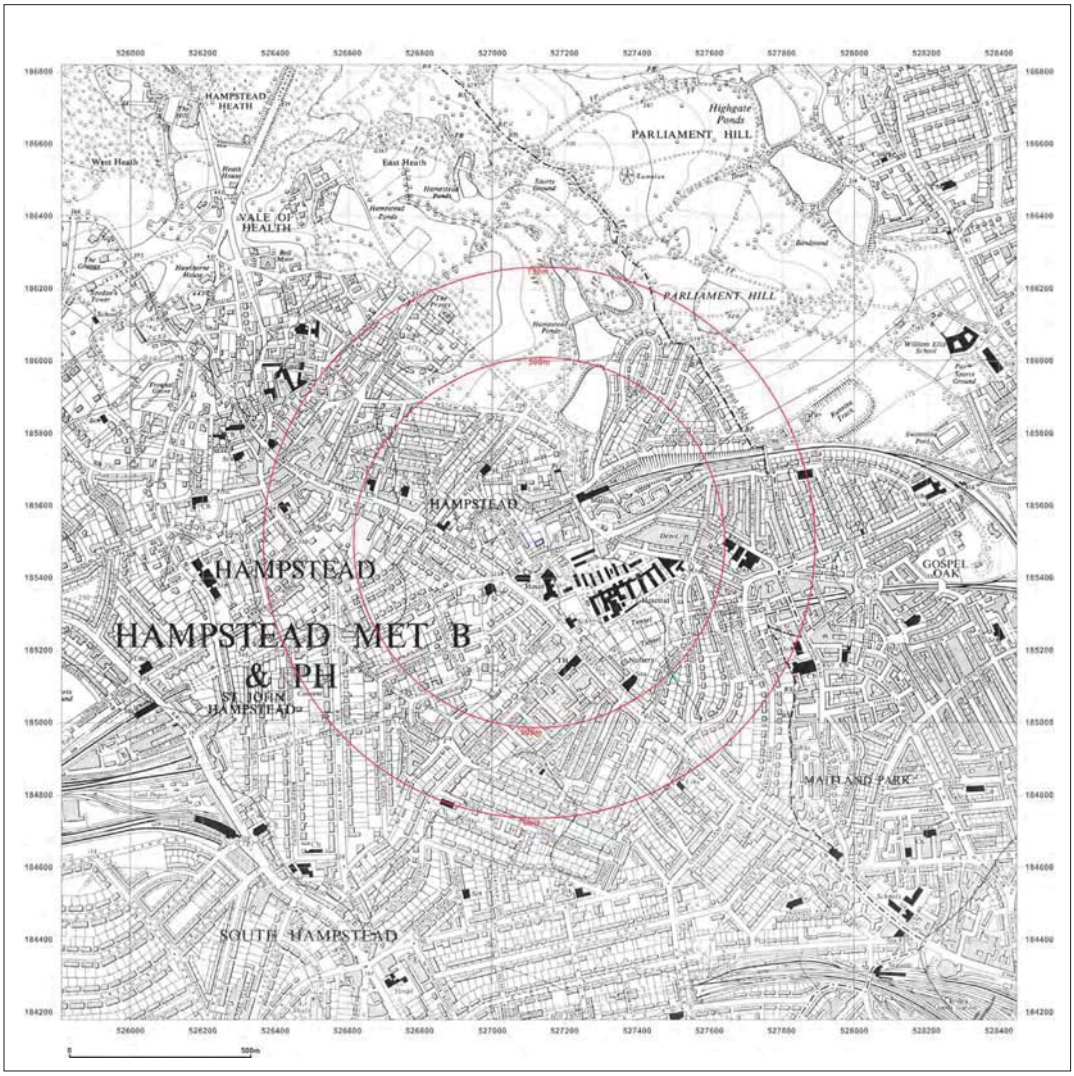
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*



Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: Provisional
Map date: **1957-1958**
Scale: 1:10,560
Printed at: 1:10,560

N W E S

Surveyed 1958
Revised 1958
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1957
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A

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Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*

Groundsure INSIGHTS

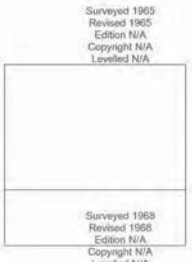
Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: Provisional
Map date: **1965-1968**
Scale: 1:10,560
Printed at: 1:10,560

N



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Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*

Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: National Grid
Map date: **1973-1974**
Scale: 1:10,000
Printed at: 1:10,000

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Surveyed 1974
Revised 1974
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1972
Revised 1973
Edition N/A
Copyright N/A
Levelled N/A

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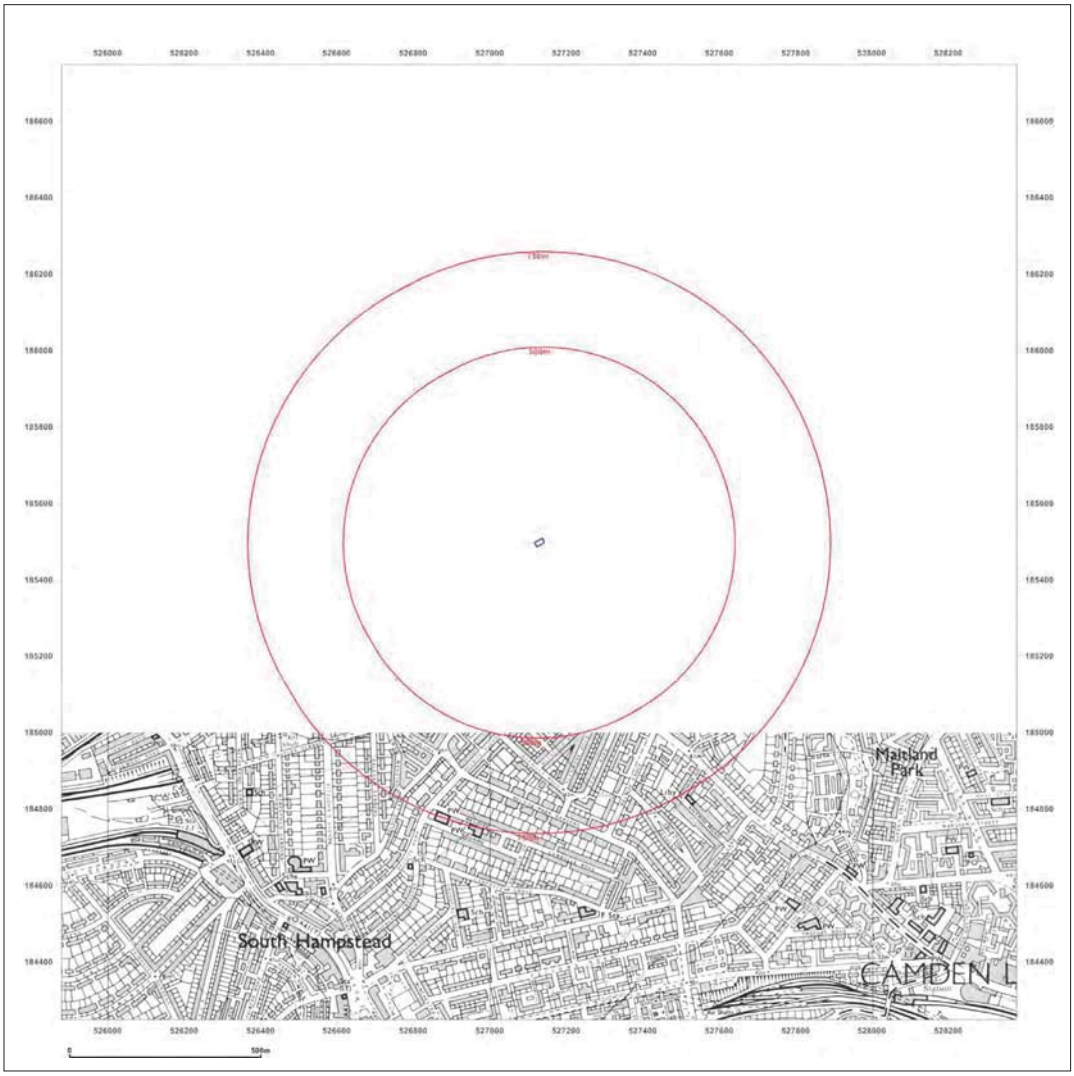
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*



Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: National Grid
Map date: **1989**
Scale: 1:10,000
Printed at: 1:10,000

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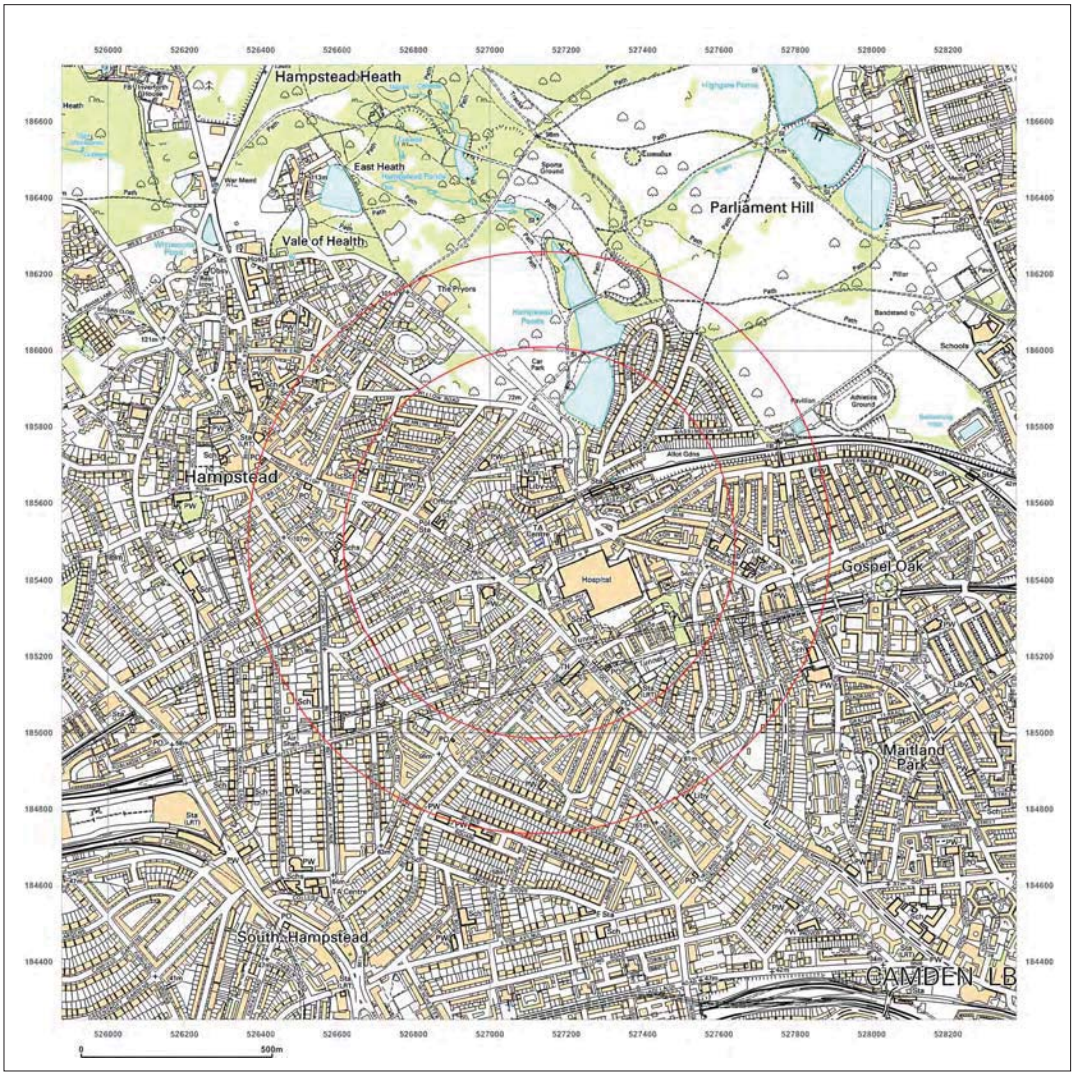
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*



Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: 1:10,000 Raster
Map date: **2002**
Scale: 1:10,000
Printed at: 1:10,000

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Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*

Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: National Grid
Map date: **2010**
Scale: 1:10,000
Printed at: 1:10,000

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Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*

Groundsure INSIGHTS

Site Details:

13A, POND STREET, LONDON, NW3 2PN

Client Ref: 8222_7546
Report Ref: GS-3526406
Grid Ref: 527128, 185499

Map Name: National Grid
Map date: 2014
Scale: 1:10,000
Printed at: 1:10,000

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Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

Production date: 15 December 2016

To view map legend click here *Legend*

Chelmer
Consultancy Services
'Groundbreaking Services'

APPENDIX F

Chelmer
Site Investigations
'Groundbreaking Services'

Factual Report

Site	13a Pond Street
	London
	NW3 2PN
Client	Entuitive
Date	11/01/17
Our Ref	FACT/8222

Chelmer Site Investigation Laboratories Ltd
Unit 15 East Hanningfield Industrial Estate, Old Church Road, East Hanningfield, Essex CM3 8AB
Essex: 01245 400930 | London: 0203 640 9136 | info@siteinvestigations.co.uk | www.siteinvestigations.com

FACTUAL REPORT CONTENT

1.0 SITE PLAN

2.0 TRIAL PIT SECTION DRAWINGS

3.0 ROOT IDENTIFICATION

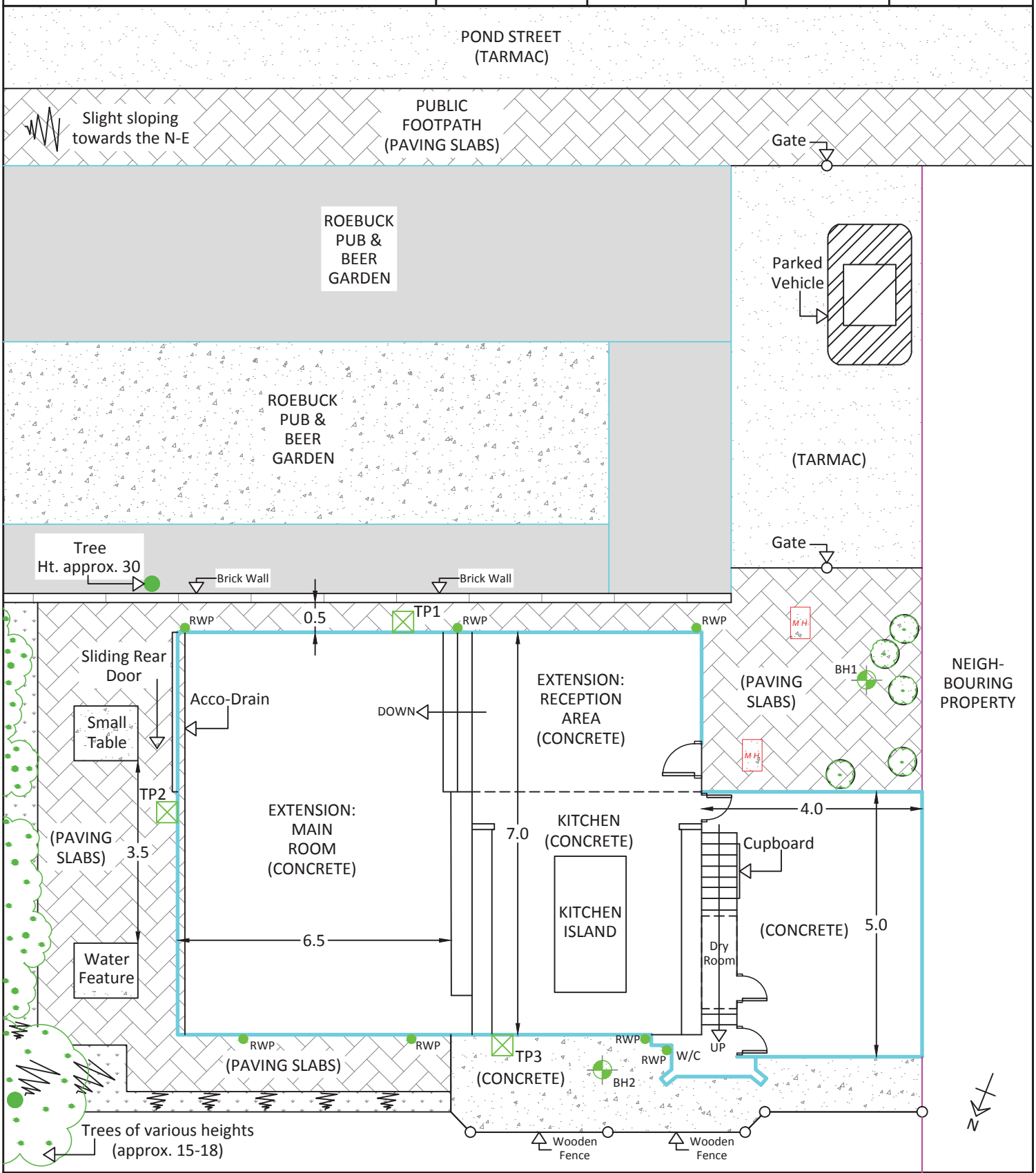
4.0 GEOTECHNICAL SOIL TESTING RESULTS

5.0 CHEMICAL SOIL TESTING RESULTS

6.0 REPORT NOTES

Chelmer Site Investigations
'Groundbreaking Services'

Client: Spencer Baylin	**Scale:** N.T.S	**Sheet:** 1 of 1	**Date:** 09.01.16	
Location: 13a Pond Street, London NW3	**Job No:** 8222	**Weather:** Dry	**Drawn by:** JS	**Checked by:** MD



Notes: All dimensions in metres.

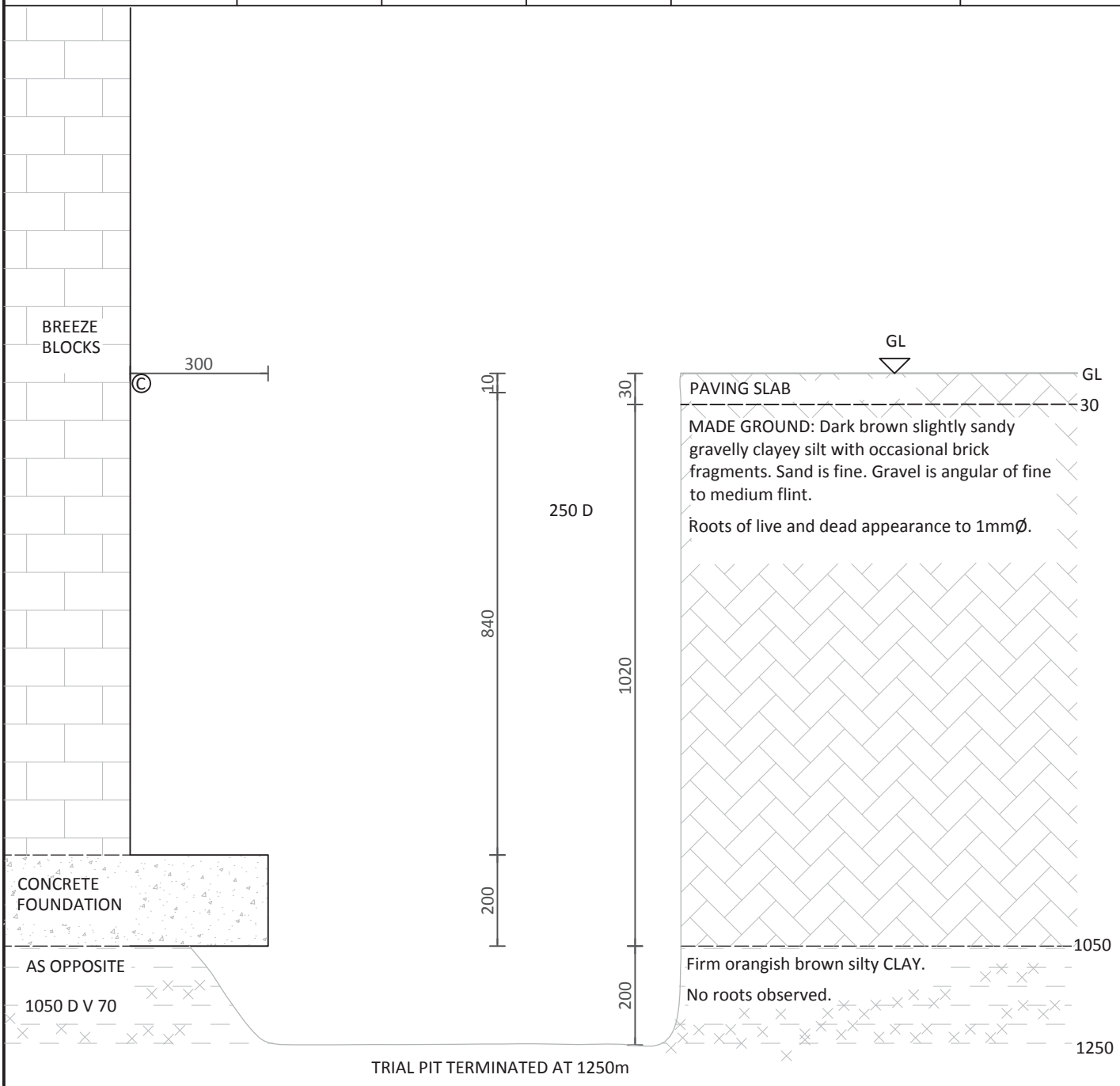
Key:

Tree/shrub | Borehole | Tree stump | Manhole | Trial Pit

Chelmer Site Investigations 'Groundbreaking Services'

Trial Pit Log

Site:		Client:			Trial Pit ID:
13A Pond Street, London, NW3 2PN		Spencer Baylin			TP1
Contract No:	**Date:**	**Logged By:**	**Checked by:**	**Weather:**	
8222	21.12.16	LS	SG	Overcast	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**		**Scale:**
ND	ND	ND	Hand Tools		NTS



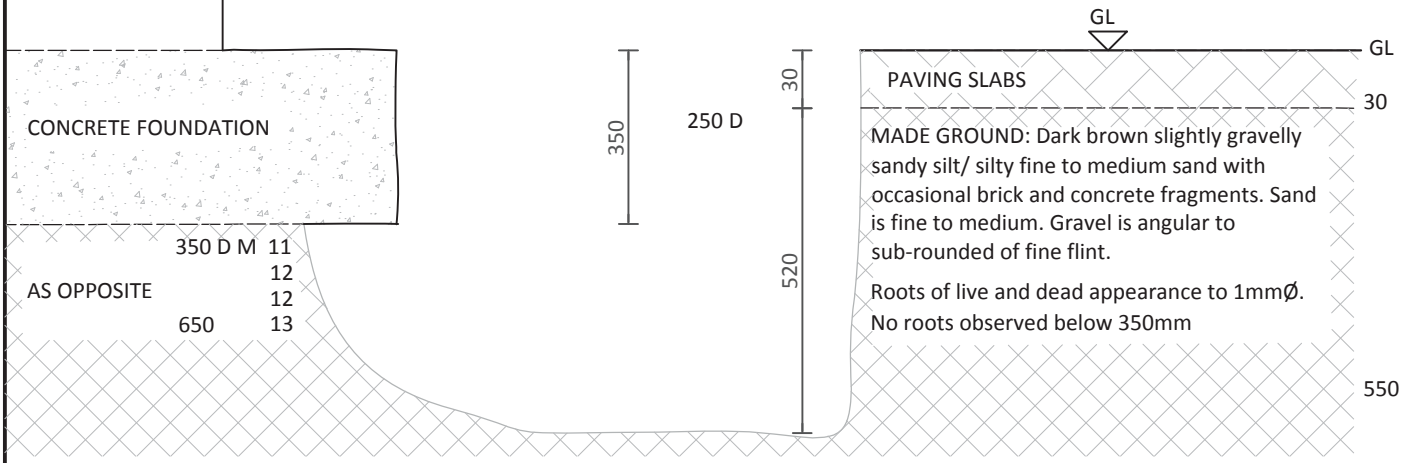
Remarks:	Key:
All dimensions in millimetres..	GL Ground Level D Small Disturbed Sample V Pilicon Vane (kPa) © Cable

Chelmer Site Investigations
'Groundbreaking Services'

Trial Pit Log

Site:		Client:			Trial Pit ID:
13A Pond Street, London, NW3 2PN		Spencer Bayln			TP2
Contract No:	**Date:**	**Logged By:**	**Checked by:**	**Weather:**	
8222	21.12.16	LS	JH	Overcast	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**		**Scale:**
ND	ND	ND	Hand Tools		NTS

GLASS
PATIO DOOR



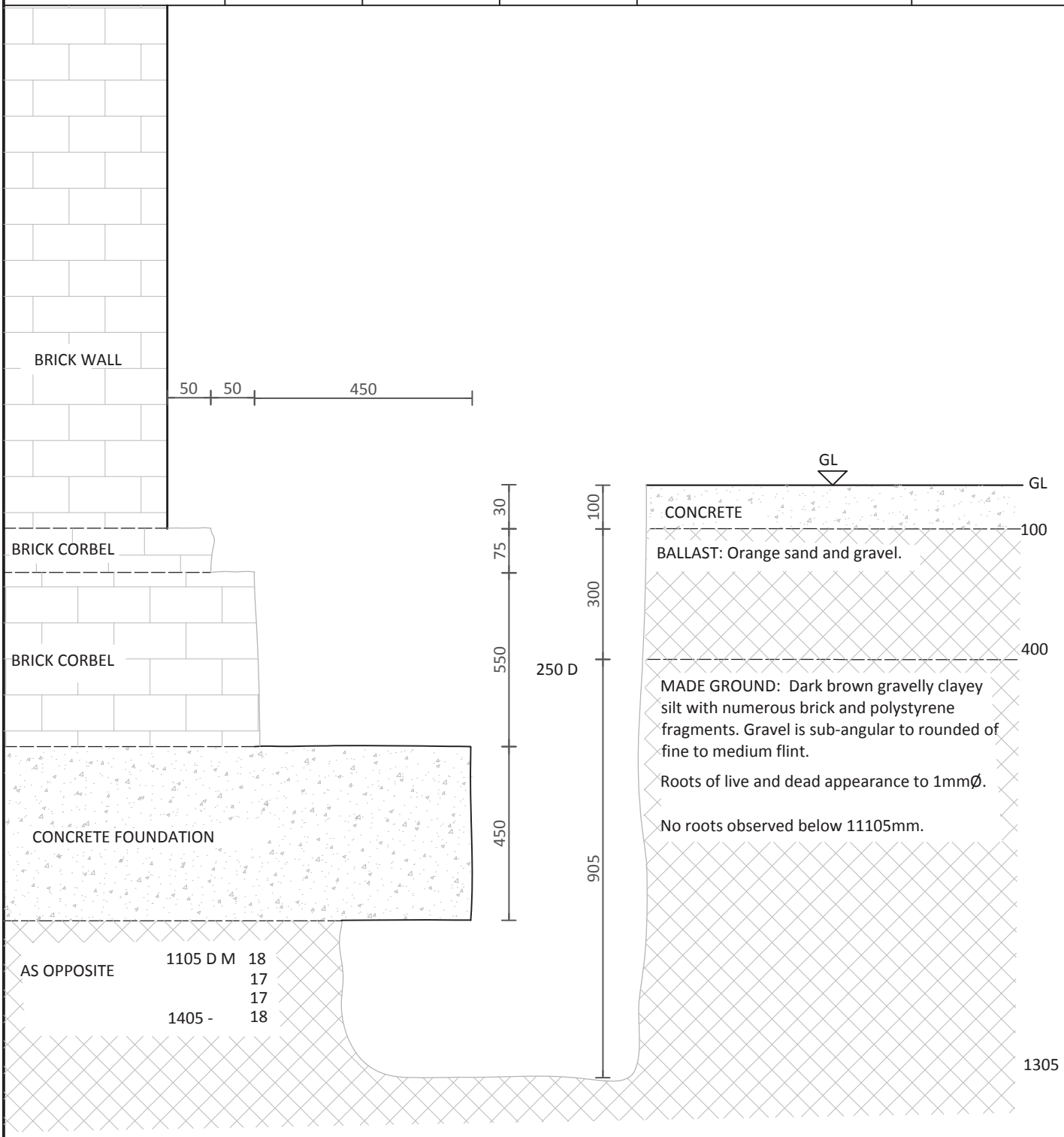
TRIAL PIT TERMINATED AT 550

Remarks:	Key:
All dimensions in millimetres.	GL Ground Level D Small Disturbed Sample M Mackintosh Probe

Chelmer Site Investigations "Groundbreaking Services"

Trial Pit Log

Site:		Client:			Trial Pit ID:
13a Pond Street, London, NW3 2PN		Spencer Bayln			TP3
Contract No:	**Date:**	**Logged By:**	**Checked by:**	**Weather:**	
8222	21.12.16	LS	JH	Overcast	Sheet 1 of 1
Easting:	**Northing:**	**Ground Level:**	**Excavation Method:**		**Scale:**
ND	ND	ND	Hand Tools		NTS



TRIAL PIT TERMINATED AT 1305

Remarks:	Key:
All dimensions in millimetres.	GL Ground Level D Small Disturbed Sample M Mackintosh Probe

Site:	Client:	Borehole ID:
13a Pond Street, London NW3 2PN	Spencer Baylin	BH1

Contract Number:	Date:	Logged By:	Checked By:	Status:	
8222	10/01/2017	JH	JH	PRELIM	Sheet 1 of 2
Easting:	**Northing:**	**Ground Level:**	**Plant Used:**	**Weather:**	**Scale:**
		10.10mOD	Cut-down Cable Percussive Rig	Dry	1:50

Borehole Log

Samples & In Situ Testing			Strata Details				Groundwater	
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
				0.10		CONCRETE		
0.50	B1			(1.00)		MADE GROUND: Dark brown slightly gravelly sandy silty clay with numerous brick and concrete fragments. Sand is fine to coarse. Gravel is sub-angular and sub-rounded of fine to medium flint.		
1.00	D2			1.10				
1.50 - 2.00	B3	SPT() 1.50m, N=7 (1,1/1,2,2,2)		(0.90)		MADE GROUND: Brown slightly sandy slightly gravelly silty clay with occasional brick fragments. Sand is fine to coarse. Gravel is sub-angular to rounded of fine to medium flint.		
2.00	D4			2.00		Firm yellowish brown grey veined silty CLAY with occasional partings of fine orange sand.		
2.50 - 2.95	U1							
3.00	D6							
3.50 - 3.95	D7	SPT() 3.50m, N=11 (1,1/2,2,3,4)						
4.00	D8			(4.00)				
4.50 - 4.95	U2							
5.00	D10							
6.00	D11	SPT() 6.00m, N=14 (1,2/3,3,4,4)		6.00		Stiff to Firm brown silty CLAY with occasional disseminated selenite crystals and rare partings of fine orange sand.		
6.00 - 6.45	SPTLS 1							
7.00	D12							
7.50 - 7.95	U3							
8.00	D13			(4.00)				
9.00	D14	SPT() 9.00m, N=14 (2,2/3,3,4,4)						
9.00 - 9.45	SPTLS 2							
10.00	D15			10.00				

Continued next sheet

Remarks:

Borehole 'dry' and open on completion.
50mmø standpipe installed to 5.0m (Backfill from 10m to 5m).

Root Information:

No roots observed.

Water Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
			0		

Site:	Client:	Borehole ID:
13a Pond Street, London NW3 2PN	Spencer Baylin	BH1

Contract Number:	Date:	Logged By:	Checked By:	Status:	
8222	10/01/2017	JH	JH	PRELIM	Sheet 2 of 2
Easting:	**Northing:**	**Ground Level:**	**Plant Used:**	**Weather:**	**Scale:**
		10.10mOD	Cut-down Cable Percussive Rig	Dry	1:50

Borehole Log

Samples & In Situ Testing			Strata Details				Groundwater	
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
						End of Borehole at 10.10m		

Remarks:

Borehole 'dry' and open on completion.
50mmø standpipe installed to 5.0m (Backfill from 10m to 5m).

Root Information:

No roots observed.

Water Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
			0		

Site:	Client:	Borehole ID:
13a Pond Street, London NW3 2PN	Spencer Baylin	BH2

Contract Number:	Date:	Logged By:	Checked By:	Status:	
8222	11/01/2017	JH	JH	PRELIM	Sheet 1 of 2

Borehole Log

Easting:	Northing:	Ground Level:	Plant Used:	Weather:	Scale:
		10.10mOD	Cable Percussive Rig		1:50

Samples & In Situ Testing			Strata Details				Groundwater	
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
				0.05		CONCRETE PAVING		
				0.20		SAND AND TARMAC		
0.50	B1			(1.00)		MADE GROUND: Brown slightly sandy gravelly silty clay with numerous brick, concrete and clinker-like fragments. Sand is fine to coarse. Gravel is sub-angular to rounded of fine to medium flint.		
1.00	D2			1.20				
1.50 - 1.95	D3	SPT() 1.50m, N=6 (1,1/1,1,2,2)				Firm yellowish brown grey veined silty CLAY with occasional partings of fine orange sand.		
2.00	D4							
2.50 - 2.95	U5							
3.00	D6							
3.50 - 3.95	D7	SPT() 3.50m, N=13 (1,2/2,3,4,4)		(4.80)				
4.00	D8							
4.50 - 4.95	U9							
5.00	D10							
6.00	D11	SPT() 6.00m, N=15 (1,2/3,3,4,5)		6.00		Stiff brown silty CLAY with occasional disseminated selenite crystals and rare partings of fine orange sand.		
6.00 - 6.45	SPTLS 1							
7.00	D12							
7.50 - 7.95	U1							
8.00	D13			(4.00)				
9.00	D14	SPT() 9.00m, N=17 (2,2/3,4,5,5)						
9.00 - 9.45	SPTLS 2							
				10.00				

Continued next sheet

Remarks:

Borehole 'dry' and open on completion.
50mmø standpipe installed to 5.0m (Backfill from 10m to 5m).

Root Information:

No roots observed.

Water Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
			0		

Site:	Client:	Borehole ID:
13a Pond Street, London NW3 2PN	Spencer Baylin	BH2

Contract Number:	Date:	Logged By:	Checked By:	Status:	
8222	11/01/2017	JH	JH	PRELIM	Sheet 2 of 2

Borehole Log

Easting:	Northing:	Ground Level:	Plant Used:	Weather:	Scale:
		10.10mOD	Cable Percussive Rig		1:50

Samples & In Situ Testing			Strata Details				Groundwater	
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
						End of Borehole at 10.10m		

11 12 13 14 15 16 17 18 19 20

Remarks:

Borehole 'dry' and open on completion.
50mmø standpipe installed to 5.0m (Backfill from 10m to 5m).

Root Information:

No roots observed.

Water Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
			0		

Entuitive
13a Pond Street, London, NW3 2PN
21.12.16
TRIAL PIT 1 PHOTOGRAPH

Entuitive
13a Pond Street, London, NW3 2PN
21.12.16
TRIAL PIT 2 PHOTOGRAPH

Chelmer Site Investigation Laboratories Ltd
Unit 15 East Hanningfield Industrial Estate, Old Church Road, East Hanningfield, Essex CM3 8AB
Essex: 01245 400930 | London: 0203 67409136 | info@siteinvestigations.co.uk | www.siteinvestigations.com

Entuitive
13a Pond Street, London, NW3 2PN
21.12.16
TRIAL PIT 3 PHOTOGRAPH

Chelmer Site Investigation Laboratories Ltd
Unit 15 East Hanningfield Industrial Estate, Old Church Road, East Hanningfield, Essex CM3 8AB
Essex: 01245 400930 | London: 0203 67409136 | info@siteinvestigations.co.uk | www.siteinvestigations.com

Richardson's Botanical Identifications

Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

Dr Ian B K Richardson
BSc, PhD, CBiol, MiBiol, MiHort, FLS
James Richardson
BSc (Hons. Biology)

Enterprise House
49-51 Whiteknights Road
Reading
RG6 7BB

Tel: (0118) 986 9552 *(Direct line)*
E-mail: richardsons@botanical.net
Web: www.botanical.net

Chelmer Site Investigations
Unit 15
East Hanningfield Ind. Est.
Old Church Rd, E. Hanningfield
Essex CM3 8AB

Your ref: **8222**

Our ref: 74/8108

02/02/2017

Dear Sirs

13A Pond Street

The samples you sent in relation to the above have been examined. The structure was referable as follows:

TP1, 1050mm

1 root: most referable to TILIA (Lime). Next best match: PRUNUS species (Cherries, Plums and Damsons, Almonds, Peaches and Apricots, Blackthorn/Sloe, as well as the shrubby Cherry-laurel and Portugal-laurel). Less than 0.8mm in diameter. 2 further samples, not examined in detail appeared similar under low magnification. Alive, recently*.

4 samples: unfortunately insufficient cells for identification.

TP2, 350mm

1 root: as above, most like TILIA (Lime), with the next closest match being a PRUNUS species. Under than 0.8mm in diameter. A further sample, not examined in detail appeared similar under low magnification. Dead* (note this 'dead' result can be unreliable with such thin samples).

2 samples: microscopic examination of both showed insufficient cells for recognition.

TP3, 1105mm

1 root: again, either TILIA (Lime) - or - a member of the PRUNUS group. As previously, this was a very IMMATURE sample (less than 0.5mm in diameter). Dead* (again this 'dead' result could be unreliable).

I trust this is of help. Please call us if you have any queries; our Invoice is enclosed.

Yours faithfully

Dr Ian B K Richardson

* Based mainly on the Iodine test for starch. Starch is present in some cells of a living woody root, but is more or less rapidly broken down by soil micro-organisms on death of the root, sometimes before decay is evident. This result need not reflect the state of the parent tree.

Identified with no information on vegetation, on or off site.

Report commissioned by Chelmer

Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone: (01424) 718618
Facsimile: (01424) 729911
info@elab-uk.co.uk

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	17-10525
Issue:	1
Date of Issue:	08/02/2017
Contact:	Steve Green
Customer Details:	Chelmer Site Investigations Ltd Unit 15 East Hanningfield Ind Est Chelmsford EssexCM3 8AB
Quotation No:	Q16-00625
Order No:	7679
Customer Reference:	8222-1
Date Received:	02/02/2017
Date Approved:	08/02/2017
Details:	13a Pond Street NW3
Approved by:	

John Wilson, Operations Manager

Any comments, opinions or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683

Sample Summary

Report No.: 17-10525

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
87479	BH1 84099 0.25	31/01/2017	02/02/2017	Sandy silty loam	
87480	BH1 84100 0.50	31/01/2017	02/02/2017	Sandy silty loam	
87481	BH2 84101 0.25	31/01/2017	02/02/2017	Silty clayey loam	
87482	BH2 84102 0.75	31/01/2017	02/02/2017	Silty clayey loam	

Results Summary

Report No.: 17-10525

			ELAB Reference	87479	87480	87481	87482
			Customer Reference	84099	84100	84101	84102
			Sample ID				
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sample Location	BH1	BH1	BH2	BH2
			Sample Depth (m)	0.25	0.50	0.25	0.75
			Sampling Date	31/01/2017	31/01/2017	31/01/2017	31/01/2017
Determinand	**Codes**	**Units**	**LOD**				
Metals							
Arsenic	M	mg/kg	1	16.4	12.6	22.8	22.8
Cadmium	M	mg/kg	0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chromium	M	mg/kg	5	24.7	20.9	30.2	33.6
Copper	M	mg/kg	5	35.7	32.3	38.5	23.6
Lead	M	mg/kg	5	416	329	163	91.1
Mercury	M	mg/kg	0.5	0.6	0.6	0.5	< 0.5
Nickel	M	mg/kg	5	17.9	14.0	16.4	14.7
Selenium	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
Zinc	M	mg/kg	5	326	201	61.2	50.4
Anions							
Water Soluble Sulphate	M	g/l	0.02	0.14	0.13	0.06	0.09
Inorganics							
Elemental Sulphur	N	mg/kg	20	< 20	< 20	< 20	< 20
Total Sulphide	N	mg/kg	2	< 2	< 2	< 2	< 2
Total Cyanide	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
Acid Soluble Sulphate (SO4)	U	%	0.02	0.10	0.08	0.04	0.04
Miscellaneous							
Acid Neutralisation Capacity	N	mol/kg	0.1	n/t	< 0.1	n/t	n/t
Loss On Ignition (450°C)	M	%	0.01	n/t	1.16	n/t	n/t
pH	M	pH units	0.1	10.7	9.8	8.4	8.2
Total Organic Carbon	N	%	0.01	n/t	1.0	n/t	n/t
Phenols							
Total Monohydric Phenols	N	mg/kg	5	< 5	< 5	< 5	< 5
Polyaromatic hydrocarbons							
Naphthalene	M	mg/kg	0.1	0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	M	mg/kg	0.1	0.6	0.4	< 0.1	< 0.1
Anthracene	M	mg/kg	0.1	0.2	0.1	< 0.1	< 0.1
Fluoranthene	M	mg/kg	0.1	2.1	1.7	< 0.1	< 0.1
Pyrene	M	mg/kg	0.1	1.9	1.7	< 0.1	< 0.1
Benzo(a)anthracene	M	mg/kg	0.1	1.1	0.8	< 0.1	< 0.1
Chrysene	M	mg/kg	0.1	1.3	1.0	< 0.1	< 0.1
Benzo (b) fluoranthene	M	mg/kg	0.1	1.5	0.9	< 0.1	< 0.1
Benzo(k)fluoranthene	M	mg/kg	0.1	1.3	1.0	< 0.1	< 0.1
Benzo (a) pyrene	M	mg/kg	0.1	1.3	0.9	< 0.1	< 0.1
Indeno (1,2,3-cd) pyrene	M	mg/kg	0.1	1.1	0.8	< 0.1	< 0.1
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.4	0.2	< 0.1	< 0.1
Benzo[g,h,i]perylene	M	mg/kg	0.1	1.2	0.8	< 0.1	< 0.1
Total PAH(16)	M	mg/kg	0.4	14.2	10.5	< 0.4	< 0.4
Total PAH (Including Coronene)	N	mg/kg	2	n/t	11	n/t	n/t

Results Summary

Report No.: 17-10525

			ELAB Reference	87479	87480	87481	87482
			Customer Reference	84099	84100	84101	84102
			Sample ID				
			Sample Type	SOIL	SOIL	SOIL	SOIL
			Sample Location	BH1	BH1	BH2	BH2
			Sample Depth (m)	0.25	0.50	0.25	0.75
			Sampling Date	31/01/2017	31/01/2017	31/01/2017	31/01/2017
Determinand	**Codes**	**Units**	**LOD**				
BTEX							
Benzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Xylenes	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
MTBE	N	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Total BTEX	M	mg/kg	0.01	n/t	< 0.01	n/t	n/t
TPH CWG							
>C5-C6 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C6-C8 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	2.5
>C10-C12 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic	N	mg/kg	1	3.0	< 1.0	2.1	< 1.0
>C35-C40 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	1.4
>C10-C12 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	2.1
>C12-C16 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aromatic	N	mg/kg	1	7.6	6.2	< 1.0	< 1.0
>C35-C40 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
Total (>C5-C40) Ali/Aro	N	mg/kg	1	10.6	6.2	2.1	6.0
Total Petroleum Hydrocarbons							
Mineral Oil	U	mg/kg	5	n/t	38	n/t	n/t
PCB (ICES 7 congeners)							
PCB (Total of 7 Congeners)	M	mg/kg	0.03	n/t	< 0.03	n/t	n/t

Results Summary

Report No.: 17-10525

WAC Analysis								
Elab Ref:	87480					**Landfill Waste Acceptance Criteria Limits**		
Sample Date:	31/01/2017					**Inert Waste Landfill**	**Stable Non-reactive Hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample ID:	BH1 84100							
Depth (m)	0.5							
Site:	13a Pond Street NW3							
Determinand		**Code**	**Units**					
Total Organic Carbon		N	%		1.00	3	5	6
Loss on Ignition		M	%		1.2	--	--	10
Total BTEX		M	mg/kg		< 0.01	6	--	--
Total PCBs (7 congeners)		M	mg/kg		< 0.03	1	--	--
TPH Total WAC		M	mg/kg		38	500	--	--
Total (of 17) PAHs		N	mg/kg		11.0	100	--	--
pH		M			9.8	--	>6	--
Acid Neutralisation Capacity		N	mol/kg		< 0.1	--	To evaluate	To evaluate
Eluate Analysis			**10:1**		**10:1**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
			mg/l		**mg/kg**			
Arsenic		N	0.021		0.21	0.5	2	25
Barium		N	0.008		0.08	20	100	300
Cadmium		N	< 0.001		< 0.01	0.04	1	5
Chromium		N	0.010		0.10	0.5	10	70
Copper		N	0.009		0.09	2	50	100
Mercury		N	< 0.005		< 0.01	0.01	0.2	2
Molybdenum		N	< 0.005		< 0.05	0.5	10	30
Nickel		N	0.002		< 0.05	0.4	10	40
Lead		N	0.009		0.09	0.5	10	50
Antimony		N	< 0.005		< 0.05	0.06	0.7	5
Selenium		N	< 0.005		< 0.05	0.1	0.5	7
Zinc		N	0.008		0.08	4	50	200
Chloride		N	< 5		< 50	800	15000	25000
Fluoride		N	< 5		< 10	10	150	500
Sulphate		N	18		181.00	1000	20000	50000
Total Dissolved Solids		N	150		1500.00	4000	60000	100000
Phenol Index		N	< 0.01		< 0.10	1	-	-
Dissolved Organic Carbon		N	8.210		82.00	500	800	1000
Leach Test Information								
pH		N	9.7					
Conductivity (uS/cm)		N	168					
Dry mass of test portion (g)			101.000					
Dry Matter (%)			86					
Moisture (%)			16					
Eluent Volume (ml)			967					

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ELAB cannot be held responsible for any discrepencies with current legislation

Unit A2, Windmill Road, Ponswood Industrial Estate, St Leonards on Sea, East Sussex, TN38 9BY
Tel: +44 (0)1424 718618, Email: info@elab-uk.co.uk, Web: www.elab-uk.co.uk

Results Summary

Report No.: 17-10525

Asbestos Results

Analytical result only applies to the sample as submitted by the client. Any comments, opinions or interpretations (marked #)
in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client.

Elab No	Depth (m)	Clients Reference	Description of Sample Matrix #	Asbestos Identification	Gravimetric Analysis Total (%)	Gravimetric Analysis by ACM Type (%)	Free Fibre Analysis (%)	Total Asbestos (%)
87479	0.25	BH1 84099	Brown soil with stones,brick,clinker	No asbestos detected	n/t	n/t	n/t	n/t
87480	0.50	BH1 84100	Brown soil with stones and brick	No asbestos detected	n/t	n/t	n/t	n/t
87481	0.25	BH2 84101	Brown soil with stones	No asbestos detected	n/t	n/t	n/t	n/t
87482	0.75	BH2 84102	Brown soil with stones	No asbestos detected	n/t	n/t	n/t	n/t

Method Summary

Report No.: 17-10525

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Sulphide	N	As submitted sample	03/02/2017	109	Colorimetry
Acid Soluble Sulphate	U	Air dried sample	06/02/2017	115	Ion Chromatography
Aqua regia extractable metals	M	Air dried sample	03/02/2017	118	ICPMS
Phenols in solids	N	As submitted sample	03/02/2017	121	HPLC
Elemental Sulphur	N	Air dried sample	03/02/2017	122	HPLC
PAH (GC-FID)	M	As submitted sample	03/02/2017	133	GC-FID
Water soluble anions	M	Air dried sample	03/02/2017	172	Ion Chromatography
Total cyanide	M	As submitted sample	03/02/2017	204	Colorimetry
Aliphatic hydrocarbons in soil	N	As submitted sample	03/02/2017	214	GC-FID
Aliphatic/Aromatic hydrocarbons in soil	N	As submitted sample	06/02/2017	214	GC-FID
Aromatic hydrocarbons in soil	N	As submitted sample	03/02/2017	214	GC-FID
Low range Aliphatic hydrocarbons soil	N	As submitted sample	06/02/2017	214	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	06/02/2017	214	GC-MS
Asbestos identification	U	As submitted sample	03/02/2017	PMAN	Microscopy
Leachate					
Arsenic*	N		08/02/2017	101	ICPMS
Cadmium*	N		08/02/2017	101	ICPMS
Chromium*	N		08/02/2017	101	ICPMS
Lead*	N		08/02/2017	101	ICPMS
Nickel*	N		08/02/2017	101	ICPMS
Copper*	N		08/02/2017	101	ICPMS
Zinc*	N		08/02/2017	101	ICPMS
Mercury*	N		08/02/2017	101	ICPMS
Selenium*	N		08/02/2017	101	ICPMS
Antimony	N		08/02/2017	101	ICPMS
Barium*	N		08/02/2017	101	ICPMS
Molybdenum*	N		08/02/2017	101	ICPMS
pH Value*	N		08/02/2017	113	Electrometric
Electrical Conductivity*	N		08/02/2017	136	Probe
Dissolved Organic Carbon	N		08/02/2017	102	TOC analyser
Chloride*	N		08/02/2017	131	Ion Chromatography
Fluoride*	N		08/02/2017	131	Ion Chromatography
Sulphate*	N		08/02/2017	131	Ion Chromatography
Total Dissolved Solids	N		08/02/2017	144	Gravimetric
Phenol index	N		08/02/2017	121	HPLC
WAC Solids analysis	N				
pH Value**	M	Air dried sample	03/02/2017	113	Electrometric
Total Organic Carbon	N	Air dried sample	08/02/2017	210	IR
Loss on Ignition**	M	Air dried sample	07/02/2017	129	Gravimetric
Acid Neutralization Capacity to pH 7	N	Air dried sample	03/02/2017	NEN 737	Electrometric
Total BTEX**	M	As submitted sample	06/02/2017	181	GCMS
Mineral Oil**	U	As submitted sample	03/02/2017	117	GCFID
Total PCBs (7 congeners)	M	Air dried sample	03/02/2017	120	GCMS
Total PAH (17)**	N	As submitted sample	06/02/2017	133	GCFID

Tests marked N are not UKAS accredited

Report Information

Report No.: 17-10525

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"

Soil sample results are expressed on an air dried basis (dried at < 30°C)
Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
PCB congener results may include any coeluting PCBs
Uncertainty of measurement for the determinands tested are available upon request

Deviation Codes

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month
All water samples will be retained for 7 days following the date of the test report
Charges may apply to extended sample storage

UKAS TESTING
8284

Chelmer
Geotechnical Laboratories
'Groundbreaking Services'

Laboratory Report

Site	13a Pond Street, NW3
Client	Spencer Baylin
Date	14-Feb-17
Our Ref	CSI8222
CGL Ref	CGL8222

Chelmer Site Investigation Laboratories Ltd
Unit 15 East Hanningfield Industrial Estate, Old Church Road, East Hanningfield, Essex CM3 8AB
Essex: 01245 400930 | London: 0203 6409136 |info@siteinvestigations.co.uk | www.siteinvestigations.com

UKAS TESTING
8284

Chelmer Geotechnical Laboratories
'Groundbreaking Services'

Content Summary

This report contains all test results as indicated on the test instruction/summary.

CGL Reference : CGL8222

Client Reference : CSI8222

For the attention of : Spencer Baylin

This report comprises of the following :

1 Cover Page
1 Inside Cover/Contents Page
3 Pages of Results
1 Moisture/Shear Strength Chart
1 Plasticity Chart
6 Pages of Unconsolidated Undrained Shear Strengths
6 Pages of BRE SD1 Results
1 Limitations of Report Page

Notes :

General

Please refer to report summary notes for details pertaining to methods undertaken and their subsequent accreditations

Samples were supplied by Chelmer Site Investigations

All tests performed in-house unless otherwise stated

Deviant Samples

Samples were received in suitable containers	Yes
A date and time of sampling was provided	Yes
Arrived damaged and/or denatured	No

Laboratory Testing Results

BS 1377 : 1990

Job Number : CGL8222
Client : Spencer Baylin
Client Reference : CSI8222
Site Name : 13a Pond Street, NW3

Date Received : 26/01/2017
Date Testing Started : 10/02/2017
Date Testing Completed : 14/02/2017
Laboratory Used : Chelmer Geotechnical, CM3 8AB

Sample Ref			Sample Type	*Moisture Content (%) [1]	*Soil Faction > 0.425mm (%) [2]	*Liquid Limit (%) [3]	*Plastic Limit (%) [4]	*Plasticity Index (%) [5]	*Liquidity Index (%) [5]	*Modified Plasticity Index (%) [6]	*Soil Class [7]	Filter Paper Contact Time (h) [8]	*Soil Sample Suction (kPa)	Insitu Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	*pH Value [11]	*Sulphate Content (g/l)		
BH/TP/WS	Depth (m)	UID															SO_3 [12]	SO_4 [13]	Class [14]
BH1	2.0	83919	D	35	<5	84	28	56	0.12	53	CV								
BH1	4.0	83922	D	39	<5	83	28	55	0.20	52	CV								
BH1	7.0	83925	D	34	<5	81	27	54	0.13	51	CV								
BH1	10.0	83927	D	32	<5	71	23	48	0.19	45	CV								

Notes :- *UKAS Accredited Tests

[1] BS 1377 : Part 2 : 1990, Test No 3.2
[2] Estimated if <5%, otherwise measured
[3] BS 1377 : Part 2 : 1990, Test No 4.4
[4] BS 1377 : Part 2 : 1990, Test No 5.3
[5] BS 1377 : Part 2 : 1990, Test No 5.4
[6] BRE Digest 240 : 1993
[7] BS 5930 : 1981 : Figure 31 - Plasticity Chart for the classification of fine soils
[8] In-house method S9a adapted from BRE IP 4/93
[9] Values of shear strength were determined in situ by Chelmer Site Investigations using a Pilcon hand vane or Geonor vane (GV).
[10] BS 1377 : Part 3 : 1990, Test No 4
[11] BS 1377 : Part 2 : 1990, Test No 9
[12] BS 1377 : Part 3 : 1990, Test No 5.6
[13] $SO_4 = 1.2 \times SO_3$
[14] BRE Special Digest One (Concrete in Aggressive Ground) 2005

Note that if the SO_3 content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4m or DS-5m class respectively unless water soluble magnesium testing is undertaken to prove otherwise

Key

D - Disturbed sample
B - Bulk sample
U - U100 (undisturbed sample)
W - Water sample
ENP - Essentially Non-Plastic
U/S - Underside Foundation

UKAS TESTING 8284

Comments :-

Technician :- JH

Checked & Authorised By:- Mark Collyer **Laboratory Manager**
Chelmer Site Investigation Laboratories Ltd

Date Checked :- 15/02/2017

Laboratory Testing Results

BS 1377 : 1990

Job Number : CGL8222
Client : Spencer Baylin
Client Reference : CSI8222
Site Name : 13a Pond Street, NW3

Date Received : 26/01/2017
Date Testing Started : 10/02/2017
Date Testing Completed : 14/02/2017
Laboratory Used : Chelmer Geotechnical, CM3 8AB

Sample Ref			Sample Type	*Moisture Content (%) [1]	*Soil Faction > 0.425mm (%) [2]	*Liquid Limit (%) [3]	*Plastic Limit (%) [4]	*Plasticity Index (%) [5]	*Liquidity Index (%) [5]	*Modified Plasticity Index (%) [6]	*Soil Class [7]	Filter Paper Contact Time (h) [8]	*Soil Sample Suction (kPa)	Insitu Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	*pH Value [11]	*Sulphate Content (g/l)		
BH/TP/WS	Depth (m)	UID															SO_3 [12]	SO_4 [13]	Class [14]
BH2	2.0	83928	D	34	<5	78	27	51	0.14	48	CV								
BH2	3.0	83930	D	31	<5	79	30	49	0.03	47	CV								
BH2	5.0	83933	D	37	<5	78	23	55	0.25	52	CV								
BH2	10.0	83936	D	21	<5	83	26	57	-0.09	54	CV								

Notes :- *UKAS Accredited Tests

[1] BS 1377 : Part 2 : 1990, Test No 3.2
[2] Estimated if <5%, otherwise measured
[3] BS 1377 : Part 2 : 1990, Test No 4.4
[4] BS 1377 : Part 2 : 1990, Test No 5.3
[5] BS 1377 : Part 2 : 1990, Test No 5.4
[6] BRE Digest 240 : 1993
[7] BS 5930 : 1981 : Figure 31 - Plasticity Chart for the classification of fine soils
[8] In-house method S9a adapted from BRE IP 4/93
[9] Values of shear strength were determined in situ by Chelmer Site Investigations using a Pilcon hand vane or Geonor vane (GV).
[10] BS 1377 : Part 3 : 1990, Test No 4
[11] BS 1377 : Part 2 : 1990, Test No 9
[12] BS 1377 : Part 3 : 1990, Test No 5.6
[13] $SO_4 = 1.2 \times SO_3$
[14] BRE Special Digest One (Concrete in Aggressive Ground) 2005

Note that if the SO_4 content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4m or DS-5m class respectively unless water soluble magnesium testing is undertaken to prove otherwise

Key

D - Disturbed sample
B - Bulk sample
U - U100 (undisturbed sample)
W - Water sample
ENP - Essentially Non-Plastic
U/S - Underside Foundation

UKAS TESTING 8284

Comments :-

Technician :- JH

Checked & Authorised By:- Mark Collyer **Laboratory Manager**
Chelmer Site Investigation Laboratories Ltd

Date Checked :- 15/02/2017

Laboratory Testing Results

BS 1377 : 1990

Job Number : CGL8222
Client : Spencer Baylin
Client Reference : CSI8222
Site Name : 13a Pond Street, NW3

Date Received : 26/01/2017
Date Testing Started : 10/02/2017
Date Testing Completed : 14/02/2017
Laboratory Used : Chelmer Geotechnical, CM3 8AB

Sample Ref			Sample Type	*Moisture Content (%) [1]	*Soil Faction > 0.425mm (%) [2]	*Liquid Limit (%) [3]	*Plastic Limit (%) [4]	*Plasticity Index (%) [5]	*Liquidity Index (%) [5]	*Modified Plasticity Index (%) [6]	*Soil Class [7]	Filter Paper Contact Time (h) [8]	*Soil Sample Suction (kPa)	Insitu Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	*pH Value [11]	*Sulphate Content (g/l)		
BH/TP/WS	Depth (m)	UID															SO_3 [12]	SO_4 [13]	Class [14]
TP1	0.6	83938	D	21	<5	53	19	34	0.07	32	CH								

Notes :- *UKAS Accredited Tests

[1] BS 1377 : Part 2 : 1990, Test No 3.2
[2] Estimated if <5%, otherwise measured
[3] BS 1377 : Part 2 : 1990, Test No 4.4
[4] BS 1377 : Part 2 : 1990, Test No 5.3
[5] BS 1377 : Part 2 : 1990, Test No 5.4
[6] BRE Digest 240 : 1993
[7] BS 5930 : 1981 : Figure 31 - Plasticity Chart for the classification of fine soils
[8] In-house method S9a adapted from BRE IP 4/93
[9] Values of shear strength were determined in situ by Chelmer Site Investigations using a Pilcon hand vane or Geonor vane (GV).
[10] BS 1377 : Part 3 : 1990, Test No 4
[11] BS 1377 : Part 2 : 1990, Test No 9
[12] BS 1377 : Part 3 : 1990, Test No 5.6
[13] $SO_4 = 1.2 \times SO_3$
[14] BRE Special Digest One (Concrete in Aggressive Ground) 2005

Note that if the SO_4 content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4m or DS-5m class respectively unless water soluble magnesium testing is undertaken to prove otherwise

Key

D - Disturbed sample
B - Bulk sample
U - U100 (undisturbed sample)
W - Water sample
ENP - Essentially Non-Plastic
U/S - Underside Foundation

UKAS TESTING 8284

Comments :-

Technician :- JH

Checked & Authorised By:- Mark Collyer **Laboratory Manager**
Chelmer Site Investigation Laboratories Ltd

Date Checked :- 15/02/2017

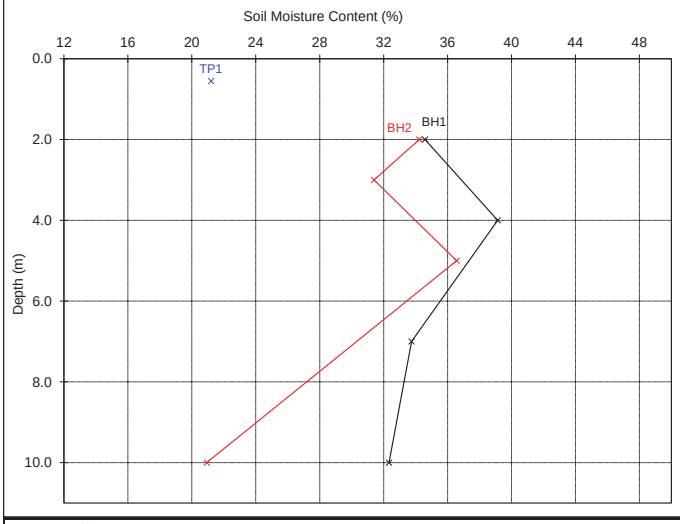
Laboratory Testing Results

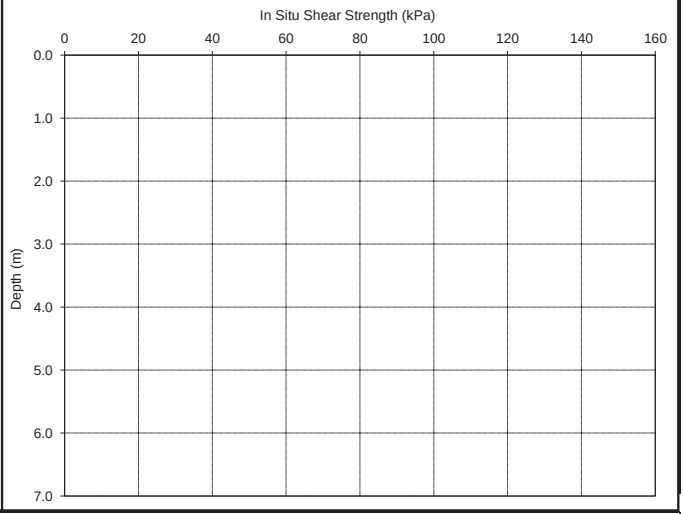
Moisture Content/Shear Strength Profile

Chelmer Geotechnical Laboratories
Groundbreaking Services

Job Number : CGL8222
Client : Spencer Baylin
Client Reference : CSI8222
Site Name : 13a Pond Street, NW3

Date Received : 26/01/2017
Date Testing Started : 10/02/2017
Date Testing Completed : 14/02/2017
Laboratory : Chelmer Geotechnical Laboratories, CM3 8AB





Notes :-

1. If the Soil Fraction > 0.425mm exceeds 5% the Equivalent Moisture Content of the remainder (calculated in accordance with BS 1377: Part 2 : 1990, cl.3.2.4 note 1) is also plotted and the alternative profile additionally shown as an appropriately coloured broken line.
2. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly over consolidated clays) at shallow depths.

Unless otherwise stated, values of Shear Strength were determined in situ by Chelmer Site Investigations using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa. (Not UKAS accredited)

UKAS TESTING 8284

Comments :-

Checked & Authorised By:- Mark Collyer **Laboratory Manager**
Chelmer Site Investigation Laboratories Ltd

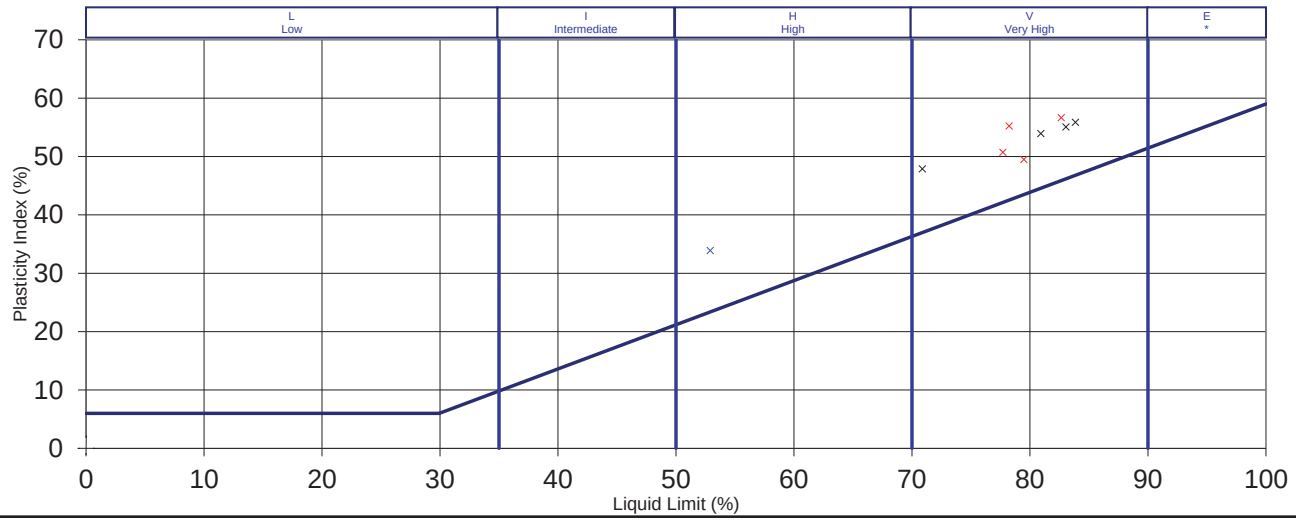
Date: 15/02/2017

Laboratory Testing Results

Plasticity Chart for the classification of fine soils and the finer part of coarse soils
In Compliance with BS5930 : 1999

Chelmer Geotechnical Laboratories
"Ground Breaking Services"

Job Number :	CGL8222	Date Received :	26/01/2017
Client :	Spencer Baylin	Date Testing Started :	10/02/2017
Client Reference :	CSI8222	Date Testing Completed :	14/02/2017
Site Name :	13a Pond Street, NW3	Laboratory :	Chelmer Geotechnical Laboratories, CM3 8AB



Notes :-

SILT (M-SOIL), M, plots below A-Line
CLAY, C, plots above A-Line }M and C may be combined as FINE SOIL, F.

Key :- BH1
BH2
TP1

UKAS TESTING
8284

Comments :-

Checked & Authorised By:- Mark Collyer **Laboratory Manager**
Chelmer Site Investigation Laboratories Ltd

Date: 15/02/2017

Laboratory Testing Results

BS 1377:1990: Part 7

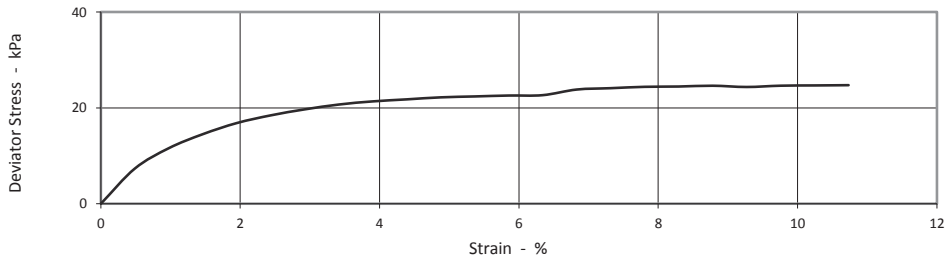
Chelmer Geotechnical Laboratories
'Groundbreaking Services'

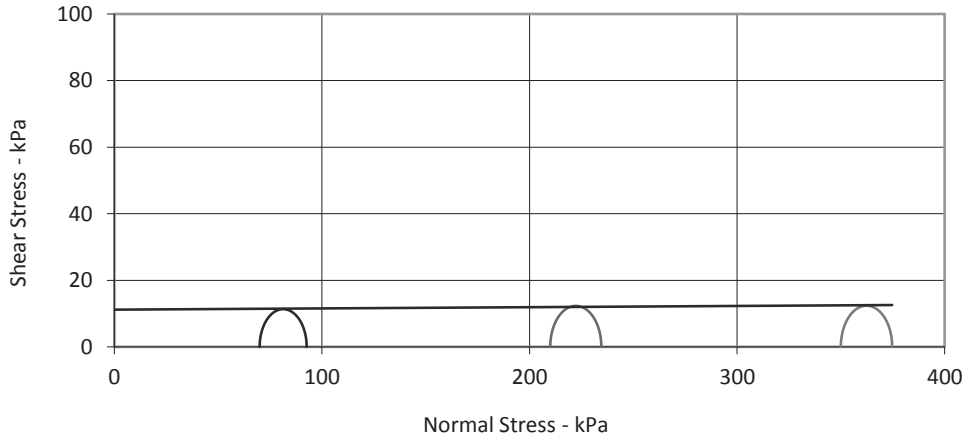
Job Number :	CGL8222	Date Tested :	01/02/2017
Client :	A Client Spencer Baylin	Date Reported :	09/02/2017
Client Reference :	BH1 @ 4.50 - 4.95	Sample UID :	83923
Project/Site :	13a Pond Street NW3		

Sample Details

Description		Very soft yellowish brown grey veined silty CLAY.			
Sample Condition		Undisturbed			
Height	mm	205.0			
Diameter	mm	104.0			
Moisture Content	%	34			
Bulk Density	Mg/m³	1.88			
Dry Density	Mg/m³	1.41			
Test Details	**Stage**	**1**	**2**	**3**	
Membrane Thickness	mm	0.26	0.26	0.26	
Membrane Correction	kPa	0.39	0.51	0.60	
Rate of Axial Displacement	%/min	1.76	1.76	1.76	
Cell Pressure	kPa	70	210	350	
Strain at Failure	%	6.3	8.8	10.7	
Maximum Deviator Stress	kPa	23	25	25	
Shear Strength	kPa	**11**	**12**	**12**	
Mode of Failure				Intermediate	

Shear Strength Parameters	
C	**11 kPa**
Phi	**0.2 °**





Unconsolidated Undrained Shear Strength Tested in Accordance with BS 1377: Part 7: 1990

Authorised Signatory: **Mark Collyer**
Laboratory Manager

15/02/2017

Q185
Rev 0
08/16

Laboratory Testing Results

BS 1377:1990: Part 7

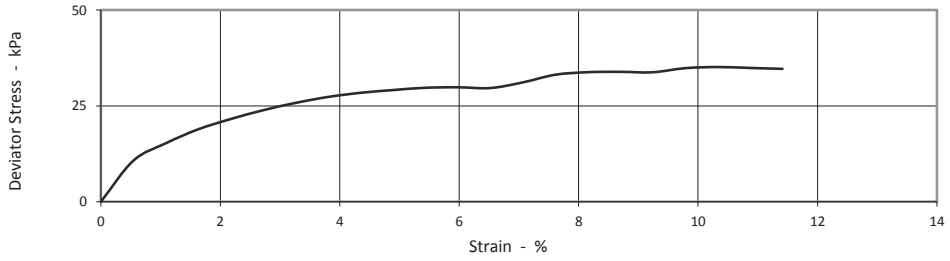
Chelmer Geotechnical Laboratories
'Groundbreaking Services'

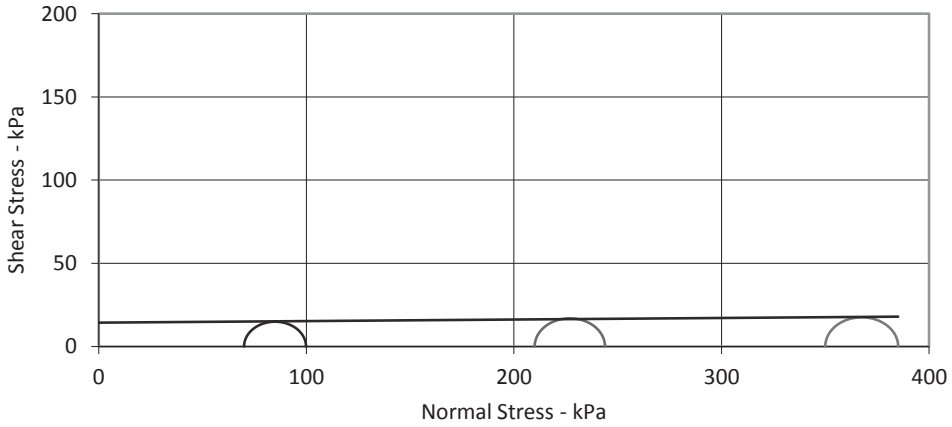
Job Number :	CGL8222	Date Tested :	01/02/2017
Client :	A Client Spencer Baylin	Date Reported :	09/02/2017
Client Reference :	BH1 @ 7.50 - 7.95	Sample UID :	83926
Project/Site :	13a Pond Street NW3		

Sample Details

Description		Stiff to firm Brown SILTY Clay			
Sample Condition		Undisturbed			
Height	mm	184.0			
Diameter	mm	103.0			
Moisture Content	%	28			
Bulk Density	Mg/m³	1.97			
Dry Density	Mg/m³	1.54			
Test Details	**Stage**	**1**	**2**	**3**	
Membrane Thickness	mm	0.27	0.27	0.27	
Membrane Correction	kPa	0.39	0.53	0.61	
Rate of Axial Displacement	%/min	1.96	1.96	1.96	
Cell Pressure	kPa	70	210	350	
Strain at Failure	%	6.0	8.7	10.3	
Maximum Deviator Stress	kPa	30	34	35	
Shear Strength	kPa	**15**	**17**	**18**	
Mode of Failure				Intermediate	

Shear Strength Parameters	
C	**14 kPa**
Phi	**0.5 °**





Unconsolidated Undrained Shear Strength Tested in Accordance with BS 1377: Part 7: 1990

Authorised Signatory: **Mark Collyer**
Laboratory Manager

15/02/2017

Laboratory Testing Results

BS 1377:1990: Part 7

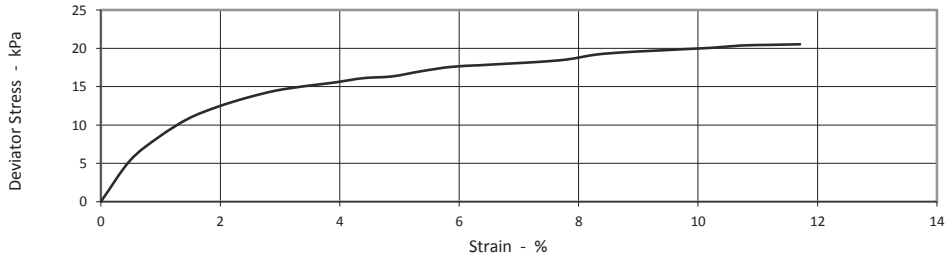
Chelmer Geotechnical Laboratories
'Groundbreaking Services'

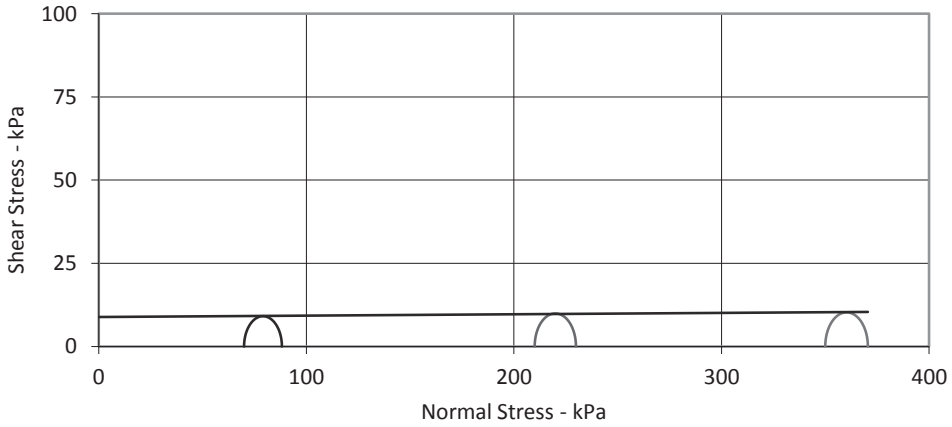
Job Number :	CGL8222	Date Tested :	01/02/2017
Client :	A Client Spencer Baylin	Date Reported :	09/02/2017
Client Reference :	BH2 @ 2.50 - 4.95	Sample UID :	83929
Project/Site :	13a Pond Street NW3		

Sample Details

Description		FIRM YELLOWISH Brown Clay			
Sample Condition		Undisturbed			
Height	mm	205.0			
Diameter	mm	104.0			
Moisture Content	%	20			
Bulk Density	Mg/m³	1.86			
Dry Density	Mg/m³	1.55			
Test Details	**Stage**	**1**	**2**	**3**	
Membrane Thickness	mm	0.19	0.19	0.19	
Membrane Correction	kPa	0.32	0.41	0.47	
Rate of Axial Displacement	%/min	1.76	1.76	1.76	
Cell Pressure	kPa	70	210	350	
Strain at Failure	%	7.3	9.8	11.7	
Maximum Deviator Stress	kPa	18	20	21	
Shear Strength	kPa	**9**	**10**	**10**	
Mode of Failure				Intermediate	

Shear Strength Parameters	
C	**9 kPa**
Phi	**0.2 °**





Unconsolidated Undrained Shear Strength Tested in Accordance with BS 1377: Part 7: 1990

Authorised Signatory: **Mark Collyer**
Laboratory Manager

15/02/2017

Laboratory Testing Results

BS 1377:1990: Part 7

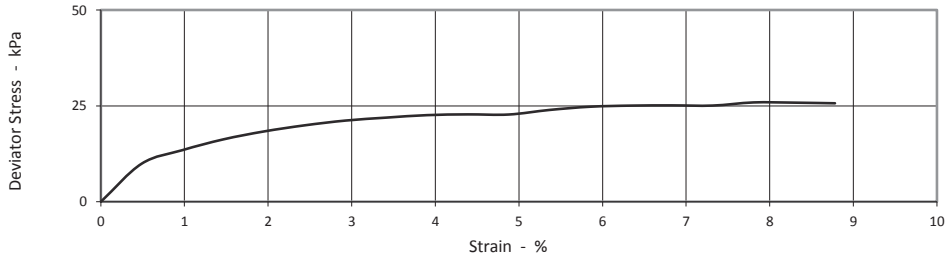
Chelmer Geotechnical Laboratories
'Groundbreaking Services'

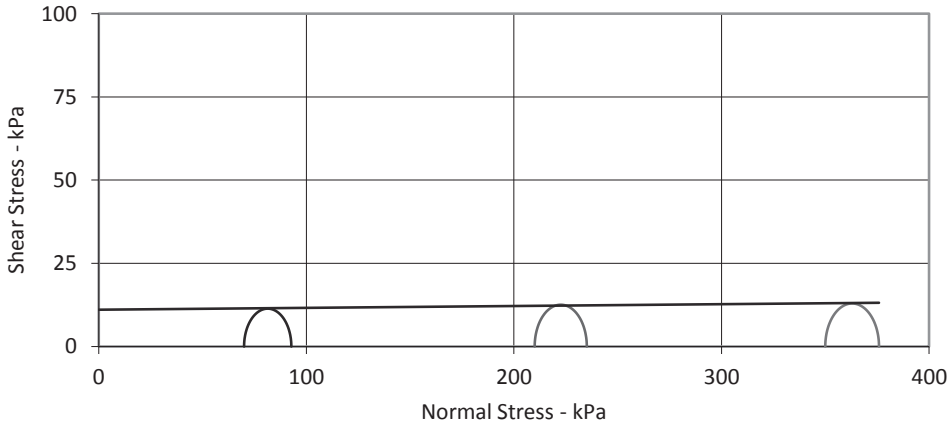
Job Number :	CGL8222	Date Tested :	01/02/2017
Client :	A Client Spencer Baylin	Date Reported :	09/02/2017
Client Reference :	BH2 @ 4.50 - 4.95	Sample UID :	83932
Project/Site :	13a Pond Street NW3		

Sample Details

Description		Firm yellowish brown grey veined silty CLAY			
Sample Condition		Undisturbed			
Height	mm	205.0			
Diameter	mm	104.0			
Moisture Content	%	32			
Bulk Density	Mg/m³	1.88			
Dry Density	Mg/m³	1.43			
Test Details	**Stage**	**1**	**2**	**3**	
Membrane Thickness	mm	0.27	0.27	0.27	
Membrane Correction	kPa	0.30	0.44	0.48	
Rate of Axial Displacement	%/min	1.76	1.76	1.76	
Cell Pressure	kPa	70	210	350	
Strain at Failure	%	4.4	6.8	7.8	
Maximum Deviator Stress	kPa	23	25	26	
Shear Strength	kPa	**11**	**13**	**13**	
Mode of Failure				Intermediate	

Shear Strength Parameters	
C	**11 kPa**
Phi	**0.3 °**





Unconsolidated Undrained Shear Strength Tested in Accordance with BS 1377: Part 7: 1990

Authorised Signatory: **Mark Collyer**
Laboratory Manager

15/02/2017

Laboratory Testing Results

BS 1377:1990: Part 7

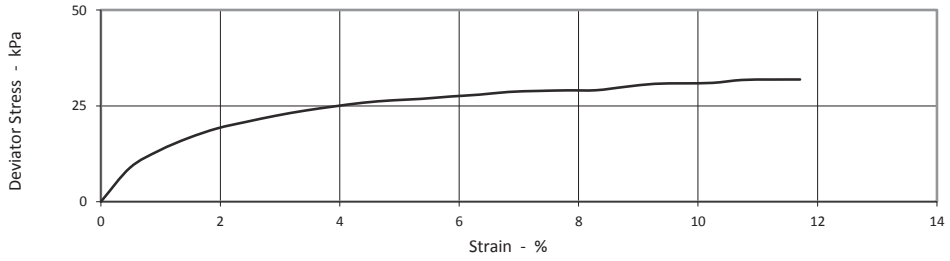
Chelmer Geotechnical Laboratories
'Groundbreaking Services'

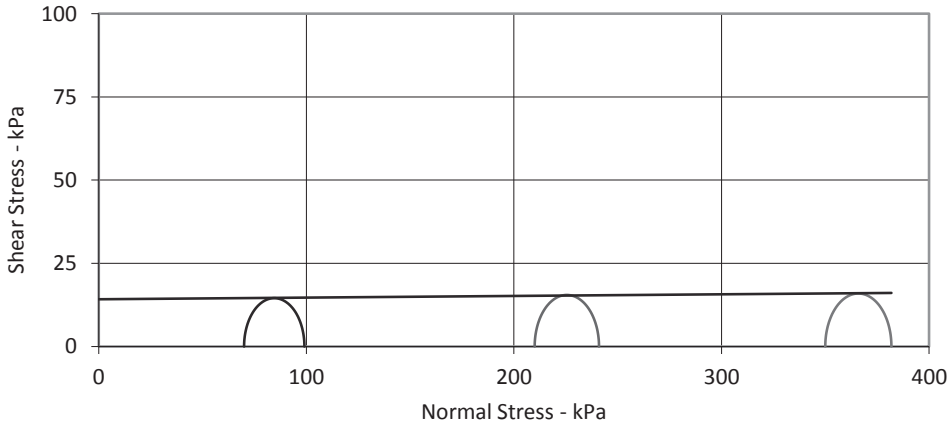
Job Number :	CGL8222	Date Tested :	01/02/2017
Client :	A Client Spencer Baylin	Date Reported :	09/02/2017
Client Reference :	BH2 @ 7.50 - 7.95	Sample UID :	83934
Project/Site :	13a Pond Street NW3		

Sample Details

Description		Stiff brown silty CLAY			
Sample Condition		Undisturbed			
Height	mm	205.0			
Diameter	mm	104.0			
Moisture Content	%	32			
Bulk Density	Mg/m³	1.88			
Dry Density	Mg/m³	1.43			
Test Details	**Stage**	**1**	**2**	**3**	
Membrane Thickness	mm	0.27	0.27	0.27	
Membrane Correction	kPa	0.51	0.60	0.66	
Rate of Axial Displacement	%/min	1.76	1.76	1.76	
Cell Pressure	kPa	70	210	350	
Strain at Failure	%	8.3	10.2	11.7	
Maximum Deviator Stress	kPa	29	31	32	
Shear Strength	kPa	**15**	**15**	**16**	
Mode of Failure				Intermediate	

Shear Strength Parameters	
C	**14 kPa**
Phi	**0.3 °**





Unconsolidated Undrained Shear Strength Tested in Accordance with BS 1377: Part 7: 1990

Authorised Signatory: **Mark Collyer**
Laboratory Manager

15/02/2017

Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone: (01424) 718618
Facsimile: (01424) 729911
info@elab-uk.co.uk

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number:	17-10481
Issue:	1
Date of Issue:	03/02/2017
Contact:	Steve Green
Customer Details:	Chelmer Site Investigations Ltd Unit 15 East Hanningfield Ind Est Chelmsford EssexCM3 8AB
Quotation No:	Q16-00625
Order No:	7672
Customer Reference:	7672
Date Received:	31/01/2017
Date Approved:	02/02/2017
Details:	13a Pond Street NW3
Approved by:	

John Wilson, Operations Manager

Any comments, opinions or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683

Sample Summary

Report No.: 17-10481

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
87178	1 83917 0.50	25/01/2017	31/01/2017	Silty loam	
87179	1 83918 1.00	25/01/2017	31/01/2017	Silty clayey loam	
87180	1 83921 3.00	25/01/2017	31/01/2017	Clay	
87181	1 83924 6.00	25/01/2017	31/01/2017	Clay	
87182	2 83931 4.00	25/01/2017	31/01/2017	Clay	
87183	2 83935 9.00	25/01/2017	31/01/2017	Clay	
87184	TP2 83937 0.35	25/01/2017	31/01/2017	Silty loam	

Results Summary

Report No.: 17-10481

ELAB Reference				87178	87179	87180	87181	87182	87183
Customer Reference				83917	83918	83921	83924	83931	83935
Sample ID									
Sample Type				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location				1	1	1	1	2	2
Sample Depth (m)				0.50	1.00	3.00	6.00	4.00	9.00
Sampling Date				25/01/2017	25/01/2017	25/01/2017	25/01/2017	25/01/2017	25/01/2017
Determinand	**Codes**	**Units**	**LOD**						
Anions									
Water Soluble Sulphate	M	g/l	0.02	0.15	0.08	0.31	2.72	3.07	3.19
Inorganics									
Total Sulphur	N	%	0.01	0.07	0.03	0.03	0.35	0.27	0.25
Acid Soluble Sulphate (SO4)	U	%	0.02	0.16	0.08	0.13	1.90	1.49	1.03
Miscellaneous									
pH	M	pH units	0.1	10.0	8.5	8.2	8.0	7.9	7.9

Results Summary

Report No.: 17-10481

ELAB Reference	87184
Customer Reference	83937
Sample ID	
Sample Type	SOIL
Sample Location	TP2
Sample Depth (m)	0.35
Sampling Date	25/01/2017

Determinand	Codes	Units	LOD	
Anions				
Water Soluble Sulphate	M	g/l	0.02	0.28
Inorganics				
Total Sulphur	N	%	0.01	0.04
Acid Soluble Sulphate (SO4)	U	%	0.02	0.16
Miscellaneous				
pH	M	pH units	0.1	9.1

Method Summary

Report No.: 17-10481

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
pH	M	Air dried sample	01/02/2017	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	02/02/2017	115	Ion Chromatography
Water soluble anions	M	Air dried sample	01/02/2017	172	Ion Chromatography
Total organic carbon/Total sulphur	N	Air dried sample	02/02/2017	216	IR

Tests marked N are not UKAS accredited

Report Information

Report No.: 17-10481

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"

Soil sample results are expressed on an air dried basis (dried at < 30°C)
Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
PCB congener results may include any coeluting PCBs
Uncertainty of measurement for the determinands tested are available upon request

Deviation Codes

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month
All water samples will be retained for 7 days following the date of the test report
Charges may apply to extended sample storage

8284

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Where our involvement consists exclusively of testing samples, the results and comments (if provided) relate only to the samples tested.

Any samples that are deemed to be subject to deviation will be recorded as such within the test summary.