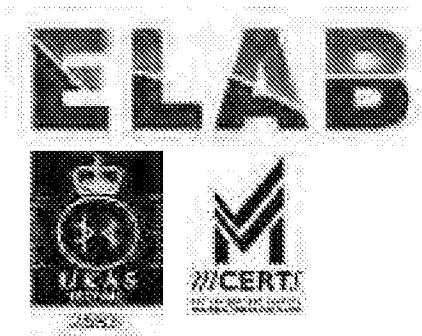




Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY

THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number: 19-26231

Issue: 1

Date of Issue: 19/12/2019

Contact: Martin Weil

Customer Details: Leap Environmental Ltd
The Atrium
Curtis Road
Dorking
Surrey RH4 1X4

Quotation No: Q14-00063

Order No: LPO-1366

Customer Reference: LP2128

Date Received: 13/12/2019

Date Approved: 19/12/2019

Details: North Littlehampton

Approved by:

Mike Varley, Technical Manager

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

This report may only be reproduced in full



Sample Summary

Report No.: 19-26231, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
192437	HP102 0.20	12/12/2019	13/12/2019	Silty loam	
192438	HP103 0.30	12/12/2019	13/12/2019	Silty loam	
192439	HP104 0.20	12/12/2019	13/12/2019	Silty clayey loam	



Results Summary

Report No.: 19-26231, issue number 1

ELAB Reference				192437	192438	192439
Customer Reference						
Sample ID						
Sample Type				SOIL	SOIL	SOIL
Sample Location				HP102	HP103	HP104
Sample Depth (m)				0.20	0.30	0.20
Sampling Date				12/12/2019	12/12/2019	12/12/2019
Determinand	Codes	Units	LOD			
Soil sample preparation parameters						
Material removed	N	%	0.1	< 0.1	< 0.1	< 0.1
Description of Inert material removed	N		0	None	None	None
Metals						
Arsenic	M	mg/kg	1	12.9	10.6	11.7
Cadmium	M	mg/kg	0.5	0.7	0.6	0.6
Chromium	M	mg/kg	5	28.4	19.8	24.5
Copper	M	mg/kg	5	18.3	28.8	30.3
Lead	M	mg/kg	5	27.9	22.8	36.2
Mercury	M	mg/kg	0.5	< 0.5	< 0.5	< 0.5
Nickel	M	mg/kg	5	21.0	22.5	19.2
Selenium	M	mg/kg	1	< 1.0	< 1.0	< 1.0
Zinc	M	mg/kg	5	87.3	85.4	99.6
Inorganics						
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	< 0.8	< 0.8
Miscellaneous						
pH	M	pH units	0.1	8.5	8.8	9.2
Total Organic Carbon	N	%	0.01	0.58	0.27	0.56
Polyaromatic hydrocarbons						
Naphthalene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Fluorene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	M	mg/kg	0.1	0.1	< 0.1	< 0.1
Anthracene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	M	mg/kg	0.1	0.4	0.2	< 0.1
Pyrene	M	mg/kg	0.1	0.4	0.2	< 0.1
Benzo(a)anthracene	M	mg/kg	0.1	0.3	0.1	< 0.1
Chrysene	M	mg/kg	0.1	0.3	0.2	< 0.1
Benzo(b)fluoranthene	M	mg/kg	0.1	0.3	0.3	< 0.1
Benzo(k)fluoranthene	M	mg/kg	0.1	0.5	0.5	< 0.1
Benzo(a)pyrene	M	mg/kg	0.1	0.3	0.2	< 0.1
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	0.3	0.3	< 0.1
Dibenzo(a,h)anthracene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Benzo(g,h,i)perylene	M	mg/kg	0.1	0.2	0.2	< 0.1
Total PAH(16)	M	mg/kg	0.4	3.3	2.3	0.7

Tests marked N are not UKAS accredited.

The Environmental Laboratory Ltd, Reg. No. 3882193



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.: 19-26231, issue number 1

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 (%)
192437	0.20	HP102	Brown Soil, Stones	No asbestos detected	n/t	n/t	n/t	n/t
192438	0.30	HP103	Brown Soil, Stones, Chalk	No asbestos detected	n/t	n/t	n/t	n/t
192439	0.20	HP104	Brown Soil, Stones, Clinker	No asbestos detected	n/t	n/t	n/t	n/t



Method Summary

Report No.: 19-26231, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Hexavalent chromium	N	As submitted sample	17/12/2019	110	Colorimetry
pH	M	Air dried sample	18/12/2019	113	Electromeric
Aqua regia extractable metals	M	Air dried sample	17/12/2019	118	ICPMS
PAH (GC-FID)	M	As submitted sample	17/12/2019	133	GC-FID
Total organic carbon/Total sulphur	N	Air dried sample	19/12/2019	210	IR
Asbestos identification	U	Air dried sample	18/12/2019	PMAN	Microscopy

Tests marked N are not UKAS accredited



Report Information

Report No.: 19-26231, issue number 1

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
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
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), and are uncorrected for inert material removed.

ELAB are unable to provide an interpretation or opinion on the content of this report.

The results relate only to the sample received.

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

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



GEOLABS Limited
Unit D3 HRS Business Park
Granby Avenue
Birmingham
B33 0SJ

Leap Environmental Limited
Southern Coast Regional Office
Victoria Road
Burgess Hill
West Sussex
RH15 9LR



04 February 2020

Report No : GEO/30483/01

Page 1 of 1

For the attention of Mr M Weil

Dear Sirs

Our ref **GEO / 30483**
Your Ref **LP2128**

Date samples received 14/01/2020
Date written instructions received 14/01/2020
Date testing commenced 15/01/2020
Date of sample disposal 03/03/2020

Project **NORTH LITTLEHAMPTON**

Further to your instructions we have pleasure in enclosing the results of the tests you requested in the attached figures.

LABORATORY TEST REPORT

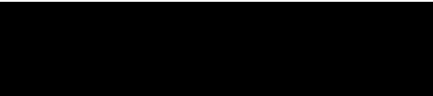
Item No	Test Quantity	Description
1	~	Geotechnical Test Summary
~	4	Water Content
2	~	Geochemical Test Summary
~	3	BRE SD1 Suite B - Natural ground + pyrite
3	4	Saturation Moisture Content
4	4	Liquid & Plastic Limits
5	1	Particle Size Distribution

Any opinions or interpretations expressed herein are outside the scope of UKAS accreditation. All results contained in this report are provisional unless signed by an approved signatory. The results contained in this report relate only to samples received in the laboratory and are tested 'as received' unless otherwise stated. This report should not be reproduced, except in full, without the written approval of the laboratory.

All the necessary data required by the documented test procedures has been recorded and will be stored for a period of not less than 6 years. This data will be issued to yourselves at your request. All samples will be disposed of after the date shown above. Written confirmation will be required to retain the samples beyond this period and a storage charge may be applied.

We trust that the above meets your requirements and should you require any further information or assistance, please do not hesitate to contact us.

Yours faithfully
on behalf of **GEOLABS Limited**



J A Reynolds
Laboratory Manager



eurolab



BGA



SUMMARY OF GEOTECHNICAL TESTING

Sample details																						
Location	Depth (m)	Sample Ref	Type	Description	Classification Tests								Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
					WC	LL	PL	PI	<425 µm	Bulk	Dry	Condition	Cell Pressure	Deviator Stress	Shear Stress	pH	2:1 W/S SO4	W/S Mg				
					%	%	%	%	%	Mg/m²	Mg/m²		kPa	kPa	kPa		g/L	mg/L				
TP104	1.40		D	Cream mottled light brown clayey CHALK.																		
TP125	2.10		D	Brown mottled grey sandy CLAY with some fine to medium gravel.	38.2	57	22	35	94								8.2	< 0.010				
TP133	2.50		B																			
TP135	2.90		B	Dark brown slightly clayey sandy SILT with rare fine to medium gravel.	51.7		NP		97								9.2	0.089				
WS102	4.50		D																			
WS103	2.50		D	Brown mottled grey CLAY with some fine to medium gravel.	56.5	81	28	53	95								9.8	0.14				
WS103	3.50		B	Greyish brown mottled grey CLAY with rare fine to medium gravel.	66.3	89	30	59	97													
WS103	4.80		D																			
WS104	2.30		D																			

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

NP=Non Plastic

Checked and Approved by:

Project Number:

Name:

GEO / 30483
NORTH LITTLEHAMPTON
LP2128



Tested by Chemtest Ltd : MCERTS / UKAS No 2183

Test Report By: GEOLABS Limited Unit D3 HRS Business Park, Granby Avenue, Birmingham, B33 0SJ
Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Notes

Project Number:

Project Name:

2014

LIQUID AND PLASTIC LIMITS

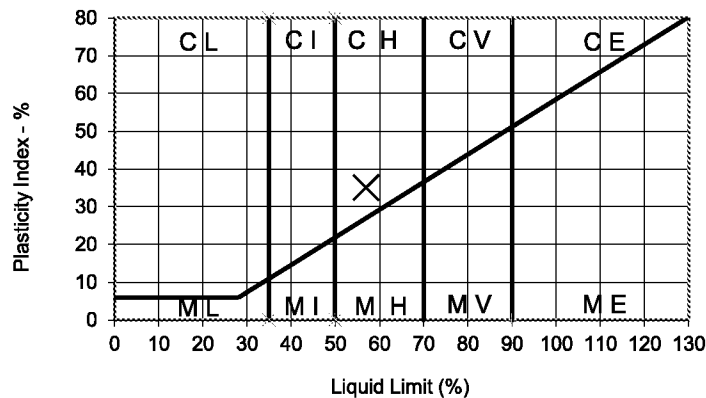
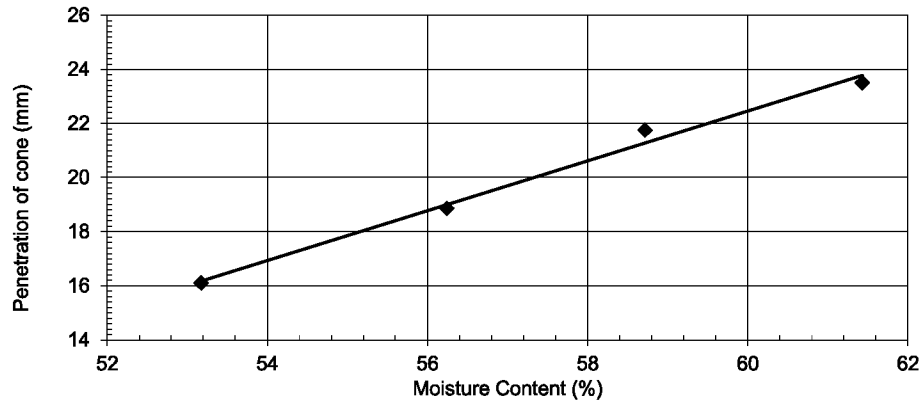
Location TP125
Depth (m) 2.10
Sample Type D

Description:

Brown mottled grey sandy CLAY with some fine to medium gravel.

Preparation : Sample as received with discrete coarse particles removed by hand.

Water Content : (BS EN ISO 17892-1:2014) 38.2 %
 Estimated percentage passing 425µm sieve : 94 %
 Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with increasing water content : 57 %
 Plastic Limit : 22 %
 Plasticity Index : 35 %
 Equivalent Water Content of material passing 425µm sieve : 40.4 %
 Liquidity Index : 0.53



Processed by BBK
Checked and Approved by

Project Number:

GEO / 30483

Project Name:

**NORTH LITTLEHAMPTON
LP2128**



LIQUID AND PLASTIC LIMITS

Location TP135
Depth (m) 2.90
Sample Type B

Description:

Dark brown slightly clayey sandy SILT with rare fine to medium gravel.

Preparation : Particles >425µm removed by wet sieving and air drying.

Water Content : (BS EN ISO 17892-1:2014) 51.7 %

Measured percentage passing 425µm sieve : 97 %

Liquid Limit - Fall Cone Method (cone angle 30°) : Not Determined

Plastic Limit : Non-Plastic

Equivalent Water Content of material passing 425µm sieve : 53 %

Sample was determined to be Non-Plastic after preparation

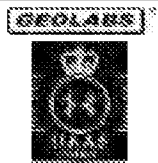
Processed by TS
Checked and Approved by

Project Number:

GEO / 30483

Project Name:

**NORTH LITTLEHAMPTON
LP2128**



LIQUID AND PLASTIC LIMITS

Location WS103
 Depth (m) 2.50
 Sample Type D

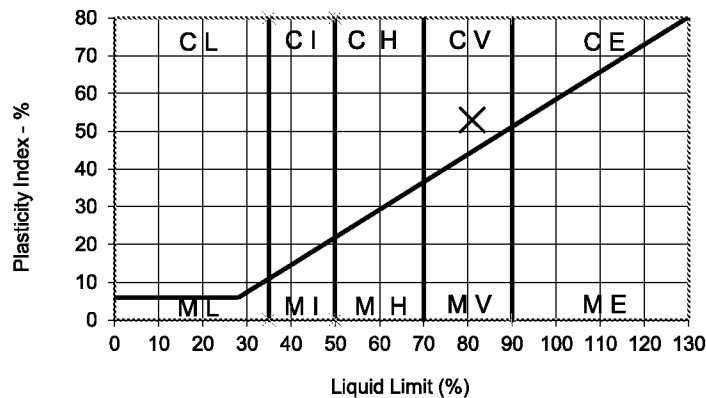
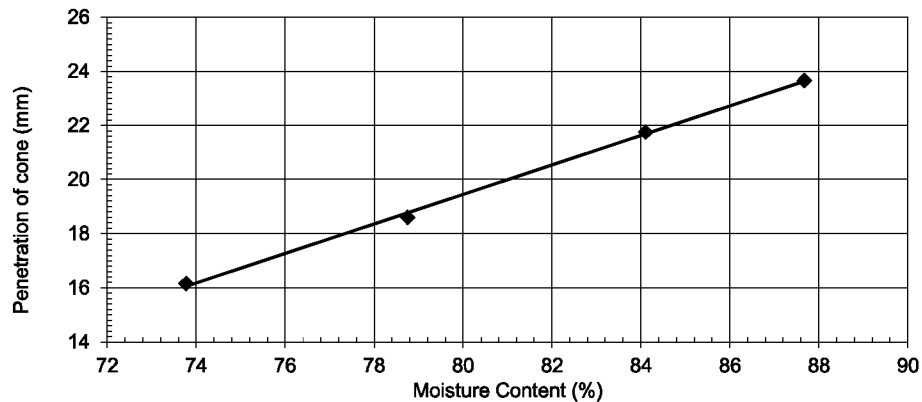
Description:

Brown mottled grey CLAY with some fine to medium gravel.

Preparation : Sample as received with discrete coarse particles removed by hand.

Water Content : (BS EN ISO 17892-1:2014) 56.5 %
 Estimated percentage passing 425µm sieve : 95 %
 Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with increasing water content : 81 %
 Plastic Limit : 28 %
 Plasticity Index : 53 %

Equivalent Water Content of material passing 425µm sieve : 59.3 %
 Liquidity Index : 0.59



Processed by BBK
 Checked and Approved by

Project Number:

GEO / 30483

Project Name:

**NORTH LITTLEHAMPTON
 LP2128**

J A Reynolds - Laboratory Manager
 04/02/2020



LIQUID AND PLASTIC LIMITS

Location WS103
 Depth (m) 3.50
 Sample Type B

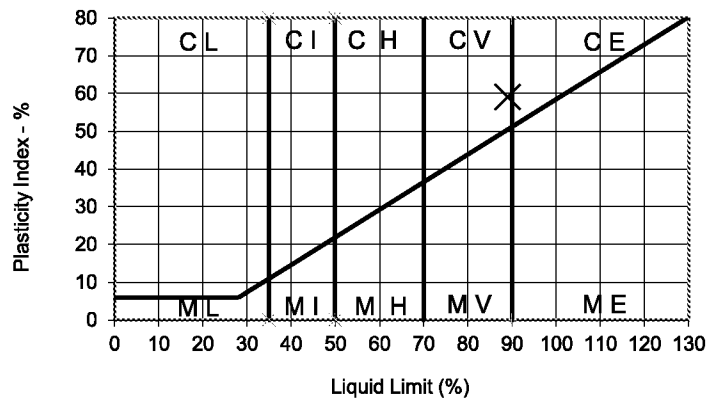
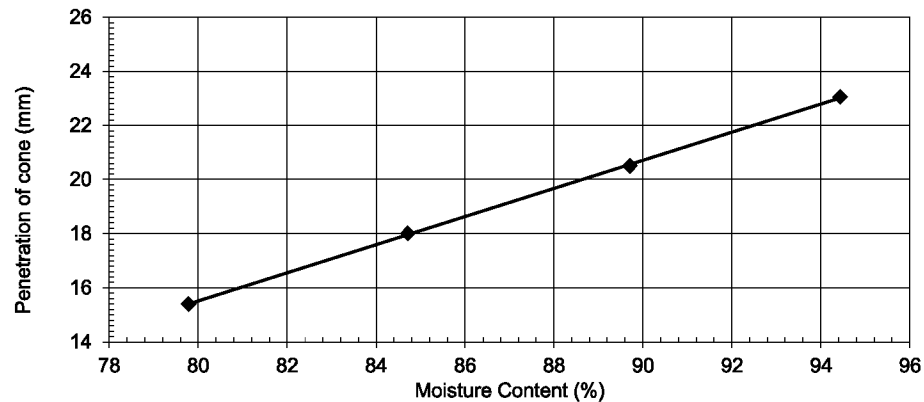
Description:

Greyish brown mottled grey CLAY with rare fine to medium gravel.

Preparation : Sample as received with discrete coarse particles removed by hand.

Water Content : (BS EN ISO 17892-1:2014) 66.3 %
 Estimated percentage passing 425µm sieve : 97 %
 Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with increasing water content : 89 %
 Plastic Limit : 30 %
 Plasticity Index : 59 %

Equivalent Water Content of material passing 425µm sieve : 68.6 %
 Liquidity Index : 0.65



Processed by BBK

Number:

GEO / 30483

Name:

NORTH LITTLEHAMPTON
LP2128

GEOLABS



PARTICLE SIZE DISTRIBUTION

BH / TP No. TP104
Depth (m) 1.40
Sample Type D

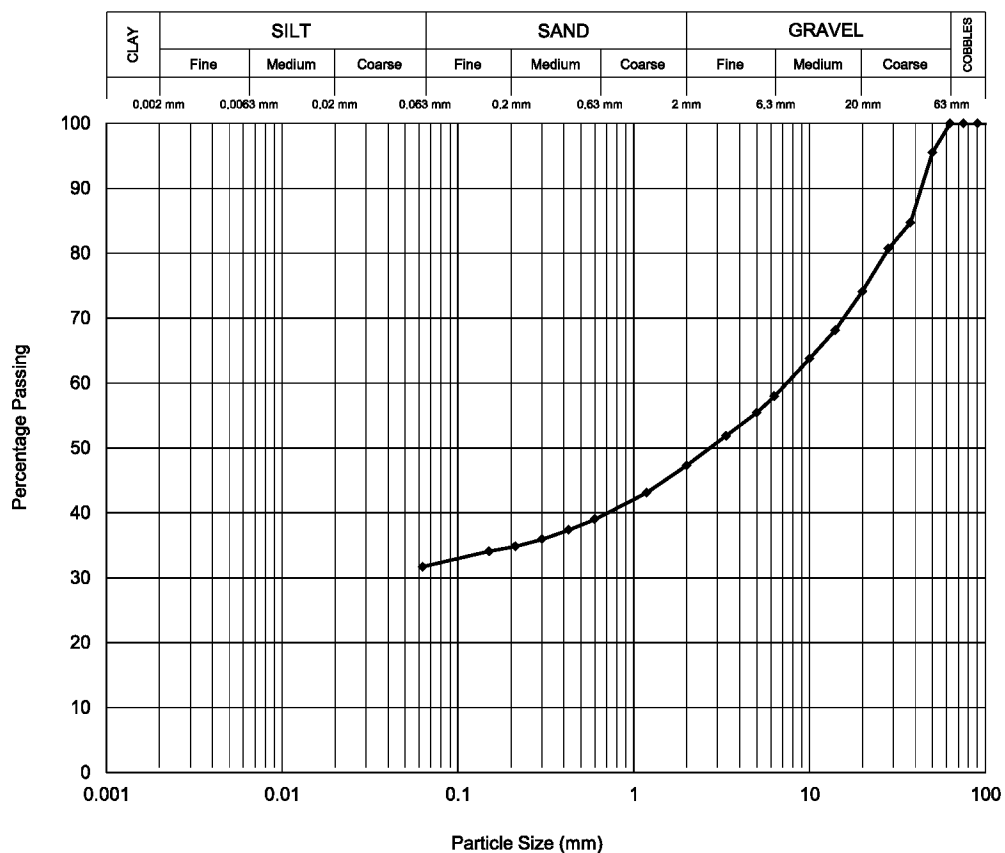
Description

Cream mottled light brown clayey CHALK.

Remarks Insufficient sample supplied to comply with BS EN ISO 17892-4 : 2016 minimum mass requirements

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	96
37.5 mm	85
28.0 mm	81
20.0 mm	74
14.0 mm	68
10.0 mm	64
6.30 mm	58
5.00 mm	55
3.35 mm	52
2.00 mm	47
1.18 mm	43
600 µm	39
425 µm	37
300 µm	36
212 µm	35
150 µm	34
63 µm	32



Particle Proportions	
Cobbles	0
Gravel	53
Sand	16
Silt & Clay	31

Processed by PK
Checked and Approved by

Project Number:

GEO / 30483

Name:

**NORTH LITTLEHAMPTON
LP2128**

GEOLABS



SUMMARY OF GEOTECHNICAL TESTING

Sample details																			Classification Tests				Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Location	Depth (m)	Sample Ref	Type	Description	WC (%)	LL (%)	PL (%)	PI (%)	<425 µm (%)	Bulk Mg/m²	Dry Mg/m²	Condition	Cell Pressure kPa	Deviator Stress kPa	Shear Stress kPa	pH	2:1 W/S SO4 (g/L)	W/S Mg (mg/L)														
BH101	1.00		D	Orangish brown mottled grey slightly fine sandy silty CLAY. Gravel is fine to medium.	19.9	26	14	12	84											Chemical												
BH101	1.50		B	Orangish brown mottled grey slightly fine sandy silty CLAY. Gravel is fine to medium.	18.4	25	15	10	92																							
BH101	3.20		B	Brown gravelly clayey SAND.																Particle Size Distribution												
BH102	1.00		D	Grey brown mottled brown slightly fine sandy silty CLAY. Gravel is fine to medium.	28.0	35	19	16	93																							
BH102	1.50		B																	Chemical												
BH102	2.00		D	Orangish brown mottled grey slightly fine sandy silty CLAY with rare fine to medium gravel.	18.6	30	14	16	99																							
BH102	4.50		B	Yellowish brown slightly clayey gravel and SAND.																Particle Size Distribution												
BH102	6.00		B	Yellowish brown sandy CLAY. Gravel is fine to cobbles sized chalk and flint.																Particle Size Distribution												
BH102	6.50		B	Yellowish brown and cream gravelly structureless CHALK. Gravel is fine to cobble sized chalk.	24.0	33	25	8.0	61											Particle Size Distribution												
BH104	1.00		B	Brown grey and grey slightly fine sandy silty CLAY with rare fine to medium gravel and rootlets.	24.3	36	18	18	98																							

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

Checked and Assessed by: [Redacted]

Project Number:

Project Name:

GEO / 30530

NORTH LITTLEHAMPTON
LP2128



SUMMARY OF GEOTECHNICAL TESTING

Sample details																				Classification Tests				Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Location	Depth (m)	Sample Ref	Type	Description	WC (%)	LL (%)	PL (%)	PI (%)	<425 µm (%)	Bulk Mg/m³	Dry Mg/m³	Condition	Cell Pressure kPa	Deviator Stress kPa	Shear Stress kPa	pH	2:1 W/S SO4 (g/L)	W/S Mg (mg/L)															
BH104	1.20		D	Yellowish brown slightly clayey gravelly SAND.																Particle Size Distribution													
BH104	2.00		B	Yellowish brown clayey gravelly SAND.																	Particle Size Distribution												
BH104	3.00		B	Yellowish brown gravelly clayey SAND.																		Particle Size Distribution											
BH105	1.00		B	White with pockets of dark grey gravelly structureless CHALK. Gravel is chalk and flint.	36.8	44	31	13	53																								
BH105	1.10		D	Dark grey mottled brown grey slightly fine sandy clayey SILT. Gravel is fine to medium with rare fine chalk.	53.1	48	36	12	87																								
BH105	2.00		B	Dark grey mottled grey silty CLAY. Gravel is fine to medium with rare shell fragments.	63.9	84	37	47	99											Chemical													
BH105	2.20-2.65		U	Soft dark grey silty CLAY.																One Dimensional Consolidation													
BH105	2.65		D	Dark grey mottled grey silty CLAY. Gravel is fine to medium with rare shell fragments.	56.2	72	26	46	99											Chemical													
BH105	3.00		D	Dark grey mottled grey silty CLAY. Gravel is fine to medium with rare shell fragments.	66.3	74	30	44	99																								
BH105	4.00		B	Dark grey mottled grey silty CLAY. Gravel is fine to medium with rare shell fragments.	69.4	76	32	44	99																								

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

Checked and Approved by

Project Number:

Object Name:

GEO / 30530

NORTH LITTLEHAMPTON
LP2128



SUMMARY OF GEOTECHNICAL TESTING

Sample details																			Classification Tests				Density Tests		Undrained Triaxial Compression				Chemical Tests			Other tests and comments
Location	Depth (m)	Sample Ref	Type	Description	WC (%)	LL (%)	PL (%)	PI	<425 µm (%)	Bulk Mg/m³	Dry Mg/m³	Condition	Cell Pressure kPa	Deviator Stress kPa	Shear Stress kPa	pH	2:1 W/S SO4 (g/L)	W/S Mg (mg/L)														
BH105	4.20-4.65		U	Soft dark grey silty CLAY with rare fine to medium gravel	43.7					1.79	1.25	Undisturbed	42	10	8				One Dimensional Consolidation													
BH105	4.65		D	Dark grey mottled brown grey silty CLAY with rare shell fragments.	41.4	44	24	20	99																							
BH105	5.50		D	Dark grey mottled brown grey SILT and CLAY with rare shell fragments.	63.0	65	34	31	99										Chemical													
BH105	7.50		B	Grey brown slightly fine sandy gravelly silty CLAY. Gravel is fine to medium chalk.	22.3																											
BH107	1.00		B	Orangish brown and grey fine sandy silty CLAY with rare fine gravel.	22.1	38	19	19	99																							
BH107	2.00		B	White mottled orangish brown fine sandy silty CLAY with fine gravel sized chalk.	25.3	34	21	13	91																							
BH107	16.00		D	White structureless CHALK.	21.9																											
TP135	1.30		D	Grey brown and brown slightly fine sandy silty CLAY with rare rootlets.	23.8	36	19	17	100																							
TP138	1.00		D	Grey brown and brown slightly fine sandy silty CLAY with rare gravel.	20.0	36	17	19	99										Chemical													

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

Checked and Approved by

Project Number:

Project Name:

GEO / 30530

NORTH LITTLEHAMPTON
LP2128



SATURATION MOISTURE CONTENT OF CHALK

Location	Depth m	Sample Ref	Sample Type	Description	Water Content BS EN ISO 17892-1 : 2014 %	Bulk Density Mg/m ³	Dry Density Mg/m ³	Saturation Moisture Content %	Porosity %
BH101	4.00		B	White CHALK	13.0	2.16	1.91	15	29
BH101	5.00		D	White CHALK	13.2	2.22	1.96	14	27
BH101	6.00		D	White CHALK	13.8	2.23	1.96	14	27
BH101	10.00		B	White CHALK	17.5	2.13	1.81	18	33
BH101	12.00		D	White CHALK	10.5	2.29	2.07	11	23
BH102	8.50		D	White CHALK	22.0	2.06	1.69	22	37
BH102	10.00		B	White CHALK	17.0	2.16	1.85	17	31
BH104	4.00		B	White CHALK	19.7	2.08	1.74	20	36
BH104	4.50		B	White CHALK	24.4	2.01	1.62	25	40
BH104	7.00		B	White CHALK	19.8	2.09	1.74	20	36
BH104	9.50		D	White CHALK	17.7	2.13	1.81	18	33
BH104	12.50		D	White CHALK	18.3	2.14	1.81	18	33
BH105	8.00		B	White CHALK	12.7	2.23	1.98	13	27
BH105	10.00		D	White CHALK	11.9	2.25	2.01	13	26
BH105	14.50		D	White CHALK	9.2	2.36	2.16	9.3	20

Notes

Checked and Approved by:

Project Number:

GEO / 30530

Name:

**NORTH LITTLEHAMPTON
LP2128****GEOLABS**

SATURATION MOISTURE CONTENT OF CHALK

Location	Depth m	Sample Ref	Sample Type	Description	Water Content BS EN ISO 17892-1 : 2014 %	Bulk Density Mg/m ³	Dry Density Mg/m ³	Saturation Moisture Content %	Porosity %
BH107	3.00		B	White CHALK	19.1	2.11	1.77	19	34
BH107	4.00		B	White CHALK	19.3	2.12	1.78	19	34
BH107	5.00		D	White CHALK	22.6	2.06	1.68	22	38
BH107	8.50		D	White CHALK	18.1	2.14	1.81	18	33
BH107	11.50		D	White CHALK	20.9	2.09	1.73	21	36
BH107	16.00		D	White CHALK	15.2	2.20	1.91	15	29

Notes

Checked and Approved by:

Project Number:

GEO / 30530

Name:

**NORTH LITTLEHAMPTON
LP2128****GEO LABS**

SUMMARY OF CHEMICAL TESTS ON SOIL

Location	Depth m	Sample Ref	Sample Type	pH Value	Total Acid Soluble Sulphate as SO ₄ %	Water Soluble Sulphate as SO ₄ 2:1 Water:Soil Extract g/l	Total Sulphur %	Water Soluble Chloride g/l	Water Soluble Nitrate g/l	Magnesium g/l	Organic Content %	Mass Loss on Ignition %	Carbonate Content %
BH101	1.00		D	8.2	< 0.010	< 0.010	< 0.010	-	-	-	-	-	-
BH102	1.50		B	7.9	0.011	< 0.010	< 0.010	-	-	-	-	-	-
BH105	2.00		B	8.0	0.045	0.019	0.068	-	-	-	-	-	-
BH105	2.65		D	9.3	0.16	0.31	0.32	-	-	-	-	-	-
BH105	5.50		D	9.2	0.14	0.40	1.3	-	-	-	-	-	-
TP138	1.00		D	7.3	0.011	< 0.010	< 0.010	-	-	-	-	-	-

Tested by Chemtest Ltd : MCERTS / UKAS No 2183

Checked and Approved by:

Project Number:

GEO / 30530

Test Name:

**NORTH LITTLEHAMPTON
LP2128**

S Burke - Senior Technician
13/02/2020

GEOLABS

Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX
Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Page 1 of 1
(Ref 1581584679)

PARTICLE SIZE DISTRIBUTION

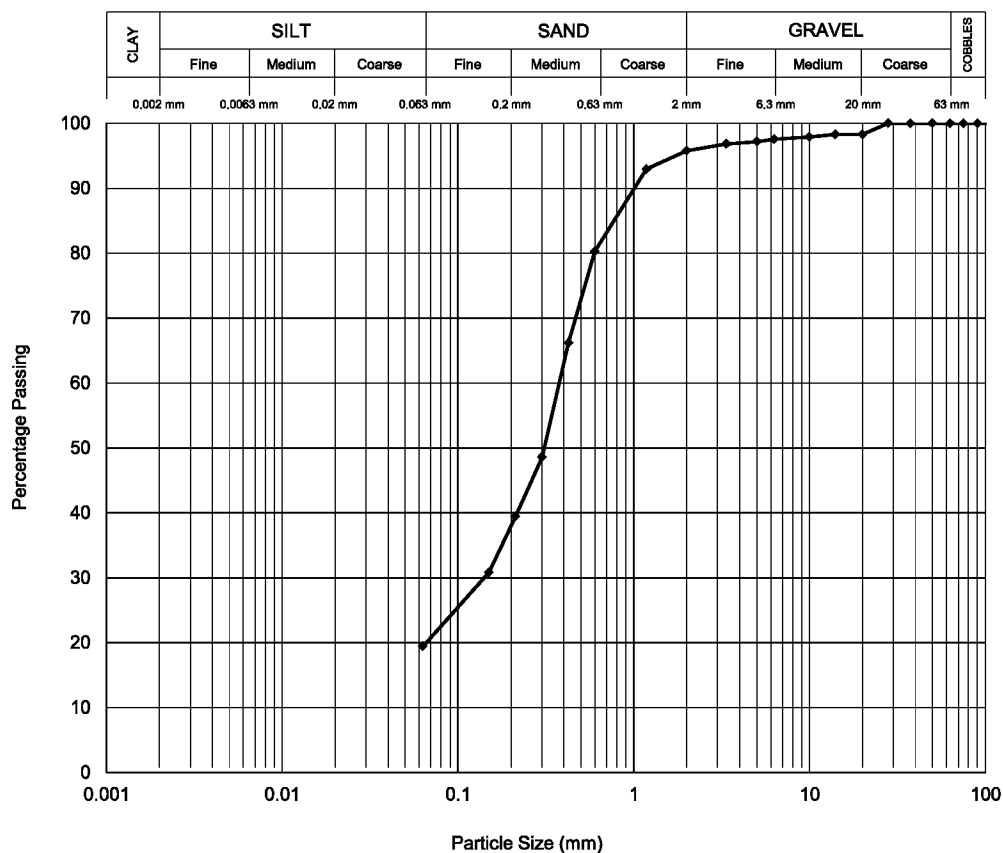
BH / TP No. BH101
Depth (m) 3.20
Sample Type B

Description

Brown gravelly clayey SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	98
14.0 mm	98
10.0 mm	98
6.30 mm	98
5.00 mm	97
3.35 mm	97
2.00 mm	96
1.18 mm	93
600 µm	80
425 µm	66
300 µm	49
212 µm	39
150 µm	31
63 µm	19



Particle Proportions	
Cobbles	0
Gravel	4
Sand	76
Silt & Clay	20

Processed by MB

Report Number:

GEO / 30530

Name:

NORTH LITTLEHAMPTON
LP2128

Geolabs Senior Technician
13/02/2020

Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

GEOLABS



PARTICLE SIZE DISTRIBUTION

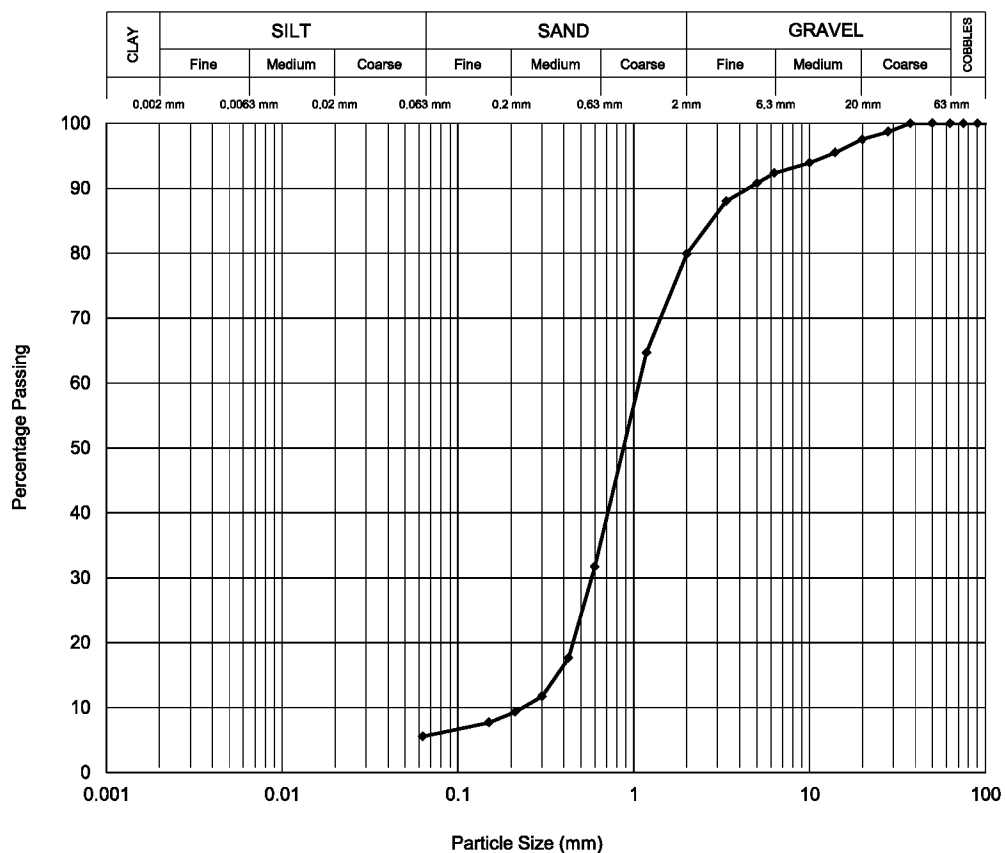
BH / TP No. BH102
Depth (m) 4.50
Sample Type B

Description

Yellowish brown slightly clayey gravel and SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	99
20.0 mm	98
14.0 mm	96
10.0 mm	94
6.30 mm	92
5.00 mm	91
3.35 mm	88
2.00 mm	80
1.18 mm	65
600 µm	32
425 µm	18
300 µm	12
212 µm	9
150 µm	8
63 µm	6



Particle Proportions	
Cobbles	0
Gravel	20
Sand	74
Silt & Clay	6

Processed by MB
Checked and Approved by

Project Number:

GEO / 30530

NORTH LITTLEHAMPTON
LP2128

GEOLABS



13/02/2020

Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

PARTICLE SIZE DISTRIBUTION

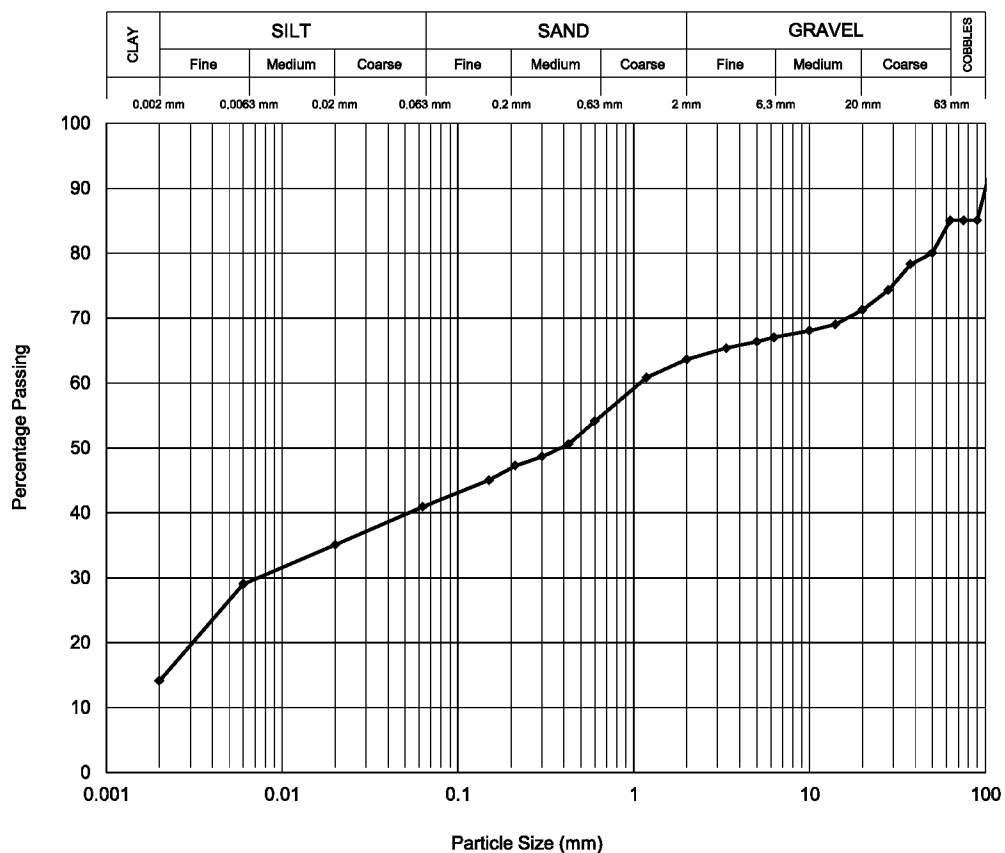
BH / TP No. BH102
Depth (m) 6.00
Sample Type B

Description

Yellowish brown sandy CLAY. Gravel si fine to cobbles sized chalk and flint.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve
BS EN ISO 17892-4 : 2016 : Clause 5.4 - Sedimentation by Pipette

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	85
75.0 mm	85
63.0 mm	85
50.0 mm	80
37.5 mm	78
28.0 mm	74
20.0 mm	71
14.0 mm	69
10.0 mm	68
6.30 mm	67
5.00 mm	66
3.35 mm	65
2.00 mm	64
1.18 mm	61
600 µm	54
425 µm	51
300 µm	49
212 µm	47
150 µm	45
63 µm	41



Sedimentation	
Pre-treatment used	
Temp (°C)	25
Size	% Pass
20 µm	35
6 µm	29
2 µm	14

Particle Density 2.70(A) Mg/m³

Particle Proportions	
Cobbles	15
Gravel	21
Sand	23
Silt	27
Clay	14

Processed by MB
Checked and Approved by

Project Number:

GEO / 30530

Name:

**NORTH LITTLEHAMPTON
LP2128**

13/02/2020

Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

GEOLABS



PARTICLE SIZE DISTRIBUTION

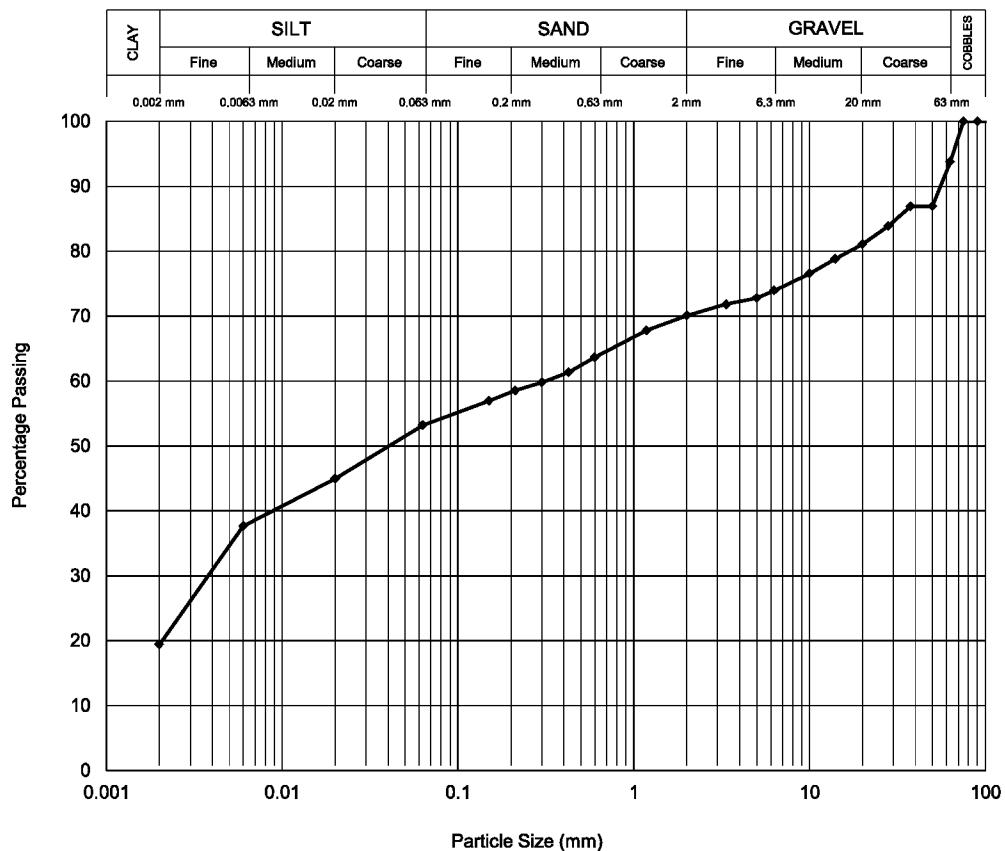
BH / TP No. BH102
Depth (m) 6.50
Sample Type B

Description

Yellowish brown and cream gravelly structureless CHALK. Gravel is fine to cobble sized chalk.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve
BS EN ISO 17892-4 : 2016 : Clause 5.4 - Sedimentation by Pipette

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	94
50.0 mm	87
37.5 mm	87
28.0 mm	84
20.0 mm	81
14.0 mm	79
10.0 mm	77
6.30 mm	74
5.00 mm	73
3.35 mm	72
2.00 mm	70
1.18 mm	68
600 µm	64
425 µm	61
300 µm	60
212 µm	59
150 µm	57
63 µm	53



Sedimentation	
Pre-treatment used	
Temp (°C)	25
Size	% Pass
20 µm	45
6 µm	38
2 µm	19

Particle Density 2.70(A) Mg/m³

Particle Proportions	
Cobbles	6
Gravel	24
Sand	17
Silt	34
Clay	19

Processed by MB
Checked and Approved by

Project Number:

GEO / 30530

NORTH LITTLEHAMPTON
LP2128

GEOLABS



PARTICLE SIZE DISTRIBUTION

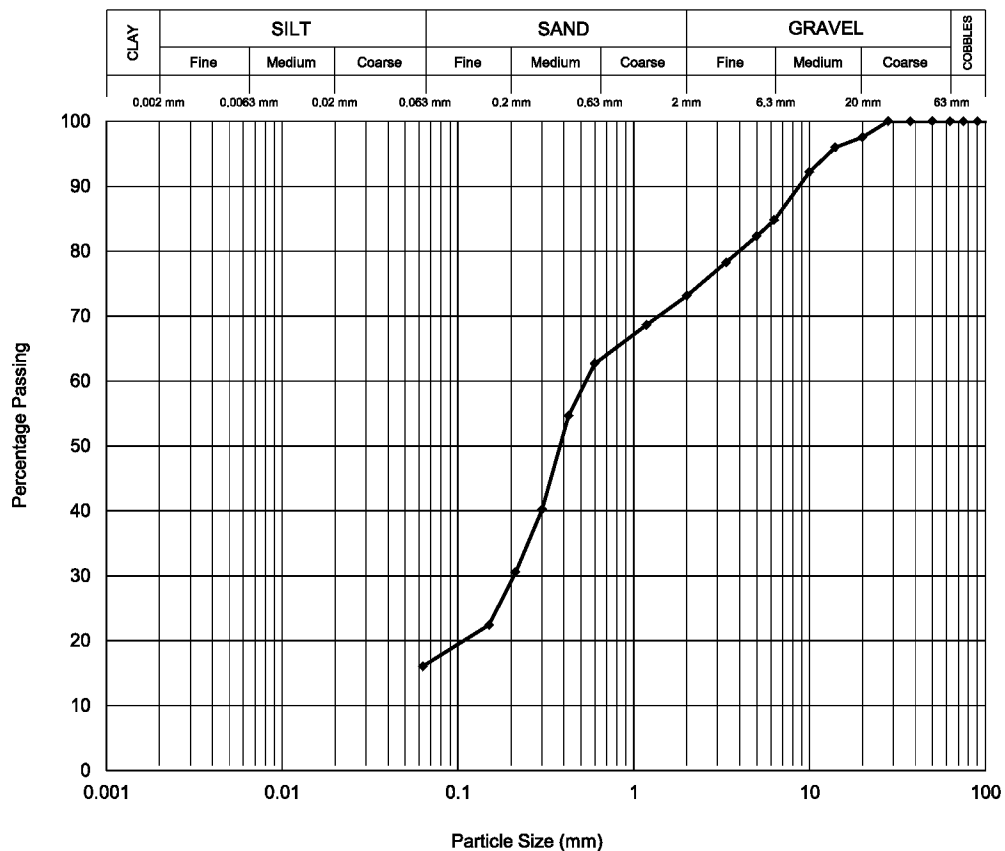
BH / TP No. BH104
 Depth (m) 1.20
 Sample Type D

Description

Yellowish brown slightly clayey gravelly SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	98
14.0 mm	96
10.0 mm	92
6.30 mm	85
5.00 mm	82
3.35 mm	78
2.00 mm	73
1.18 mm	69
600 µm	63
425 µm	55
300 µm	40
212 µm	31
150 µm	22
63 µm	16



Particle Proportions	
Cobbles	0
Gravel	27
Sand	57
Silt & Clay	16

Processed by MB
 Checked and Approved by

Project Number:

GEO / 30530

Name:

**NORTH LITTLEHAMPTON
 LP2128**

S Burke - Senior Technician
 13/02/2020

Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

GEOLABS



PARTICLE SIZE DISTRIBUTION

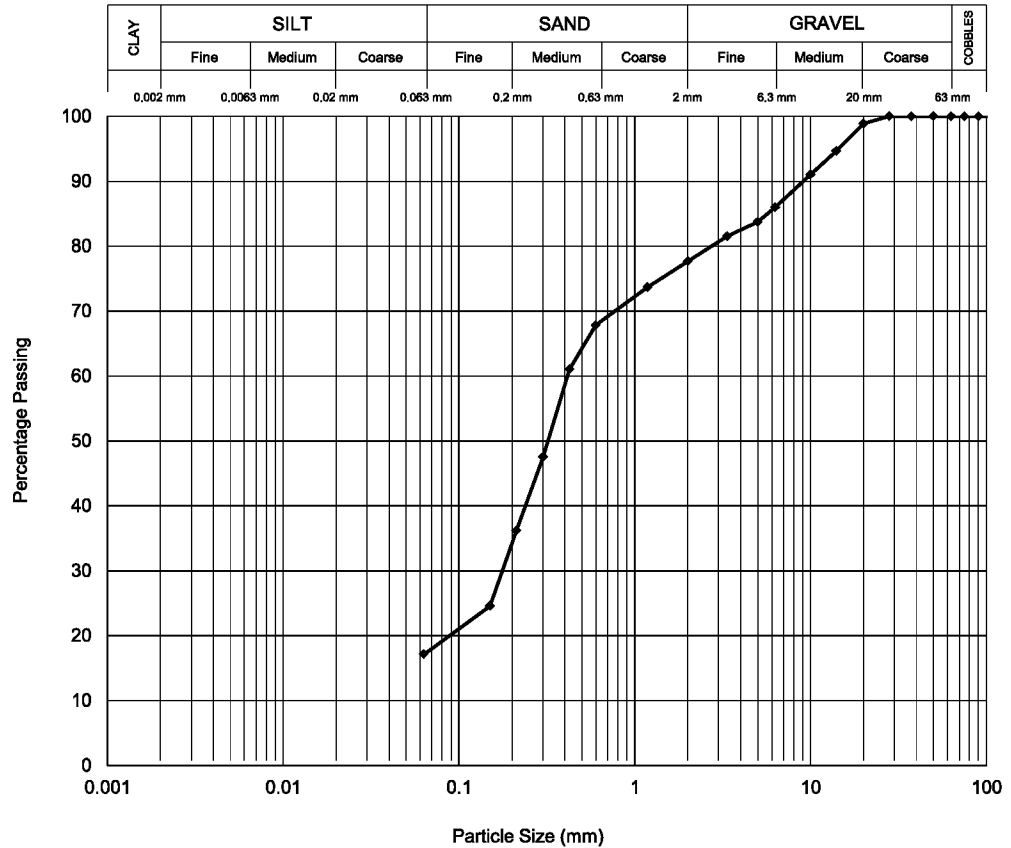
BH / TP No. BH104
Depth (m) 2.00
Sample Type B

Description

Yellowish brown clayey gravelly SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	99
14.0 mm	95
10.0 mm	91
6.30 mm	86
5.00 mm	84
3.35 mm	82
2.00 mm	78
1.18 mm	74
600 µm	68
425 µm	61
300 µm	48
212 µm	36
150 µm	25
63 µm	17



Particle Proportions	
Cobbles	0
Gravel	22
Sand	61
Silt & Clay	17

Processed by MB
Checked and Approved by

Project Number:

GEO / 30530

Site Name:

**NORTH LITTLEHAMPTON
LP2128**

Geolabs Lane, Garston, Watford, Hertfordshire, WD25 9XX

South Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

GEOLABS



PARTICLE SIZE DISTRIBUTION

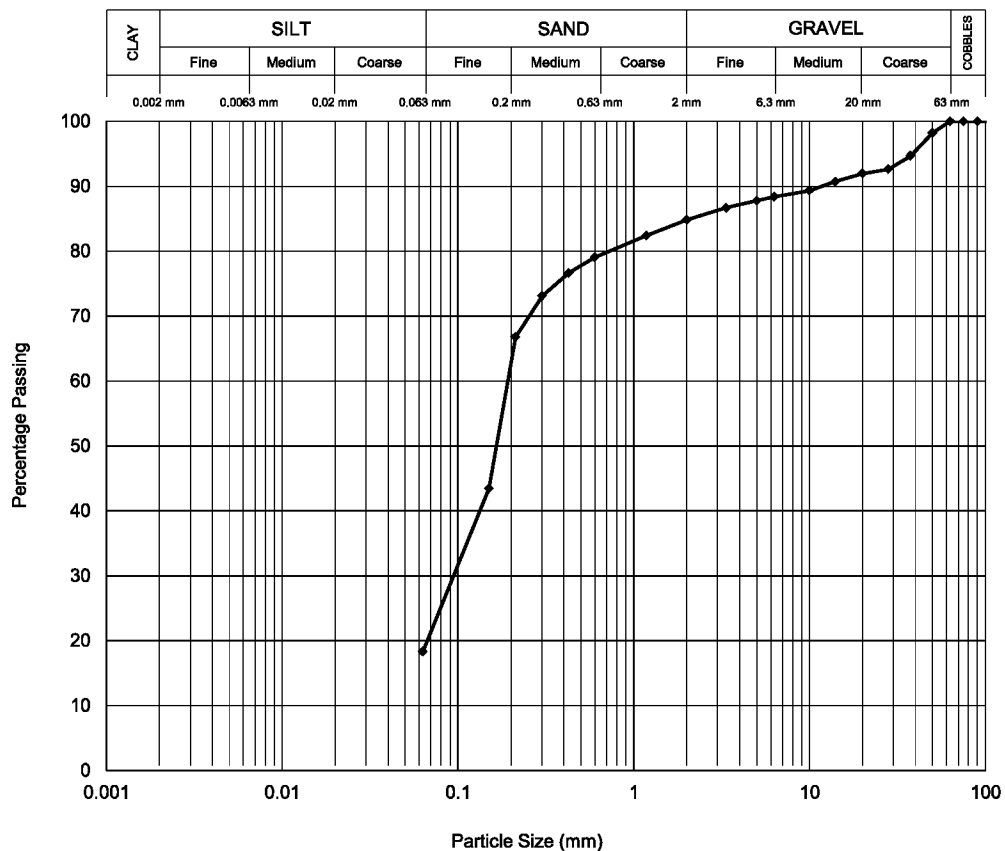
BH / TP No. BH104
Depth (m) 3.00
Sample Type B

Description

Yellowish brown gravelly clayey SAND.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	98
37.5 mm	95
28.0 mm	93
20.0 mm	92
14.0 mm	91
10.0 mm	89
6.30 mm	88
5.00 mm	88
3.35 mm	87
2.00 mm	85
1.18 mm	82
600 µm	79
425 µm	77
300 µm	73
212 µm	67
150 µm	43
63 µm	18



Particle Proportions	
Cobbles	0
Gravel	15
Sand	66
Silt & Clay	19

Processed by MB
Checked and Approved by

Project Number:

Name:

GEO / 30530

**NORTH LITTLEHAMPTON
LP2128**

GEOLABS

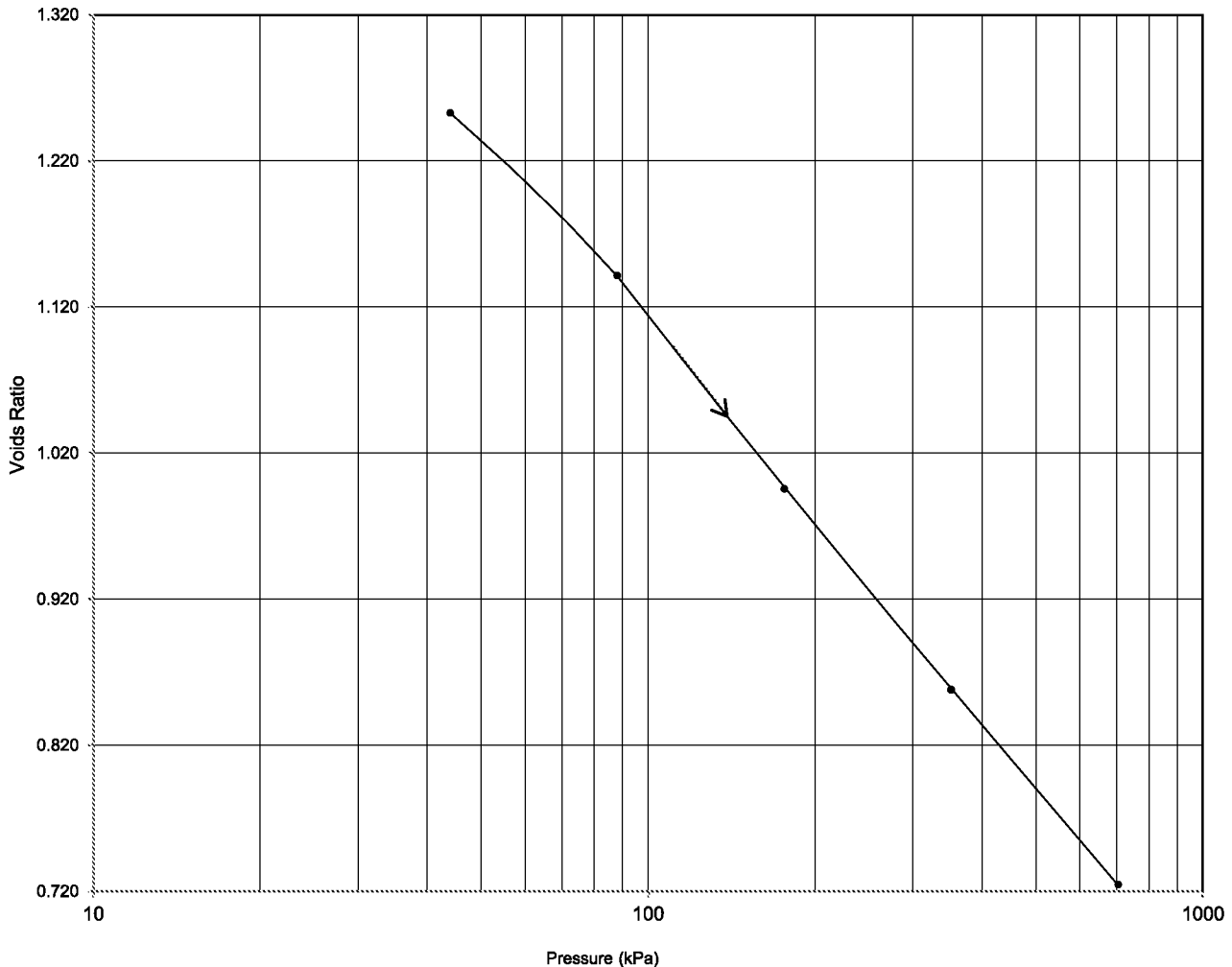


INCREMENTAL LOADING OEDOMETER TEST

Location BH105
 Depth (m) 2.20-2.65
 Sample Type U
 Depth within original (mm) 2.30-2.35
 Orientation within original Vertical
 Specimen preparation Undisturbed

Description:

Soft dark grey silty CLAY.



Initial Conditions:

Height (mm) 19.06
 Diameter (mm) 76.11
 Area (mm²) 4550
 Volume (cm³) 86.72
 Laboratory Temperature (°C) 19.3

Water Content (%) 51.6 (from trimmings)
 Voids Ratio 1.429
 Bulk Density (Mg/m³) 1.69
 Dry Density (Mg/m³) 1.11
 Particle density (Mg/m³) 2.70 (Assumed)
 Degree of Saturation (%) 97.6

Results have been corrected for equipment deformation

Checked and Approved by:

Project Number:

GEO / 30530

Project Name:

NORTH LITTLEHAMPTON
LP2128

GEO LABS



ARUN DISTRICT COUNCIL LIMITED, 100 Knalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Page 1 of 2

(Ref 7,867.3813)

INCREMENTAL LOADING OEDOMETER TEST

Location BH105
 Depth (m) 2.20-2.65
 Sample Type U
 Depth within original (mm) 2.30-2.35
 Orientation within original Vertical
 Specimen preparation Undisturbed

Description:

Soft dark grey silty CLAY.

Pressure Range (kPa)	m_v (m ² /MN)	c_v (m ² /year)	Time Fitting		Voids Ratio
			Method	minutes	
0 - 44	1.7	0.80	t50	10.9	1.253
44 - 88	1.1	0.37	t50	20.7	1.141
88 - 176	0.78	0.34	t50	19.9	0.995
176 - 352	0.39	0.35	t50	17.0	0.858
352 - 704	0.20	0.42	t50	12.3	0.724

Checked and Approved by

Project Number:

GEO / 30530

Project Name:

NORTH LITTLEHAMPTON
LP2128

GEOLABS
 Jacknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX
 Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Page 2 of 2

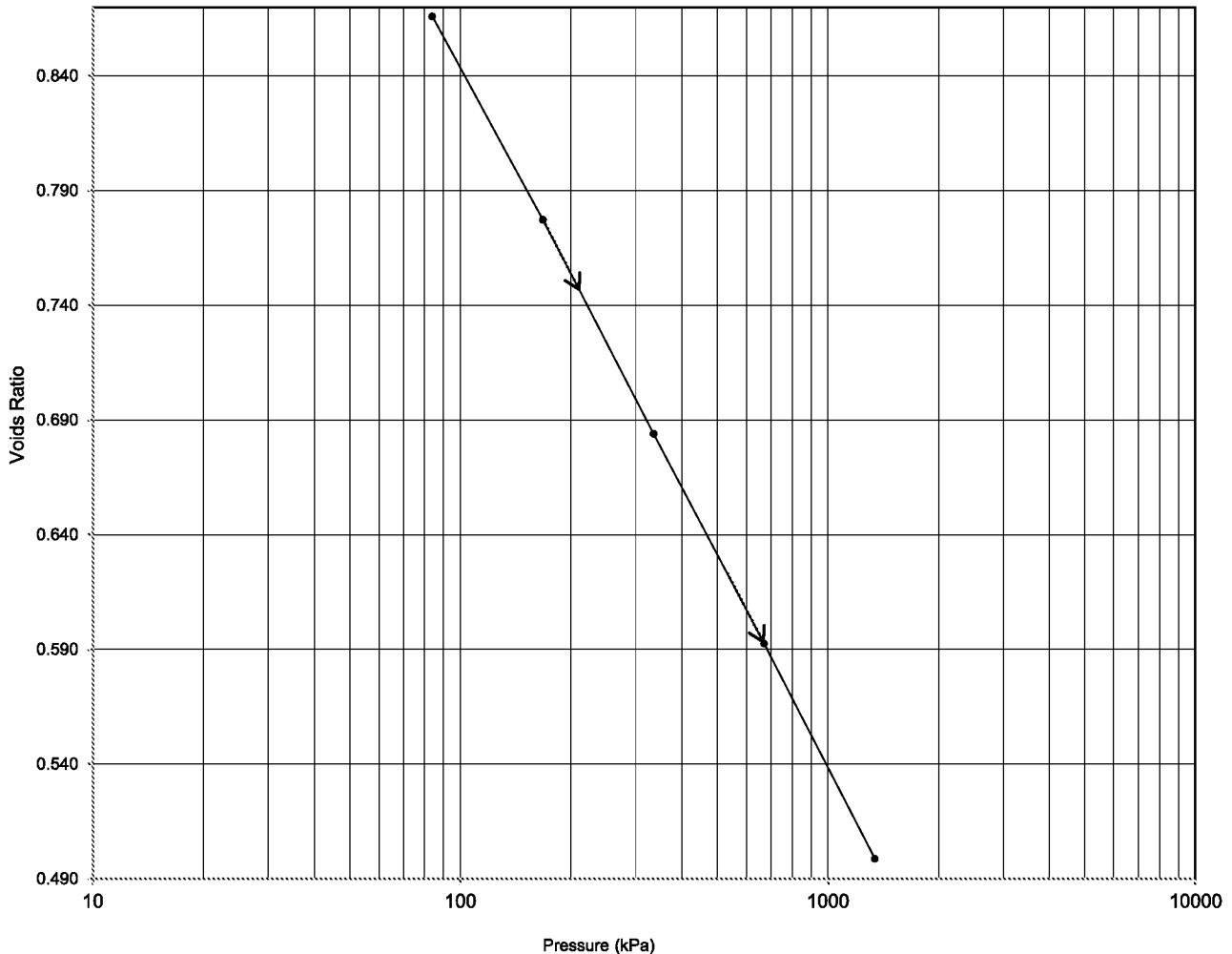
(Ref 7,867.3813)

INCREMENTAL LOADING OEDOMETER TEST

Location BH105
 Depth (m) 4.20-4.65
 Sample Type U
 Orientation within original Vertical
 Specimen preparation Undisturbed

Description:

Soft to very soft grey silty CLAY with rare 3-5mm pockets of organic matter and 4-6mm shell remains.

**Initial Conditions:**

Height (mm) 19.01
 Diameter (mm) 74.94
 Area (mm²) 4411
 Volume (cm³) 83.85
 Laboratory Temperature (°C) 20.9

Water Content (%)	Initial *	Final	
	49.4	23.8	(* from trimmings)
Voids Ratio	1.279		
Bulk Density (Mg/m ³)	1.77		
Dry Density (Mg/m ³)	1.18		
Particle density (Mg/m ³)	2.70 (Assumed)		
Degree of Saturation (%)	100.0		

Results have been corrected for equipment deformation

Checked and Approved by

Project Number:

GEO / 30530

Project Name:

**NORTH LITTLEHAMPTON
LP2128**

GEOLABS



Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Page 1 of 2

(Ref 7,873.6792)

INCREMENTAL LOADING OEDOMETER TEST

Location BH105
 Depth (m) 4.20-4.65
 Sample Type U
 Orientation within original Vertical
 Specimen preparation Undisturbed

Description:

Soft to very soft grey silty CLAY with rare 3-5mm pockets of organic matter and 4-6mm shell remains.

Pressure Range (kPa)	m_v (m ² /MN)	c_v (m ² /year)	Time Fitting		Voids Ratio
			Method	minutes	
0 - 84	2.2	0.44	t50	17.6	0.866
84 - 168	0.57	0.35	t50	17.0	0.777
168 - 336	0.31	0.47	t50	11.5	0.684
336 - 672	0.16	0.56	t50	8.74	0.592
672 - 1344	0.088	0.51	t50	8.39	0.499

Checked and Approved by

Project Number:

GEO / 30530

Test Name:

**NORTH LITTLEHAMPTON
LP2128**

GEOLABS

Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Page 2 of 2

(Ref 7,873.6792)

UNCONSOLIDATED UNDRAINED MULTISTAGE TRIAXIAL COMPRESSION

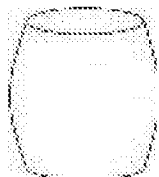
Location BH105
 Depth (m) 4.20-4.65
 Sample Type U

Description:

Soft dark grey silty CLAY with rare fine to medium gravel

Specimen Details

Specimen conditions		Undisturbed		
Length	(mm)	199.7		
Diameter	(mm)	103.2		
Moisture content	(%)	43.7		
Bulk density	(Mg/m ³)	1.79		
Dry density	(Mg/m ³)	1.25		
Test Details		1	2	3
Latex membrane thickness	(mm)	0.3	0.3	0.3
Specimen height prior to shearing	(mm)	199.0	-	-
Membrane correction	(kPa)	0.3	0.7	0.9
Mean rate of shear	(%/min)	1.0	1.0	1.0
Cell pressure	(kPa)	42	84	126
Strain at failure	(%)	3.8	11.5	16.0
Maximum deviator stress	(kPa)	10	17	19
Shear Stress Cu	(kPa)	5	9	10

Mode of failure**Orientation of the sample**

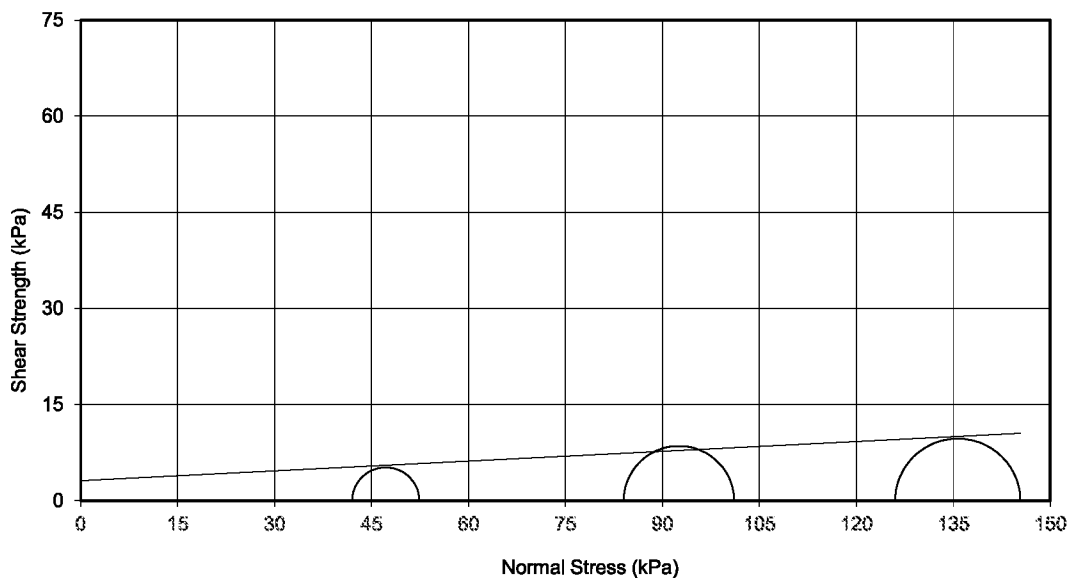
Vertical

Distance from top of tube mm

100

Shear Strength Parameters

Cohesion (kPa) 3
 Angle of Shear Resistance (°) 3.0



Processed by SB

Checked and Approved by

Project Number:

GEO / 30530

Project Name:

NORTH LITTLEHAMPTON
 LP2128

GEOLABS



SUMMARY OF LIQUID AND PLASTIC LIMIT TESTS

Location	Depth m	Sample Ref	Sample Type	Description	Water Content BS EN ISO 17892-1 : 2014 %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Percentage Passing 425µm %	Atterberg Classification	Test Type	Sample Condition
BH103	1.00	B1	B	Brown and grey gravelly sandy silty CLAY. Gravel is flint and concrete.	20.0	34	20	14	63	CL	2	3
BH103	2.00	B2	B	Greyish brown and grey gravelly sandy silty CLAY. Gravel is fine to medium gravel sized chalk and concrete.	23.0	31	19	12	74	CL	2	3
BH103	3.00	B3	B	Brownish grey gravelly sandy silty CLAY. Gravel is flint and chalk.	29.5	30	20	10	76	CL	2	3
BH106	1.00	B1	B	Yellowish brown silty clayey structureless CHALK with some gravel sized chalk.	20.1	29	14	15	72	CL	2	3
BH111	1.00	B1	B	Yellowish brown and greyish brown sandy silty CLAY with rare gravel sized chalk.	20.2	36	17	19	92	CI	2	3
BH111	2.00	B3	B	Brown and grey sandy silty CLAY with rare gravel.	23.8	33	16	17	91	CL	2	3
BH111	3.00	B5	B	Cream and white gravel sized CHALK in a structureless chalk matrix.	24.9	30	18	12	51	CL	2	3
BH112	4.00	B6	B	Brown and light grey very gravelly sandy silty CLAY. Gravel is flint and chalk.	29.5	55	24	31	45	CH	2	3
BH112	5.00	B7	B	Brownish grey and white gravelly silty CLAY. Gravel is chalk.	40.0	52	22	30	69	CH	2	3
BH113	2.00	B3	B	Orangish brown and brown gravelly sandy silty CLAY.	19.7	28	16	12	81	CL	2	3
BH113	4.00	B6	B	Orangish brown and brown gravelly sandy silty CLAY. Gravel is chalk.	14.9	26	13	13	78	CL	2	3

Test Type:

- 1 - 1 point 80g / 30° fall cone method.
 2 - 4 point 80g / 30° fall cone method.
 3 - Non plastic determination.

Sample condition:

- 1 - As Received
 2 - Air Dried
 3 - Washed & Air Dried

Checked and Approved by:

Project Number:

GEO / 30617

Project Name:

NORTH LITTLEHAMPTON
LP2128

GEOLABS



SATURATION MOISTURE CONTENT OF CHALK

Location	Depth m	Sample Ref	Sample Type	Description	Water Content BS EN ISO 17892-1 : 2014 %	Bulk Density Mg/m ³	Dry Density Mg/m ³	Saturation Moisture Content %	Porosity %
BH103	3.50	B5	B	White CHALK.	14.6	2.19	1.91	15	29
BH103	7.00	D10	D	White CHALK.	18.0	2.13	1.81	18	33
BH103	10.00	B14	B	Cream and white CHALK.	13.4	2.23	1.97	14	27
BH103	13.00	D18	D	White CHALK.	13.5	2.21	1.95	14	28
BH106	2.00	B4	B	Cream and white CHALK.	20.2	2.08	1.73	21	36
BH106	3.00	D6	D	White CHALK.	19.3	2.10	1.76	20	35
BH106	6.00	D11	D	White CHALK.	22.1	2.06	1.69	22	37
BH106	7.00	D13	D	White CHALK.	19.7	2.08	1.74	20	36
BH106	9.00	D16	D	White CHALK.	15.9	2.18	1.88	16	30
BH106	11.50	D20	D	White CHALK.	20.7	2.09	1.73	21	36
BH106	14.50	D24	D	White CHALK.	16.9	2.07	1.77	19	34
BH106	16.00	D26	D	White CHALK.	18.6	2.11	1.78	19	34
BH111	4.00	B7	B	White CHALK.	18.6	2.10	1.77	19	34
BH111	6.50	B11	B	White CHALK.	17.1	2.14	1.83	18	32
BH111	9.50	B15	B	White CHALK.	19.8	2.07	1.73	21	36

Notes

Checked and Approved by: Project Number:

GEO / 30617**NORTH LITTLEHAMPTON
LP2128****GEOLABS**

SATURATION MOISTURE CONTENT OF CHALK

Location	Depth m	Sample Ref	Sample Type	Description	Water Content BS EN ISO 17892-1 : 2014 %	Bulk Density Mg/m ³	Dry Density Mg/m ³	Saturation Moisture Content %	Porosity %
BH111	12.50	D19	D	White CHALK.	16.6	2.17	1.86	17	31
BH111	15.50	D23	D	White CHALK.	15.5	2.17	1.88	16	30
BH111	18.00	D27	D	White CHALK.	22.0	2.07	1.70	22	37
BH111	21.50	D31	D	White CHALK.	16.8	2.13	1.82	18	33
BH112	5.50	B9	B	Cream and white CHALK.	16.1	2.18	1.88	16	30
BH112	7.00	B10	B	White CHALK.	16.4	2.15	1.85	17	31
BH112	9.50	B14	B	White CHALK.	18.1	2.14	1.81	18	33
BH112	12.50	B18	B	White CHALK.	21.3	2.08	1.71	21	37
BH112	15.50	D22	D	White CHALK.	21.5	2.05	1.69	22	37
BH112	18.50	D26	D	White CHALK.	15.3	2.20	1.91	15	29
BH112	23.00	D32	D	White CHALK.	20.1	2.08	1.73	21	36
BH112	24.50	D34	D	White CHALK.	14.2	2.19	1.92	15	29
BH113	5.00	B8	B	White CHALK.	20.6	2.06	1.71	21	37
BH113	7.00	D11	D	White iron stained CHALK.	21.5	2.08	1.71	21	37
BH113	8.00	B13	B	White CHALK.	21.6	2.06	1.69	22	37

Notes

Checked and Approved by:

Project Number:

GEO / 30617

Project Name:

**NORTH LITTLEHAMPTON
LP2128****GEOLABS**

Checked and Approved by:	Project Number:	GEO / 30617	NORTH LITTLEHAMPTON LP2128	DATE: 1/28/2018
	Name:			

1262 - PSD BH113 01.00 B1 B - 30617-352122.XLSM

BS EN ISO 17892-4 : 2016

PARTICLE SIZE DISTRIBUTION

BH / TP No.
Sample Ref
Depth (m)
Sample Type

BH113
B1
1.00
B

Description

Brown clayey silty SAND with rare fine to medium gravel.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve
BS EN ISO 17892-4 : 2016 : Clause 5.4 - Sedimentation by Pipette

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	100
14.0 mm	100
10.0 mm	99
6.30 mm	99
5.00 mm	99
3.35 mm	98
2.00 mm	98
1.18 mm	96
600 µm	91
425 µm	85
300 µm	72
212 µm	58
150 µm	42
63 µm	24

Sedimentation	
Pre-treatment used	
Temp (°C)	25
Size	% Pass
20 µm	17
6 µm	13
2 µm	12

Particle Density 2.70(A) Mg/m³

CLAY

SILT

Fine

Medium

Coarse

SAND

Fine

Medium

Coarse

GRAVEL

Fine

Medium

Coarse

COBBLES

0.002 mm

0.0063 mm

0.02 mm

0.063 mm

0.2 mm

0.63 mm

2 mm

6.3 mm

20 mm

63 mm

Percentage Passing

100

90

80

70

60

50

40

30

20

10

0

0.001

0.01

0.1

1

10

100

Particle Size (mm)

Particle Proportions	
Cobbles	0
Gravel	2
Sand	73
Silt	13
Clay	12

Processed by JS
Checked and Approved by

Project Number:

Project Name:

NORTH LITTLEHAMPTON
LP2128

GEOLABS



Test Report By GEOLABS Limited
Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX

Page 1 of 1
(Ref 1582908761)

ARUN DISTRICT COUNCIL LU/184/21/DOC

SUMMARY OF CHEMICAL TESTS ON SOIL

Location	Depth m	Sample Ref	Sample Type	pH Value	Total Acid Soluble Sulphate as SO ₄ %	Water Soluble Sulphate as SO ₄ 2:1 Water:Soil Extract g/l	Total Sulphur %	Water Soluble Chloride g/l	Water Soluble Nitrate g/l	Magnesium g/l	Organic Content %	Mass Loss on Ignition %	Carbonate Content %
BH103	1.00	B1	B	10.2	0.15	0.31	0.054	-	-	-	-	-	-
BH103	3.00	B3	B	8.8	0.091	0.18	0.052	-	-	-	-	-	-
BH106	1.00	B1	B	8.5	0.043	0.023	0.019	-	-	-	-	-	-
BH111	1.00	B1	B	8.5	0.016	0.031	0.012	-	-	-	-	-	-
BH111	2.00	B3	B	7.8	0.048	0.13	0.025	-	-	-	-	-	-
BH111	3.00	B5	B	8.7	0.030	< 0.010	0.011	-	-	-	-	-	-
BH112	5.00	B7	B	10.7	0.13	0.21	0.056	-	-	-	-	-	-
BH113	2.00	B3	B	8.3	0.010	0.047	< 0.010	-	-	-	-	-	-
BH113	4.00	B6	B	9.1	0.024	0.012	0.011	-	-	-	-	-	-
TP115	1.00		B	8.1	0.061	0.11	0.044	-	-	-	-	-	-
TP116	1.00		D	7.6	0.031	0.019	0.019	-	-	-	-	-	-
TP120	1.00		D	8.4	0.010	0.018	0.011	-	-	-	-	-	-
TP127	0.60		D	7.3	0.037	0.055	0.019	-	-	-	-	-	-
TP211	0.50		D	8.2	0.024	0.057	0.014	-	-	-	-	-	-
TP212	0.90		D	8.1	0.016	0.014	0.011	-	-	-	-	-	-
TP224	0.80		D	8.2	0.039	0.048	0.028	-	-	-	-	-	-

Tested by Chemtest Ltd : MCERTS / UKAS No 2183

Checked and Approved by:

Project Number:

GEO / 30617

Project Name:

**NORTH LITTLEHAMPTON
LP2128**



Test Report By GEOLABS Limited Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX
 Client : Leap Environmental Limited, Southern Coast Regional Office, Victoria Road, Burgess Hill, West Sussex, RH15 9LR

Page 1 of 2
(Ref 1582908382)

Tested by Chemtest Ltd : MCERTS / UKAS No 2183

Project Number:

Project Name:

0501408

Page 2 of 2
(Ref 1582908382)

APPENDIX I -- Soil Screening Results

Soil Screening Results



[illegible]

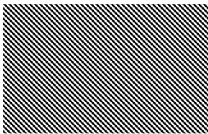
Sample Location							TP01		TP02		TP03		TP04		TP05		TP06	
							0.1	2.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
Depth (m)							Date Sampled		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Last Period							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Screening Values							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase 4		Phase 4	
Phase 4							Phase 4		Phase 4		Phase 4		Phase 4		Phase			

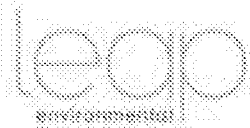
			Sample Location: Depth (m): Date Sampled: Land Parcel: Matrix:				WS101 0.15 06/12/2019 C.Wetlands MG	WS102 0.3 06/12/2019 C.Wetlands MG	WS103 1 06/12/2019 C.Wetlands MG	WS104 0.25 06/12/2019 C.Wetlands MG
			Screening Values				MG	MG	MG	MG
Determinand	Units	LOD	POS Ref	Source	N	N>GAC				
Miscellaneous										
Acid Neutralisation Capacity	mol/kg	0.1								
Loss On Ignition (450°C)	%	0.01								
pH	pH units	0.1	n.v.	-	4	0	10.7	8.8	8.3	8.5
Total Organic Carbon	%	0.1	n.v.	-	4	0	0.55	3.3	0.38	2.4
Calculated Soil Organic Matter	%				0	0				
Metals										
Arsenic	mg/kg	2	79	C4SL	4	0	12.6	3.3	18.2	9.3
Cadmium	mg/kg	0.1	220	C4SL	4	0	n.v.	n.v.	n.v.	0.6
Chromium	mg/kg	0.5	1500	S4UL	4	0	24.4	6.5	39.7	20.5
Chromium VI	mg/kg	1	21	C4SL	4	0	n.v.	n.v.	n.v.	n.v.
Copper	mg/kg	2	1,200	S4UL	4	0	26.1	12.7	18.6	255
Lead	mg/kg	2	630	C4SL	4	1	32.6	6.7	18	906
Mercury	mg/kg	1	120	S4UL	4	0	n.v.	n.v.	n.v.	n.v.
Nickel	mg/kg	0.5	230	S4UL	4	0	16.7	5.9	24.3	10.2
Selenium	mg/kg	3	1100	S4UL	4	0	n.v.	n.v.	n.v.	n.v.
Zinc	mg/kg	2	81,000	S4UL	4	0	143	26.3	66.5	437
Asbestos										
Asbestos Identification	-	-	Presence			0	N.D.	N.D.	N.D.	N.D.
Asbestos Quantification	%	0.001	Presence							
Polycyclic Aromatic Hydrocarbons (USEPA 16)										
Benzo(a)pyrene	mg/kg	0.1	10.0	C4SL	4	0	0.9	n.v.	n.v.	n.v.
Naphthalene	mg/kg	0.1	4900	S4UL	4	0	n.v.	n.v.	n.v.	n.v.
Acenaphthylene	mg/kg	0.1	n.v.	-	4	0	n.v.	n.v.	n.v.	n.v.
Acenaphthene	mg/kg	0.1	n.v.	-	4	0	0.1	n.v.	n.v.	n.v.
Fluorene	mg/kg	0.1	n.v.	-	4	0	0.1	n.v.	n.v.	n.v.
Phenanthrene	mg/kg	0.1	n.v.	-	4	0	1.2	n.v.	n.v.	n.v.
Anthracene	mg/kg	0.1	n.v.	-	4	0	0.3	n.v.	n.v.	n.v.
Fluoranthene	mg/kg	0.1	n.v.	-	4	0	2	n.v.	n.v.	0.2
Pyrene	mg/kg	0.1	n.v.	-	4	0	1.5	n.v.	n.v.	0.1
Benzo(a)anthracene	mg/kg	0.1	n.v.	-	4	0	0.9	n.v.	n.v.	n.v.
Chrysene	mg/kg	0.1	n.v.	-	4	0	1	n.v.	n.v.	n.v.
Benzo(b)fluoranthene	mg/kg	0.1	n.v.	-	4	0	0.9	n.v.	n.v.	0.1
Benzo(k)fluoranthene	mg/kg	0.1	n.v.	-	4	0	0.9	n.v.	n.v.	0.2
Benzo(a)pyrene	mg/kg	0.1	10	-	4	0	0.9	n.v.	n.v.	n.v.
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	n.v.	-	4	0	0.9	n.v.	n.v.	n.v.
Dibenzo(ah)anthracene	mg/kg	0.1	n.v.	-	4	0	0.2	n.v.	n.v.	n.v.
Benzo(ghi)perylene	mg/kg	0.1	n.v.	-	4	0	0.9	n.v.	n.v.	0.1
PAH (total)	mg/kg	0.1	-	-	4	0	12	n.v.	n.v.	1.1
Petroleum Hydrocarbons										
Benzene	µg/kg	0.01	140000	C4SL	1	0	n.v.	n.v.	n.v.	n.v.
Toluene	µg/kg	0.01	5.60E+07	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
Ethylbenzene	µg/kg	0.01	2.40E+07	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
Xylenes	µg/kg	0.01	4.10E+07	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
Methyl tert-Butyl Ether	µg/kg	0.01	n.v.	-	1	0	n.v.	n.v.	n.v.	n.v.
Total BTEX	mg/kg	0.01			1	0	n.v.	n.v.	n.v.	n.v.
>C5-C6 Aliphatic	mg/kg	0.01	570000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C6-C8 Aliphatic	mg/kg	0.01	600000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C8-C10 Aliphatic	mg/kg	1	13000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C10-C12 Aliphatic	mg/kg	1	13000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C12-C16 Aliphatic	mg/kg	1	13,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C16-C21 Aliphatic	mg/kg	1	250,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C21-C35 Aliphatic	mg/kg	1	250,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C35-C40 Aliphatic	mg/kg	1	250,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C5-C7 Aromatic	mg/kg	0.01	56,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C7-C8 Aromatic	mg/kg	0.01	56,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C8-C10 Aromatic	mg/kg	1	5,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C10-C12 Aromatic	mg/kg	1	5,000	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C12-C16 Aromatic	mg/kg	1	5,100	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C16-C21 Aromatic	mg/kg	1	3800	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C21-C35 Aromatic	mg/kg	1	3800	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
>C35-C40 Aromatic	mg/kg	1	3800	S4UL	1	0	n.v.	n.v.	n.v.	n.v.
Total (>C5-C40) All/Aro	mg/kg	1	n.v.	-	1	0	n.v.	n.v.	n.v.	n.v.
MG = Made Ground Superficial = River Terrace Deposits, Raised Beach Deposits, Raised Marine Deposits										

APPENDIX J --Field Monitoring Records

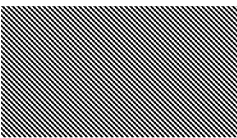
Field Monitoring Records



Continuous Gas Monitoring Record								
Date	17/01/2020	Engineer	AU/OA					
Project No	LP2128	Temp °C	7					
Site	North Littlehampton	Ambient Pressure	1037					
WS103		Time	Flow (l/h)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	CO (ppm)	H ₂ S (ppm)
		00:00	Well was flooded so position could not be monitored					
Hole ID		00:15						
		00:30						
VOC peak (ppm)		01:00						
VOC steady (ppm)		01:30						
		02:00						
Borehole Depth (mbgl)	3.2	02:30						
		03:00						
Water level (mbgl)	0.8	03:30						
		04:00						
Borehole Pressure (mb)		04:30						
		05:00						
WS104		Time	Flow (l/h)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	CO (ppm)	H ₂ S (ppm)
		00:00	0.0	0.0	2.5	15.4	0	0
Hole ID		00:15	0.0	0.0	2.6	12.4	0	0
		00:30	0.0	0.0	2.6	12.1	0	0
VOC peak (ppm)	0	01:00		0.0	2.7	12.0	0	0
VOC steady (ppm)	0	01:30		0.0	2.7	11.9	0	0
		02:00		0.0	2.7	11.8	0	0
Borehole Depth (mbgl)	1.95	02:30		0.0	2.7	11.8	0	0
		03:00		0.0	2.7	11.8	0	0
Water level (mbgl)	1.7	03:30		0.0	2.7	11.8	0	0
		04:00		0.0	2.7	11.8	0	0
Borehole Pressure (mb)	1013	04:30		0.0	2.7	11.8	0	0
		05:00		0.0	2.7	11.8	0	0

Continuous Gas Monitoring Record								
Date	07/02/2020	Engineer	KT					
Project No	LP2128	Temp °C	6					
Site	North Littlehampton	Ambient Pressure	1020					
WS103		Time	Flow (l/h)	CH ⁴ (%)	CO ² (%)	O ² (%)	CO (ppm)	H ² S (ppm)
		00:00	-0.8	0.2	0.4	20.9	0	0
Hole ID		00:15	-0.9	0.2	3.7	18.9	2	0
		00:30	-0.7	0.2	3.7	18.9	1	0
VOC peak (ppm)	0	01:00	-0.4	0.2	3.7	18.3	1	0
VOC steady (ppm)		01:30	-0.3	0.2	3.7	17.7	2	0
		02:00	-0.2	0.2	3.7	17.1	2	0
Borehole Depth (mbgl)		02:30	-0.1	0.2	3.7	16.5	2	0
		03:00	-0.1	0.2	3.7	15.9	1	0
Water level (mbgl)		03:30		0.2	3.7	15.3	1	0
		04:00		0.2	3.7	18.3	2	0
Borehole Pressure (mb)		04:30	Response zone flooded - pump started sucking up water					
		05:00						
WS104		Time	Flow (l/h)	CH ⁴ (%)	CO ² (%)	O ² (%)	CO (ppm)	H ² S (ppm)
		00:00	0.0	0.1	0.0	21.3	0	0
Hole ID		00:15		0.1	3.1	11.5	0	0
		00:30		0.1	3.1	10.9	0	0
VOC peak (ppm)	0	01:00		0.1	3.1	10.6	0	0
VOC steady (ppm)		01:30		0.1	3.1	10.5	0	0
		02:00		0.1	3.1	10.5	0	0
Borehole Depth (mbgl)		02:30		0.1	3.1	10.5	0	0
		03:00		0.2	3.1	10.4	0	0
Water level (mbgl)		03:30		0.2	3.1	10.4	0	0
		04:00		0.2	3.1	10.4	0	0
Borehole Pressure (mb)		04:30		0.2	3.1	10.4	0	0
		05:00		0.2	3.1	10.4	0	0

HP101		Time	Flow (l/h)	CH ⁴ (%)	CO ² (%)	O ² (%)	CO (ppm)	H ² S (ppm)
Hole ID		00:00	0.0	0.2	0.0	21.1	0	0
		00:15		0.2	2.6	20.5	0	0
VOC peak (ppm)	0	00:30		0.2	2.8	19.4	0	0
		01:00		0.2	3.0	19.1	0	0
VOC steady (ppm)	0	01:30		0.2	3.0	19.0	0	0
		02:00		0.2	3.1	19.0	1	0
Borehole Depth (mbgl)	0.85	02:30		0.2	3.2	18.9	0	0
		03:00		0.2	3.3	18.8	0	0
Water level (mbgl)	Dry	03:30		0.2	3.4	18.8	0	0
		04:00		0.2	3.4	18.8	0	0
Borehole Pressure (mb)	1021	04:30		0.2	3.4	18.8	0	0
		05:00		0.2	3.4	18.9	0	0

Continuous Gas Monitoring Record								
Date	18/02/2020	Engineer	AU					
Project No	LP2128	Temp °C	8					
Site	North Littlehampton	Ambient Pressure	1012					
WS103		Time	Flow (l/h)	CH ⁴ (%)	CO ² (%)	O ² (%)	CO (ppm)	H ² S (ppm)
		00:00	0.2	0.2	0.1	20.9	0	0
Hole ID		00:15	0.1	0.2	3.4	19.7	0	0
		00:30	0.0	0.2	3.5	19.3	0	0
VOC peak (ppm)	0	01:00		0.2	3.5	19.2	0	0
VOC steady (ppm)	0	01:30		0.2	3.5	19.2	0	0
		02:00		0.2	3.5	19.2	0	0
Borehole Depth (mbgl)	2.9	02:30		0.2	3.5	19.2	0	0
		03:00		0.2	3.5	19.2	0	0
Water level (mbgl)	0.45	03:30		0.2	3.5	19.2	0	0
		04:00		0.2	3.5	19.2	0	0
Borehole Pressure (mb)	1024	04:30		0.2	3.5	19.2	0	0
		05:00		0.2	3.5	19.2	0	0
WS104		Time	Flow (l/h)	CH ⁴ (%)	CO ² (%)	O ² (%)	CO (ppm)	H ² S (ppm)
		00:00	0.2	0.0	2.1	20.2	0	0
Hole ID		00:15	0.1	0.2	2.5	14.2	0	0
		00:30	0.0	0.2	2.5	11.8	0	0
VOC peak (ppm)	0	01:00		0.2	2.5	11.3	0	0
VOC steady (ppm)	0	01:30		0.2	2.5	11.3	0	0
		02:00		0.2	2.5	11.3	0	0
Borehole Depth (mbgl)	1.95	02:30		0.2	2.5	11.3	0	0
		03:00		0.2	2.5	11.3	0	0
Water level (mbgl)	1.35	03:30		0.2	2.5	11.3	0	0
		04:00		0.2	2.5	11.3	0	0
Borehole Pressure (mb)	1023	04:30		0.2	2.5	11.3	0	0
		05:00		0.2	2.5	11.3	0	0

Continuous Gas Monitoring Record								
Date	04/03/2020	Engineer	AU					
Project No	LP2128	Temp °C	10					
Site	North Littlehampton	Ambient Pressure	1012					
WS103		Time	Flow (l/h)	CH ⁴ (%)	CO ² (%)	O ² (%)	CO (ppm)	H ² S (ppm)
		00:00	0.0	0.1	0.3	20.2	0	0
Hole ID		00:15		0.1	3.0	20.1	0	0
		00:30		0.1	3.1	19.9	0	0
VOC peak (ppm)	-	01:00		0.1	3.1	19.9	0	0
VOC steady (ppm)	-	01:30		0.1	3.1	19.9	0	0
		02:00		0.1	3.1	19.9	0	0
Borehole Depth (mbgl)	3	02:30		0.1	3.1	19.9	0	0
		03:00		0.1	3.1	19.9	0	0
Water level (mbgl)	0.5	03:30		0.1	3.1	19.9	0	0
		04:00		0.1	3.1	19.9	0	0
Borehole Pressure (mb)	984	04:30		0.1	3.1	19.9	0	0
		05:00		0.1	3.1	19.9	0	0
WS104		Time	Flow (l/h)	CH ⁴ (%)	CO ² (%)	O ² (%)	CO (ppm)	H ² S (ppm)
		00:00	0.2	0.2	2.0	20.0	0	0
Hole ID		00:15	0.0	0.2	2.5	18.9	0	0
		00:30		0.2	3.1	14.2	0	0
VOC peak (ppm)	-	01:00		0.2	3.1	12.2	0	0
VOC steady (ppm)	-	01:30		0.2	3.1	12.1	0	0
		02:00		0.2	3.1	12.1	0	0
Borehole Depth (mbgl)	1.95	02:30		0.2	3.1	12.1	0	0
		03:00		0.2	3.1	12.1	0	0
Water level (mbgl)	1.2	03:30		0.2	3.1	12.1	0	0
		04:00		0.2	3.1	12.1	0	0
Borehole Pressure (mb)	988	04:30		0.2	3.1	12.1	0	0
		05:00		0.2	3.1	12.1	0	0