Trial Pit Log Sheart lof I Name: Hook Norton Road, Sixford Ferris Project No. C85855 Level 120/07018 Name: Location: Sixford Ferris, Benbury Directions 2 129 Location: Sixford Ferris, Benbury Directions 2 129 Location: Land and Partners II Location: Land									Trialpit N	No
Project No. Coords Level	j n	pgroup Consulting Engineers					Tri	al Pit Log		
Name Hook Notion Nada, Sibrort Ferris Cester Cest										of 1
Depth Depth Type Results Depth Stratum Description Depth Scale Depth Stratum Description Depth D	Project	Hook No	rton Ro	ad, Sibford Ferris	-					10
Column C					C6363					
Samples and in Situ Testing Depth Type Results 0.10 Depth Upper Typ	Locatio	on: Sibtord F	erris, B	anbury				(m):	1:25	
Semples and in Situ Testing Depth Type Results O.10 One of the state	Client:	Land and Partners Ltd								d
Depth Type Results (m) (m) Cegena Crists are things the property of the proper	e o	Sample	s and I	n Situ Testing	Depth	l evel			<u> </u>	
TOPSOIL TOP	Wate Strik					(m) (m) Legend Stratum Description				
								rootlets. TOPSOIL Orangey brown silty fine SAND with rare silty po (<5cm) and rare subangular ironstone cobbles. Becoming very silty towards base. NORTHAMPTON SAND FORMATION	/	2 3 4 1 1 1 1 1 1 1 1 1
Stability: Stable						•			AG	S

								Trialpit N	No
i jr	pgroup Consulting Engineers					Tri	al Pit Log	SA0	
							_	Sheet 1 c	of 1
Project Name:	t Hook No	rton Ro	ad, Sibford Ferris	Projec			Co-ords: -	Date 12/07/20	140
				C8585	55		Level: Dimensions 2	Scale	
Location: Sibford Ferris, Banbury						(m):	1:25		
Client:	Land an	d Partn	ers Ltd				Depth 0	Logged JP	d
- a	Sample	s and I	n Situ Testing	Donth Lovel			JF		
Water Strike	Depth	Туре	Results	(m)	m) (m) Legend Stratum Description				
				0.10			Grass overlying light brown sandy TOPSOIL wit rootlets.	th fine	_
						××××	TOPSOIL Orangey brown silty fine SAND with ocassional	silt	_
						× × ×	pockets (<5cm) and rare fine to medium subang ironstone gravel.	gular	_
						× × × ×	NORTHAMPTON SAND FORMATION		_
						× × ×	×.		_
						×××			=
						`x			_
						××× ×××			1 -
				1.10			Firm to stiff grey CLAY. WHITBY MUDSTONE FORMATION		=
				1.30			End of pit at 1.30 m		_
							· ·		_
									_
									_
									=
									2 -
									_
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Remar	ks: Pit dry	/.			1	1			
Stabilit	v: Stable	<u> </u>						AG	S

	n seetin & nathers						Trialpit I	No
🎑 jr	pgroup Consulting Engineers				Tri	ial Pit Log	SA03A	
							Sheet 1	of 1
Projec Name:		oad, Sibford Ferris	Project C8585			Co-ords: - Level:	Date 12/07/20	110
			C6565			Dimensions 2	Scale	
Location	on: Sibford Ferris,	Banbury				(m):	1:25	
Client: Land and Partners Ltd					Depth 0 1.10	Logge JP	d	
e e	Samples and	In Situ Testing	Depth	Level			<u> </u>	
Water Strike	Depth Type	Results	(m)	(m)	Legend			
			0.10			Grass overlying light brown sandy TOPSOIL. TOPSOIL Orangey brown silty fine SAND with ocassional pockets (<5cm) and rare fine to medium subanironstone gravel. Becoming slightly clayey town NORTHAMPTON SAND FORMATION End of pit at 1.10 m	gular	2
						<u> </u>		5 —
Remar							AC	SS



APPENDIX F: GEOTECHNICAL TEST RESULTS



Liquid and Plastic Limits

i2 Analytical Ltd Unit 8 Harrowden Road Brackmills Industrial Estate Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: JNP Midlands LLP

Client Address: No.1 Meadowhall, Riverside,

Sheffield

Contact: Samuel Pyott

Site Address: Hook Norton Road, Sibford Ferris

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Job Number: 20-29971
Date Sampled: 08/09/2020
Date Received: 10/09/2020
Date Tested: 23/09/2020

Depth Top [m]: 1.00

Sample Type: D

Depth Base [m]: Not Given

Client Reference: C85855

Sampled By: Client- SP

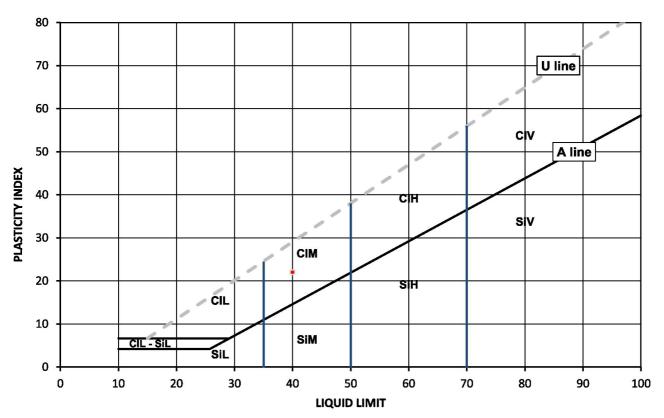
Test Results:

Laboratory Reference: 1619892
Hole No.: TP03
Sample Reference: 8

Soil Description: Orangish brown slighty gravelly sandy CLAY

Sample Preparation: Tested after washing to remove >425um

As Received Moisture	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425μm
Content [W] %	[WL] %	[Wp]%	[lp]%	BS Test Sieve
16	40	18	22	96



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing - Identification and classification of soil

Plasticity Liquid Limit CI below 35 Clay Low Si Silt М Medium 35 to 50 H High 50 to 70 V Very high exceeding 70

O Organic append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section for and on behalf of i2 Analytical Ltd







Liquid and Plastic Limits

i2 Analytical Ltd Unit 8 Harrowden Road Brackmills Industrial Estate Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: JNP Midlands LLP

Client Address: No.1 Meadowhall, Riverside,

Sheffield

Contact: Samuel Pyott

Site Address: Hook Norton Road, Sibford Ferris

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: C85855 Job Number: 20-29971 Date Sampled: 08/09/2020 Date Received: 10/09/2020

Depth Top [m]: 1.20

Sample Type: D

Depth Base [m]: Not Given

Date Tested: 23/09/2020 Sampled By: Client- SP

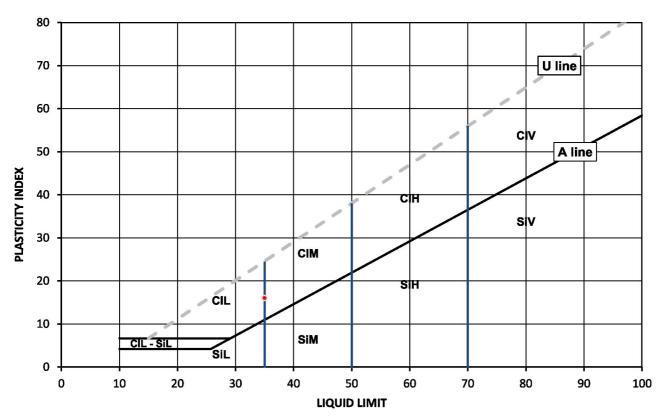
Test Results:

Laboratory Reference: 1619894 Hole No.: TP06 Sample Reference: 16

Soil Description: Brown slightly gravelly sandy CLAY

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp]%	Plasticity Index [lp]%	% Passing 425µm BS Test Sieve
22	35	19	16	89



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing - Identification and classification of soil

Plasticity Liquid Limit CI below 35 Clay Low Si Silt М Medium 35 to 50 H High 50 to 70 V Very high exceeding 70

O Organic append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz PL Deputy of Head of Geotechnical Section for and on behalf of i2 Analytical Ltd

Date Reported: 29/09/2020



Liquid and Plastic Limits

i2 Analytical Ltd Unit 8 Harrowden Road Brackmills Industrial Estate Northampton NN4 7EB

Client Reference: C85855

Depth Top [m]: 2.00

Sample Type: D

14

Depth Base [m]: Not Given

96



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: JNP Midlands LLP

Client Address: No.1 Meadowhall, Riverside,

Sheffield

Contact: Samuel Pyott

Site Address: Hook Norton Road, Sibford Ferris

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

35

Date Sampled: 08/09/2020 Date Received: 10/09/2020 Date Tested: 23/09/2020 Sampled By: Client- SP

Job Number: 20-29971

Test Results:

Laboratory Reference: 1619895 Hole No.: TP07 Sample Reference: 19

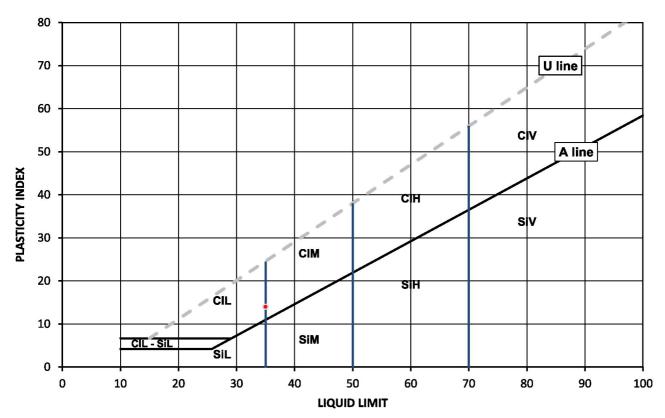
23

Soil Description: Brown slightly gravelly sandy CLAY

Sample Preparation: Tested after washing to remove >425um

Sample Preparation.	103100	raiter washing to remove 7-42	-oum		
As Received Moist Content [W] %	5.500005	Liquid Limit [WL 1 %	Plastic Limit [Wp] %	Plasticity Index [lp] %	% Passing 425µm BS Test Sieve
Content [W] A	+	[** 2] /0	[446] 70	[iþ]/0	DO Test Cieve

21



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing - Identification and classification of soil

Plasticity Liquid Limit CI below 35 Clay Low Si Silt М Medium 35 to 50 H High 50 to 70 V Very high exceeding 70

O Organic append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd







Liquid and Plastic Limits

i2 Analytical Ltd Unit 8 Harrowden Road Brackmills Industrial Estate Northampton NN4 7EB



Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client: JNP Midlands LLP

Client Address: No.1 Meadowhall, Riverside,

Sheffield

Contact: Samuel Pyott

Site Address: Hook Norton Road, Sibford Ferris

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: C85855 Job Number: 20-29971 Date Sampled: 08/09/2020 Date Received: 10/09/2020 Date Tested: 23/09/2020

Depth Top [m]: 0.80

Sample Type: D

Depth Base [m]: Not Given

Sampled By: Client- SP

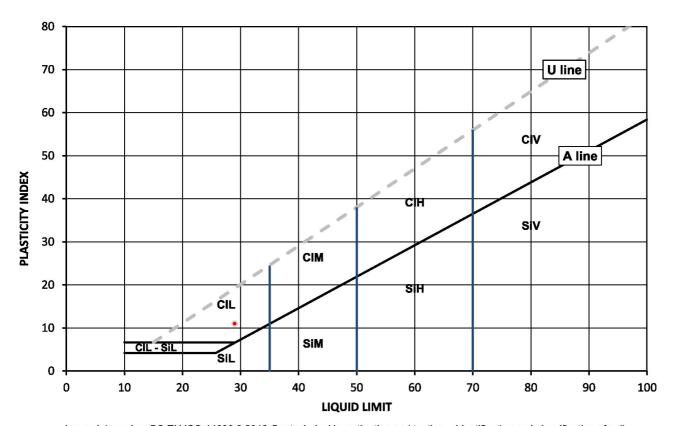
Test Results:

Laboratory Reference: 1619896
Hole No.: TP08
Sample Reference: 20

Soil Description: Dark brown slightly gravelly very sandy CLAY

Sample Preparation: Tested after >425um removed by hand

As Received Moisture	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
Content [W] %	[WL] %	[Wp]%	[lp] %	BS Test Sieve
16	29	18	11	94



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

Plasticity Liquid Limit CI below 35 Clay Low Si Silt М Medium 35 to 50 H High 50 to 70 V Very high exceeding 70

O Organic append to classification for organic material (eg CIHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Page 1 of 1

Date Reported: 29/09/2020

GF 236.10

Client:

JNP Midlands LLP

4041

Client Address:

No.1 Meadowhall, Riverside,

Contact:

Samuel Pyott

SUMMARY REPORT

Summary of Classification Test Results

Northampton NN4 7EB Unit 8 Harrowden Road Brackmills Industrial Estate i2 Analytical Ltd



Client Reference: C85855 Job Number: 20-29971

Date Received: 10/09/2020 Date Tested: 23/09/2020

Sampled By: Client- SP

Date Sampled: 08/09/2020

Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test),

Tested in Accordance with:

Site Address: Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland Hook Norton Road, Sibford Ferris

Test results

										\neg	
				1619896	1619895	1619894	1619892		Laboratory Reference		
				TP08	TP07	тР06	TP03		Hole No.		
				20	19	16	8		Reference		
				0.80	2.00	1.20	1.00	3	Depth Top	Sample	
				Not Given	Not Given	Not Given	Not Given	3	Depth Base	e	
				0	ם	ם	D		Туре		
				Dark brown slightly gravelly very sandy CLAY	Brown slightly gravelly sandy CLAY	Brown slightly gravelly sandy CLAY	Orangish brown slighty gravelly sandy CLAY		Description		
				Atterberg 4 Point	Atterberg 4 Point	Atterberg 4 Point	Atterberg 4 Point		Remarks		
				16	23	22	16	%	Moisture Co [W]	ntent	
								*	Water Con [W]	tent	
				94	96	89	96	%	% Passing 425um		
				29	35	35	40	%	ML	Atte	
				18	21	19	18	%	Wp	Atterberg	
				1	14	16	22	*	ᅙ		
								Mg/m3	bulk		
								Mg/m3 Mg/m3 Mg/m3	dгу	Density	
								Mg/m3	В		
								Ж	Total Porosity	#	
٠											

Note: # Non accredited; NP - Non plastic

Comments:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.



Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section for and on behalf of i2 Analytical Ltd

Date Reported: 29/09/2020

Page 1 of 1

GF 238.12



Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd Unit 8 Harrowden Road Brackmills Industrial Estate Northampton NN4 7EB



Client: JNP Midlands LLP

Client Address: No.1 Meadowhall, Riverside,

Sheffield

Contact: Samuel Pyott

Site Address: Hook Norton Road, Sibford Ferris

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: C85855 Job Number: 20-29971 Date Sampled: 08/09/2020 Date Received: 10/09/2020 Date Tested: 23/09/2020

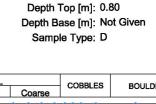
Sampled By: Client- SP

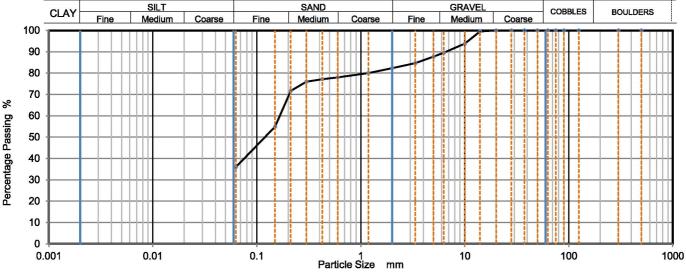
Test Results:

Laboratory Reference: 1619891
Hole No.: TP02
Sample Reference: 5

Sample Description: Orangish brown gravelly very clayey SAND

Sample Preparation: Sample was quartered, oven dried at 107.0 °C and broken down by hand.





Siev	/ing	Sedimentation				
Particle Size mm	% Passing	Particle Size mm	% Passing			
500	100					
300	100					
125	100					
90	100					
75	100					
63	100					
50	100					
37.5	100					
28	100					
20	100					
14	100					
10	94					
6.3	90					
5	88					
3.35	85					
2	82	To the second se				
1.18	80	1				
0.6	78					
0.425	77	1				
0.3	76	1				
0.212	72					
0.15	55					
0.063	36]				

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	17.70
Sand	46.20
Fines <0.063mm	36.20

Grading Analysi	S	
D100	mm	20
D60	mm	0.166
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

-

Szczepan Bielatowicz PL Deputy of Head of Geotechnical Section for and on behalf of i2 Analytical Ltd

Page 1 of 1

Date Reported: 29/09/2020 GF 100.18



Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd Unit 8 Harrowden Road Brackmills Industrial Estate Northampton NN4 7EB



JNP Midlands LLP Client:

Client Address: No.1 Meadowhall, Riverside,

Sheffield

Contact: Samuel Pyott

Site Address: Hook Norton Road, Sibford Ferris

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Client Reference: C85855 Job Number: 20-29971 Date Sampled: 08/09/2020 Date Received: 10/09/2020 Date Tested: 23/09/2020

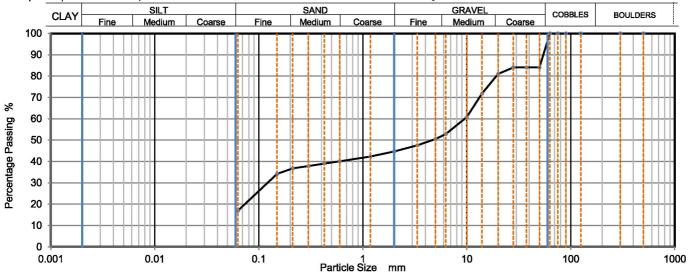
Sampled By: Client- SP

Test Results:

Laboratory Reference: 1619893 Depth Top [m]: 1.00 TP04 Depth Base [m]: Not Given Hole No .: Sample Type: D Sample Reference: 11

Orangish brown clayey sandy GRAVEL Sample Description:

Sample Preparation: Sample was whole tested, oven dried at 107.0 °C and broken down by hand.



Siev	ing	Sedime	Sedimentation				
Particle Size mm	% Passing	Particle Size mm	% Passing				
500	100						
300	100						
125	100						
90	100						
75	100						
63	100						
50	84						
37.5	84						
28	84						
20	81						
14	72						
10	61						
6.3	53						
5	51						
3.35	48						
2	45	1					
1.18	42	1					
0.6	40						
0.425	39	1					
0.3	38	7					
0.212	37	1					
0.15	34		_				
0.063	18]					

Sample Proportions	% dry mass				
Very coarse	0.00				
Gravel	55.30				
Sand	27.00				
Fines <0.063mm	17.80				

Grading Analysi	S	
D100	mm	63
D60	mm	9.55
D30	mm	0.12
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

The material submitted - fails to meet the minimum mass requirements as stated in BS1377 Part 2 Table 3 Remarks:

Page 1 of 1

Signed:

Szczepan Bielatowicz PL Deputy of Head of Geotechnical Section for and on behalf of i2 Analytical Ltd

Date Reported: 29/09/2020

GF 100.18





Sheffield

e:



i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404 **f:** 01923 237404

e: reception@i2analytical.com

Project / Site name: Hook Norton, Sibford Ferris Samples received on: 10/09/2020

Analytical Report Number: 20-29973

Your job number: C85855 Samples instructed on/ 11/09/2020

Analysis started on:

Your order number: G755 Analysis completed by: 25/09/2020

Report Issue Number: 1 Report issued on: 25/09/2020

Samples Analysed: 4 soil samples

Signed:

Zina Abdul Razzak Senior Quality Specialist For & on behalf of i2 Analytical Ltd.

- 4 weeks from reporting

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

leachates - 2 weeks from reporting waters - 2 weeks from reporting asbestos - 6 months from reporting

soils

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Standard sample disposal times, unless otherwise agreed with the laboratory, are:

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies.

An estimate of measurement uncertainty can be provided on request.





7.1

3.6

5.5

2.8

Analytical Report Number: 20-29973 Project / Site name: Hook Norton, Sibford Ferris Your Order No: G755

Lab Sample Number 1619913 1619914 1619915 1619916 TP01 TP05 TP07 TP07 Sample Reference Sample Number 13 18 19 3 Depth (m) 0.60 1.10 0.80 2.00 08/09/2020 08/09/2020 08/09/2020 08/09/2020 Date Sampled Time Taken None Supplied None Supplied None Supplied None Supplied Accreditation Limit of detection Analytical Parameter (Soil Analysis) Status Stone Content NONE < 0.1 < 0.1 < 0.1 < 0.1 % 0.1 Moisture Content N/A NONE 21 11 15 20 Total mass of sample received 0.001 NONE 0.5 **General Inorganics** pH - Automated pH Units MCERTS 8.3 8.1 7.9 N/A 8 Total Sulphate as SO4 % 0.005 MCERTS 0.023 0.04 0.02 0.02 Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent) g/l 0.00125 MCERTS 0.0091 0.012 0.0076 0.0088 Water Soluble Chloride (2:1) (leachate equivalent) < 0.5 0.5 MCERTS 11 6.5 4.6 mg/l Total Sulphur % 0.005 MCERTS 0.012 0.025 0.014 0.012 Water Soluble Nitrate (2:1) as N (leachate equivalent) 2 NONE < 2.0 < 2.0 < 2.0 < 2.0

5

2.5

mg/kg

NONE

NONE

5.4

2.7

7.1

3.5

U/S = Unsuitable Sample I/S = Insufficient Sample

Heavy Metals / Metalloids

Magnesium (leachate equivalent)

Magnesium (water soluble)





Project / Site name: Hook Norton, Sibford Ferris

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1619913	TP01	3	0.6	Brown loam and clay with gravel.
1619914	TP05	13	1.1	Brown loam and clay with gravel.
1619915	TP07	18	0.8	Brown loam and clay with gravel.
1619916	TP07	19	2	Brown loam and clay with gravel.





Project / Site name: Hook Norton, Sibford Ferris

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	w	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN- 82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



APPENDIX G: CHEMICAL TEST RESULTS

49 October 2020





Samuel Pyott

JNP Midlands LLP No.1 Meadowhall Riverside Sheffield

e:

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number: 20-30123

Project / Site name: Hook Norton Road, Sibford Ferris Samples received on: 14/09/2020

Your job number: C85855 Samples instructed on/ 14/09/2020

Analysis started on:

Your order number: G754 Analysis completed by: 23/09/2020

Report Issue Number: 1 Report issued on: 23/09/2020

Samples Analysed: 6 soil samples



Joanna Wawrzeczko Technical Reviewer (Reporting Team) For & on behalf of i2 Analytical Ltd.

- 4 weeks from reporting

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

leachates - 2 weeks from reporting waters - 2 weeks from reporting asbestos - 6 months from reporting

soils

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Standard sample disposal times, unless otherwise agreed with the laboratory, are:

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies.

An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory. The results included within the report are representative of the samples submitted for analysis.





Analytical Report Number: 20-30123 Project / Site name: Hook Norton Road, Sibford Ferris Your Order No: G754

Lab Sample Number	1620601	1620602	1620603	1620604			
Sample Reference	TP01 ES1	TP03 ES7	TP04 ES10	TP06 ES15			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10	0.30	0.60	0.30			
Date Sampled	08/09/2020	08/09/2020	08/09/2020	08/09/2020			
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Time Turch	I		>	чоне заррнеа	топе заррнеа	нопе заррпеа	топе зарряец
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	16	13	16	13
Total mass of sample received	kg	0.001	NONE	0.4	0.5	0.4	0.5
·							
Asbestos in Soil	Туре	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	7	7.3	7.6	7.3
Organic Matter	%	0.1	MCERTS	2.9	- 7.3	-	1.5
organic racci	70	J.1	HOLKIS	2.7			1.5
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	40	42	87	35
Barium (aqua regia extractable)	mg/kg	1	MCERTS	49	46	79	51
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.5	1.5	3.3	1.4
Boron (water soluble)	mg/kg	0.2	MCERTS	1.2	0.9	0.5	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	53	48	150	49
Copper (aqua regia extractable)	mg/kg	1	MCERTS	10	12	7.5	8.4
Lead (aqua regia extractable)	mg/kg	1	MCERTS	25	23	24	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	18	29	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	110	110	330	110
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	67	69	79	67
Petroleum Hydrocarbons							
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1
TRU (010 - 025)				40	T		
TPH (C10 - C25)	mg/kg	10	MCERTS	40	-	< 10	< 10





Analytical Report Number: 20-30123 Project / Site name: Hook Norton Road, Sibford Ferris Your Order No: G754

Lab Sample Number				1620601	1620602	1620603	1620604
Sample Reference	TP01 ES1	TP03 ES7	TP04 ES10	TP06 ES15			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	0.10	0.30	0.60	0.30			
Date Sampled	08/09/2020	08/09/2020	08/09/2020	08/09/2020			
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
TPH (C25 - C40)	mg/kg	10	MCERTS	< 10	-	< 10	< 10
SVOCs							
Aniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	< 0.2	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	< 0.2	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-
Hexachlorobenzene Phenanthrene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-
	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Anthracene Carbazole	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05 < 0.3	-
	mg/kg	0.3	MCERTS	< 0.3			-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3 < 0.05	-	< 0.3 < 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-

0.05

0.3

0.05

0.05

mg/kg

mg/kg

mg/kg

mg/kg

MCERTS

ISO 17025

MCERTS

MCERTS

< 0.05

< 0.3

< 0.05

< 0.05

Pyrene

Chrysene

Butyl benzyl phthalate

Benzo(a)anthracene

< 0.05

< 0.3

< 0.05

< 0.05





Project / Site name: Hook Norton Road, Sibford Ferris

Your Order No: G754

Lab Sample Number					1620602	1620603	1620604
Sample Reference	TP01 ES1	TP03 ES7	TP04 ES10	TP06 ES15			
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.30	0.60	0.30
Date Sampled				08/09/2020	08/09/2020	08/09/2020	08/09/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	 		< 0.05	-	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-

SVOCs TICs

SVOCs TICs Compound Name		N/A	NONE	ND	-	ND	-
SVOC % Match	%	N/A	NONE	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample





Project / Site name: Hook Norton Road, Sibford Ferris

Your Order No: G754

Lab Sample Number				1620605	1620606
Sample Reference				TP10 ES1	TP15 ES1
Sample Number	None Supplied	None Supplied			
Depth (m)	0.20	0.60			
Date Sampled	11/09/2020	11/09/2020			
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
			I I	0.1	0.1
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	17	18
Total mass of sample received	kg	0.001	NONE	0.5	0.5
A.L			· 1		
Asbestos in Soil	Туре	N/A	ISO 17025	Not-detected	Not-detected
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	-	7.4
Organic Matter	%	0.1	MCERTS	-	1.6
				<u></u>	
Speciated PAHs			I	2.25	
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS MCERTS	< 0.05 < 0.05	-
Pyrene Benzo(a)anthracene	mg/kg mg/kg	0.05	MCERTS	< 0.05	
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	_
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-
Total PAH			T		
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	89
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	52
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	2.2
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	87
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	15
.ead (aqua regia extractable)	mg/kg	1	MCERTS	-	17
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	30
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	190
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	59
Petroleum Hydrocarbons					
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1
PH (C10 - C25)	mg/kg	10	MCERTS	< 10	< 10





Analytical Report Number: 20-30123 Project / Site name: Hook Norton Road, Sibford Ferris Your Order No: G754

Lab Sample Number	1620605	1620606			
Sample Reference				TP10 ES1	TP15 ES1
Sample Number				None Supplied	None Supplied
Depth (m)				0.20	0.60
Date Sampled				11/09/2020	11/09/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
TPH (C25 - C40)	mg/kg	10	MCERTS	< 10	< 10

SVOCs

/0Cs					
iline	mg/kg	0.1	NONE	-	< 0.1
enol	mg/kg	0.2	ISO 17025	-	< 0.2
Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
s(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2
3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1
1-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
s(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1
Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3
xachloroethane	mg/kg	0.05	MCERTS	-	< 0.05
robenzene	mg/kg	0.3	MCERTS	1	< 0.3
Methylphenol	mg/kg	0.2	NONE	-	< 0.2
phorone	mg/kg	0.2	MCERTS	-	< 0.2
Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3
1-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3
s(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3
2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
phthalene	mg/kg	0.05	MCERTS	-	< 0.05
1-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3
Chloroaniline	mg/kg	0.1	NONE	-	< 0.1
xachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1
Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1
1,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
1,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2
Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1
Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1
methylphthalate	mg/kg	0.1	MCERTS	-	< 0.1
5-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1
enaphthylene	mg/kg	0.05	MCERTS	-	< 0.05
enaphthene	mg/kg	0.05	MCERTS	-	< 0.05
1-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2
penzofuran	mg/kg	0.2	MCERTS	-	< 0.2
Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3
ethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2
iorene	mg/kg	0.05	MCERTS	-	< 0.05
obenzene	mg/kg	0.3	MCERTS	-	< 0.3
omophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2
xachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
enanthrene	mg/kg	0.05	MCERTS	-	< 0.05
thracene	mg/kg	0.05	MCERTS	-	< 0.05
rbazole	mg/kg	0.3	MCERTS	-	< 0.3
putyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
thraquinone	mg/kg	0.3	MCERTS	-	< 0.3
oranthene	mg/kg	0.05	MCERTS	-	< 0.05
rene	mg/kg	0.05	MCERTS	_	< 0.05
tyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3
nzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
• •				-	< 0.05
rysene	mg/kg	0.05	MCERTS		





Project / Site name: Hook Norton Road, Sibford Ferris

Your Order No: G754

Lab Sample Number	1620605	1620606			
Sample Reference	TP10 ES1	TP15 ES1			
Sample Number				None Supplied	None Supplied
Depth (m)				0.20	0.60
Date Sampled				11/09/2020	11/09/2020
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05

SVOCs TICs

SVOCs TICs Compound Name		N/A	NONE	-	ND
SVOC % Match	%	N/A	NONE	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample





Project / Site name: Hook Norton Road, Sibford Ferris

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1620601	TP01 ES1	None Supplied	0.1	Brown sandy clay with vegetation.
1620602	TP03 ES7	None Supplied	0.3	Brown sandy clay.
1620603	TP04 ES10	None Supplied	0.6	Brown sandy clay.
1620604	TP06 ES15	None Supplied	0.3	Brown sandy clay with vegetation.
1620605	TP10 ES1	None Supplied	0.2	Brown sandy clay with vegetation.
1620606	TP15 ES1	None Supplied	0.6	Brown clay.





Project / Site name: Hook Norton Road, Sibford Ferris

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
PRO (Soil)	Determination of hydrocarbons C6-C10 by headspace GC-MS.	In-house method based on USEPA8260	L088-PL	w	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Tentatively identified compounds (SVOC) in soil	Determination of semi-volatile organic compounds total ion count in soil by extraction with dichloromethane and hexane followed by GC-MS followed by a full library scan.	In-house method based on USEPA 8270	L064-PL	D	NONE
TPH Oils (Soils)	Determination of extractable hydrocarbons in soil by GC-MS/FID.	In-house method with silica gel split/clean up.	L076-PL	D	MCERTS
DRO (Soil)	Determination of extractable hydrocarbons in soil by GC-MS/FID.	In-house method with silica gel split/clean up.	L076-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom. For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.



APPENDIX H: SOAKAWAY CALCULATIONS

50 October 2020

Marlborough House Leamington Spa

Warwickshire CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

john newton & partners INP GROUP Consulting Engineers

SOIL INFILTRATION TEST

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

Test Location: SA01 Test No: 1 Date: 12 Jul 2018

Water level during test

Time	Depth
mins	m bgl
0	1.700
1.5	1.850
2	2.100

Trial pit dimensions

That pit aimonorous		
depth (m)	2.10	
length (m)	2.00	
width (m)	0.60	

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

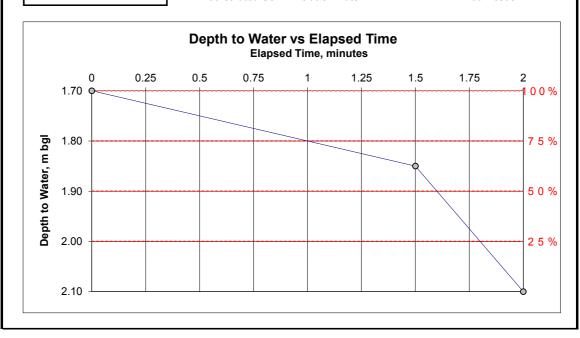
 a_{s50} = internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 1 time at 25% effective depth (mins) 1.8

(from graph)

Calculated Soil Infiltration Rate = 2.2E-03 m/sec



Marlborough House Leamington Spa

Warwickshire CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoen vironmental@jnpgroup.co.uk

john newton & partners INP GROUP Consulting Engineers

SOIL INFILTRATION TEST

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

Test Location: SA01 Test No: 2 Date: 12 Jul 2018

Water level during test

Time	Depth
mins	m bgl
0	1.600
1.5	1.850
2	2.100

Trial pit dimensions

depth (m)	2.10
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

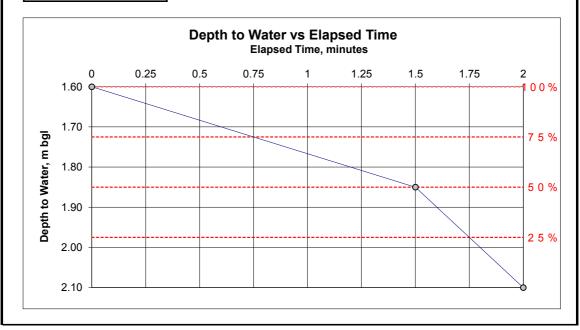
 a_{s50} = internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 0.75 time at 25% effective depth (mins) 1.75

(from graph)

Calculated Soil Infiltration Rate = 2.0E-03 m/sec



Marlborough House Learnington Spa

Warwickshire CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoen vironmental@jnpgroup.co.uk

john newton & partners INPGROUP Consulting Engineers

SOIL INFILTRATION TEST

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

Test Location: SA01 Test No: 3 Date: 12 Jul 2018

Water level during test

Depth
m bgl
1.600
1.850
2.100

Trial pit dimensions

That pit aimonoiono		
depth (m)	2.10	
length (m)	2.00	
width (m)	0.60	

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

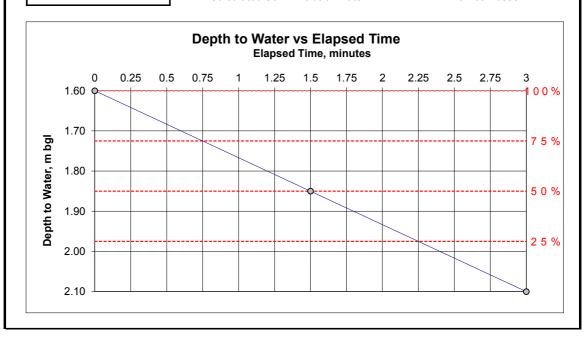
 a_{s50} = internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 0.75 time at 25% effective depth (mins) 2.25

(from graph)

Calculated Soil Infiltration Rate = 1.3E-03 m/sec



Marlborough House Leamington Spa Warwickshire

Warwickshire CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

john newton & partners IND GROUP Consulting Engineers

SOIL INFILTRATION TEST

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

Test Location: SA02A Test No: 1 Date: 12 Jul 2018

Water level during test

water level during test		
Time	Depth	
mins	m bgl	
0	0.400	
5	0.420	
14	0.440	
59	0.530	
89	0.560	
109	0.560	
144	0.580	
164	0.585	

Trial pit dimensions

That pit aimonorous		
depth (m)	1.40	
length (m)	2.00	
width (m)	0.60	

$$f = \frac{V_{\text{p75}-25}}{a_{\text{s50}} \times t_{\text{p75}-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

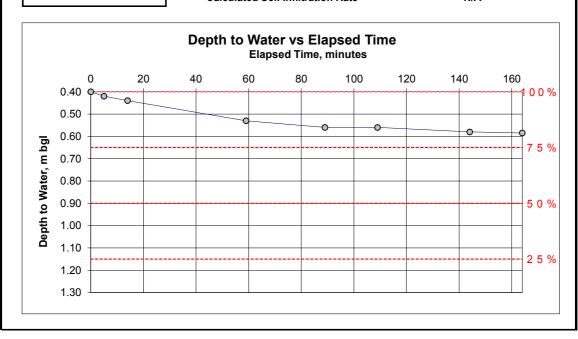
 a_{s50} = internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) N/A time at 25% effective depth (mins) N/A

Test incomplete - Infiltration rate could not be determined

Calculated Soil Infiltration Rate = N/A



Marlborough House Leamington Spa Warwickshire

Warwickshire CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk



SOIL INFILTRATION TEST

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

Test Location: SA03A Test No: 1 Date: 12 Jul 2018

Water level during test

water level during test		
Depth		
m bgl		
0.100		
0.120		
0.270		
0.350		
0.430		
0.480		
0.490		
0.520		

Trial pit dimensions

mai pit ulmensions	
depth (m)	1.10
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

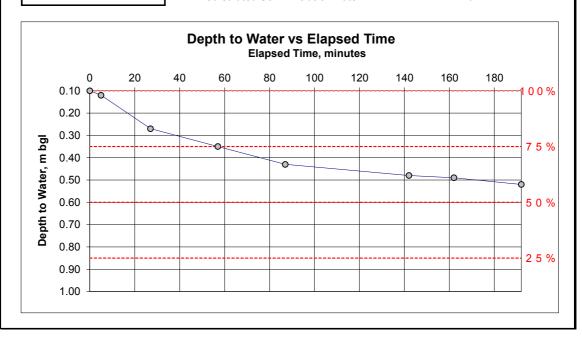
 a_{s50} = internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) N/A time at 25% effective depth (mins) N/A

Test incomplete - Infiltration rate could not be determined

Calculated Soil Infiltration Rate = N/A



Marlborough House Leamington Spa Warwickshire

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SOIL INFILTRATION TEST

Date: 08 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Water level during test

Test Location: TP03

Water level during test	
Time	Depth
mins	m bgl
0	0.400
1	0.500
2	0.900
3	1.080
4	1.400

Test No: 1

Trial pit dimensions

depth (m)	1.40
length (m)	1.80
width (m)	0.70

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

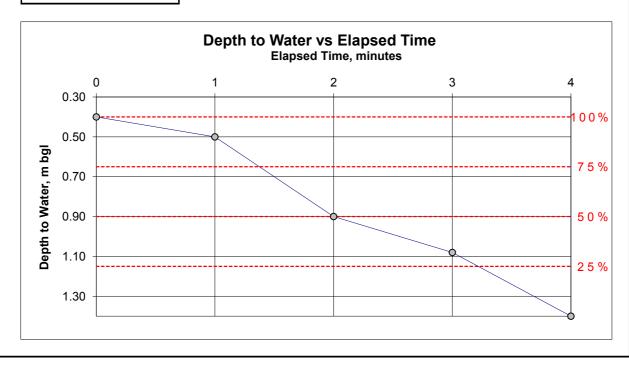
 V_{p75-25} = volume of water from 75% to 25% effective depth

= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 1.4 time at 25% effective depth (mins) 3.2 (from graph)

Calculated Soil Infiltration Rate = 1.6E-03 m/sec



Marlborough House Leamington Spa Warwickshire

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SOIL INFILTRATION TEST

Date: 08 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Water level during test

Test Location: TP03

Time	Depth
mins	m bgl
0	0.400
1	0.600
2	0.800
3	1.100
4	1.300
5	1.400

Test No: 2

Trial pit dimensions

depth (m)	1.40
length (m)	1.80
width (m)	0.70

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

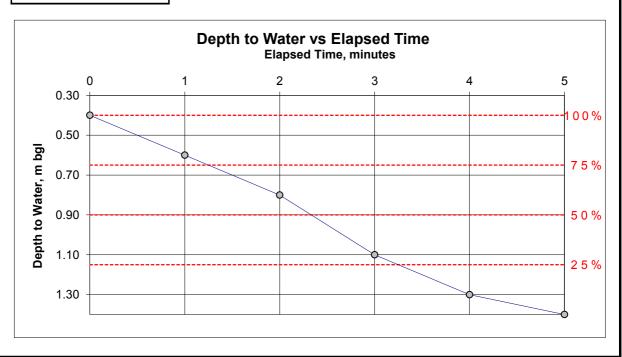
= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 1.3 time at 25% effective depth (mins) 3.3

(from graph)

Calculated Soil Infiltration Rate = 1.4E-03 m/sec



Marlborough House Leamington Spa Warwickshire

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SOIL INFILTRATION TEST

Date: 09 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Test Location: TP03 Water level during test

Trator lovor daring toot	
Time	Depth
mins	m bgl
0	0.400
1	0.600
2	0.800
3	0.900
4	1.300
5	1.400

Test No: 3

Trial pit dimensions

depth (m)	1.40
length (m)	1.80
width (m)	0.70

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

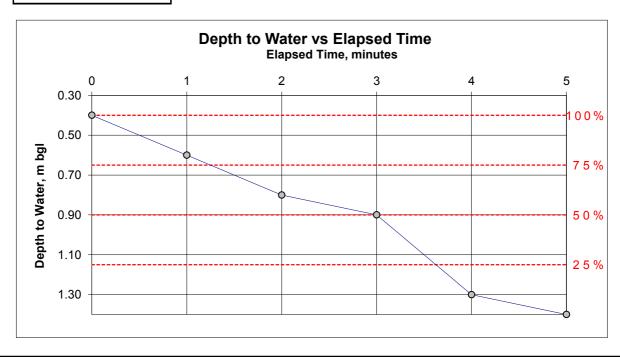
= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 1.2 time at 25% effective depth (mins) 3.6

(from graph)

Calculated Soil Infiltration Rate = 1.2E-03 m/sec



Marlborough House Leamington Spa

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SOIL INFILTRATION TEST

Date: 08 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

Warwickshire CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Water level during test

Test Location: TP06

	<u> </u>
Time	Depth
mins	m bgl
0	1.400
2	2.240
4	2.300

Test No: 1

Trial pit dimensions

depth (m)	2.30
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

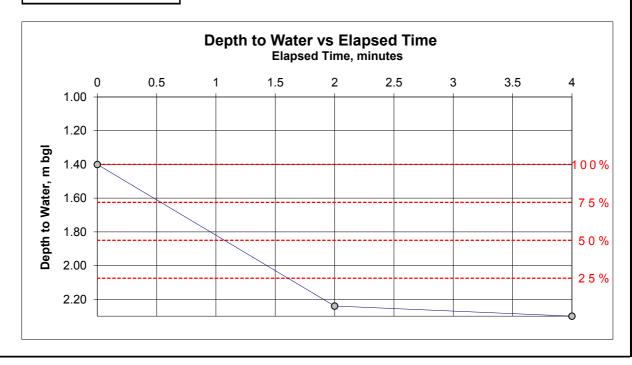
= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 0.5 time at 25% effective depth (mins) 1.6

(from graph)

Calculated Soil Infiltration Rate = 2.3E-03 m/sec



Marlborough House Leamington Spa Warwickshire

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SOIL INFILTRATION TEST

Date: 09 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Water level during test

Test Location: TP06

	J
Time	Depth
mins	m bgl
0	1.400
1	2.250
2	2.300

Test No: 2

Trial pit dimensions

depth (m)	2.30
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

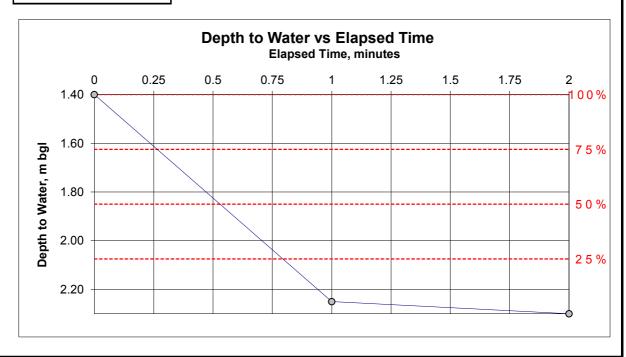
 V_{p75-25} = volume of water from 75% to 25% effective depth

= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 0.2 time at 25% effective depth (mins) 0.5 (from graph)

Calculated Soil Infiltration Rate = 8.5E-03 m/sec



Marlborough House Leamington Spa Warwickshire JNP GROUP

SOIL INFILTRATION TEST

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Test Location: TP06 Test No: 3 Date: 09 Sep 2020

Water level during test

Time	Depth
mins	m bgl
0	1.400
1	2.200
2	2.300

Trial pit dimensions

That pit aimonoiono	
depth (m)	2.30
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

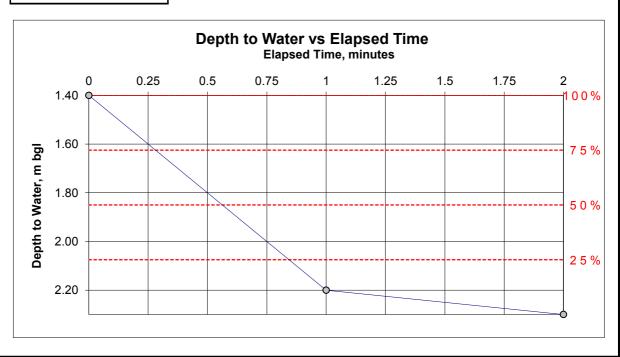
 V_{p75-25} = volume of water from 75% to 25% effective depth

 a_{s50} = internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 0.3 time at 25% effective depth (mins) 0.85 (from graph)

Calculated Soil Infiltration Rate = 4.6E-03 m/sec



Marlborough House Leamington Spa Warwickshire

JNP GROUP

SOIL INFILTRATION TEST

Date: 08 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Test Location: TP07 Water level during test

Water lever during test	
Time	Depth
mins	m bgl
0	1.600
1	1.630
2	1.660
3	1.730
4	1.780
5	1.840
6	1.870
7	1.970
12	2.100
17	2.150
22	2.230
32	2.330
42	2.420

2.510

52

Test No: 1

Trial pit dimensions

depth (m)	2.60
length (m)	1.90
width (m)	0.70

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

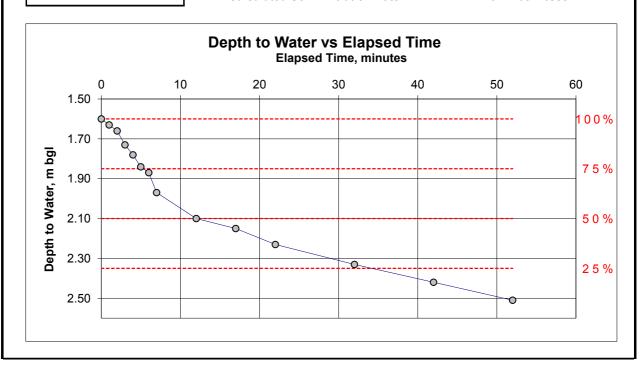
 V_{p75-25} = volume of water from 75% to 25% effective depth

= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 5 time at 25% effective depth (mins) 35 (from graph)

Calculated Soil Infiltration Rate = 9.4E-05 m/sec



Marlborough House Leamington Spa Warwickshire JNP GROUP

SOIL INFILTRATION TEST

Date: 09 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP Tel 01926 889955

Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Test Location: TP07 Test No: 2

Water level during test

vvater level during test	
Time	Depth
mins	m bgl
0	1.600
1	1.650
2	1.740
3	1.800
4	1.820
5	1.860
6	1.900
7	1.930
8	1.950
9	1.980
10	1.990
11	2.000
19	2.110
39	2.270
44	2.300
53	2.420

Trial pit dimensions

depth (m)	2.60
length (m)	1.90
width (m)	0.70

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

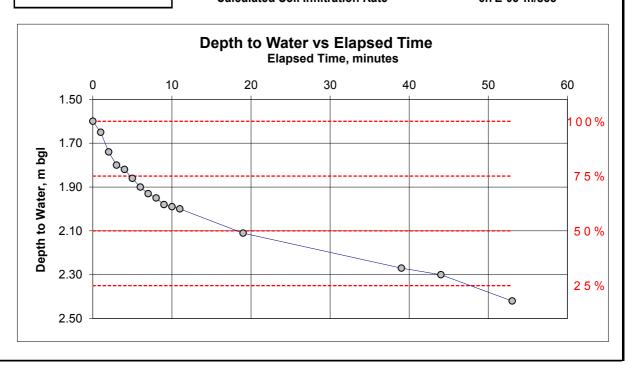
 V_{p75-25} = volume of water from 75% to 25% effective depth

 a_{s50} = internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 5 time at 25% effective depth (mins) 47 (from graph)

Calculated Soil Infiltration Rate = 6.7E-05 m/sec



Marlborough House Leamington Spa Warwickshire

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SOIL INFILTRATION TEST

Date: 09 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Test Location: TP07

Water level during test	
Time	Depth
mins	m bgl
0	1.620
1	1.670
11	1.840
16	2.000
21	2.050
26	2.100
31	2.150
36	2.200
41	2.250
46	2.290
56	2.400

Test No: 3

Trial pit dimensions

depth (m)	2.60
length (m)	1.90
width (m)	0.70

$$f = \frac{V_{\text{p75}-25}}{a_{\text{s50}} \times t_{\text{p75}-25}}$$

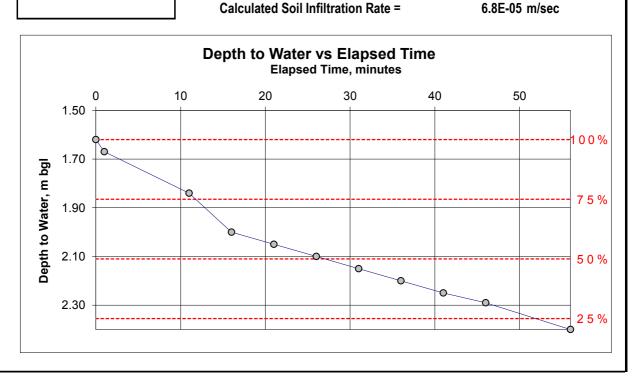
f = soil infiltration rate

 V_{p75-25} = volume of water from 75% to 25% effective depth

= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 11 time at 25% effective depth (mins) 52 (from graph)



Marlborough House Leamington Spa Warwickshire

JNP GROUP

SOIL INFILTRATION TEST

Date: 08 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Test Location: TP08

Water level during test	
Time	Depth
mins	m bgl
0	1.000
1	1.050
2	1.100
3	1.200
4	1.240
5	1.290
6	1.300
16	1.370
21	1.490
26	1.570
31	1.650
36	1.790
41	1.830
1	

Test No: 1

Trial pit dimensions

depth (m)	2.00
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

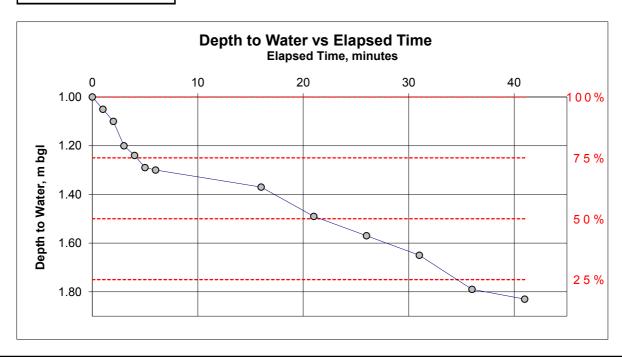
 V_{p75-25} = volume of water from 75% to 25% effective depth

= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 4.3 time at 25% effective depth (mins) 35 (from graph)

Calculated Soil Infiltration Rate = 8.6E-05 m/sec



Marlborough House Leamington Spa Warwickshire

JNP GROUP

SOIL INFILTRATION TEST

Date: 09 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955

Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Water level during test

Test Location: TP08

Water level during test	
Time	Depth
mins	m bgl
0	0.900
1	0.970
2	1.000
3	1.020
4	1.050
5	1.090
6	1.100
7	1.140
8	1.150
9	1.170
14	1.220
19	1.340
24	1.400
29	1.500
34	1.550
44	1.660
54	1.870

Test No: 2

Trial pit dimensions	
depth (m)	2.00
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

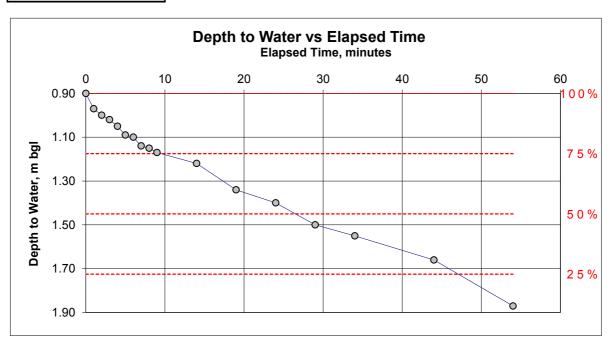
 V_{p75-25} = volume of water from 75% to 25% effective depth

= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 9.3 time at 25% effective depth (mins) 47 (from graph)

Calculated Soil Infiltration Rate = 7.2E-05 m/sec



Marlborough House Leamington Spa Warwickshire

JNP GROUP

SOIL INFILTRATION TEST

Date: 09 Sep 2020

Project:

Hook Norton Road, Sibford Ferris

Project No: C85855

CV32 4XP

Tel 01926 889955 Fax 01926 451745

geoenvironmental@jnpgroup.co.uk

Water level during test

Test Location: TP08

vvater lever du	ing tost
Time	Depth
mins	m bgl
0	1.100
10	1.300
20	1.400
30	1.470
40	1.580
56	1.700
66	1.880
78	2.000

Test No: 3

Trial pit dimensions

depth (m)	2.00
length (m)	2.00
width (m)	0.60

$$f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$$

f = soil infiltration rate

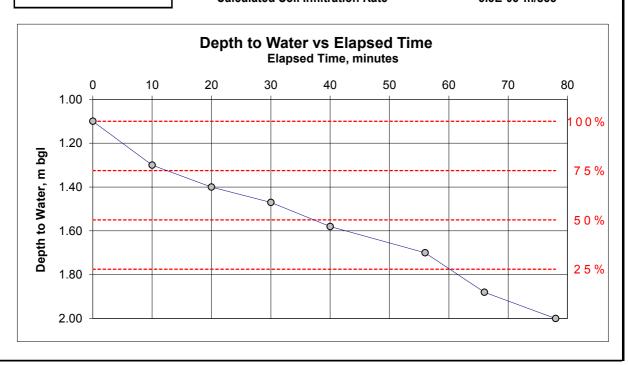
 V_{p75-25} = volume of water from 75% to 25% effective depth

= internal surface area at 50% effective depth

 $t_{\rm p75-25}$ = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (mins) 12 time at 25% effective depth (mins) 60 (from graph)

Calculated Soil Infiltration Rate = 5.3E-05 m/sec





APPENDIX I: DCP CALCULATIONS

51 October 2020

Project Nan	ne Hook	Norton Road Si C85855	bford Ferris	Record of Re TRL DCP (D		•	ole ID CP01
		000000		Cone Penet		·	
Engineer	SP					Tal	ble No.
Client	Land and Partne	ers Ltd					
Test no Initial Depth	1 0 m			Chainage Weather			Dry
Number of blows	Total blows	Reading mm	Difference mm	Number of blows	Total blows	Reading mm	Difference mm
0	0	40	0				
1	1	90	50				
1	2	130	40				
1	3	170	40				
1	4	200	30				
1	5	225	25				
1	6	250	25				
1	7	270	20				
1	8	290	20				
1	9	315	25				
1	10	330	15				
1	11	355	25				
1	12	380	25				
1	13	410	30				
1	14	440	30				
1	15	470	30				
1	16	490	20				
1	17	510	20				
1	18	530	20				
1	19	560	30				
1	20	585	25				
1	21	610	25				
1	22	630	20				
1	23	715	85				
1	24	725	10				
1	25	760	35				
1	26	765	5				
1	27	780	15				
1	28	795	15				
1	29	810	15				
1	30	820	10				
1	31	830	10				1
1	32	830	0				
1	33	830	0				
1	34	830	0				
1	35	830	0				
1	36	830	0				
Remarks							
Docor	dod by:	T		SP	Т		
	ded by:						
D:	ate:		09.0	9.2020			

Proje	ect Name	Hook Norton	n Road Sibfo	ord Ferris			f Resu					Hole	ID	
Pro	oject No.		C85855				P (Dyn netron					DCP	01	
Engine	eer SP								• ,		Т	able	No.	
Client	Land ar	nd Partners Ltd												
Test no Initial Dep		1 0 m			Chair Weat									Dry
	0	5	10	Total 15	number of b	olows 20		25			30		3	35
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			Laye	er 1 CBR value	10, Layer 2 (CBR va	alue 7.3							
Remarks	S													
	Recorded by:				SP									
	Date:				9.2020									
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Project Nam	ne Hook	Norton Road Si	bford Ferris	Record of Re	sults for	Но	le ID
Project No.		C85855		TRL DCP (D Cone Peneti		DC	P02
Engineer	SP			Oone i cheu	onicici	Tab	le No.
Client	Land and Partne	ers Ltd					
Test no Initial Depth	1 0.07 m			Chainage Weather		1	Dry
Number of blows	Total blows	Reading mm	Difference mm	Number of blows	Total blows	Reading mm	Difference mm
0	0	80	0				
1	1	120	40				
1	2	165	45				
1	3	200	35				
1	4	220	20				
1	5	240	20				
1	6	255	15				
1	7	270	15				
1	8	280	10				
1	9	295	15				
1	10	305	10				
1	11	315	10				
1	12	325	10				
1	13	335	10				
1	14	345	10				
1	15	360	15				
1	16 17	390	30 40				
1	18	430	50				
1	19	480	75				
1	20	555 620	65				
1	21	675	55				
1	22	740	65				
1	23	810	70				
1	24	810	0				
1	25	820	10				
1	26	830	10				
1	27	835	5				
1	28	850	15				
1	29	870	20				
1	30	900	30				
1	31	925	25				
1	32	950	25				
1	33	980	30				
				1			
Remarks			I				
Recor	ded by:		5	SP			
	ate:			9.2020			

Project N	ame F	łook Norto	n Road Sibfo	rd Ferris	Reco	rd of	Results	for	Hole ID				
Project I			C85855				(Dynan			DCP02			
Engineer	SP									Table No	0.		
Client	Land and Pa	artners Ltd											
Test no nitial Depth	1 0.07	m			Chai Wea						[
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1000													
			Laye	r 1 CBR value 5	i.1, Layer 2	CBR valu	ue 9.6						
Remarks													
Rec	corded by:			0	<u> </u>								
	Date:				.2020								
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Project Nan	ne Hook	Norton Road Si	bford Ferris	Record of Re TRL DCP (D				e ID P03
		000000		Cone Penet				
Engineer	SP						Tabl	e No.
Client	Land and Partne	ers Ltd						
Test no Initial Depth	1 0.06 m	ı		Chainage Weather				Dry
Number of blows	Total blows	Reading mm	Difference mm	Number of blows	Total blov	/S I	eading mm	Difference mm
0	0	60	0					
1	1	100	40					
1	2	140	40					
1	3	190	50					
1	4	230	40					
1	5	260	30					
1	6	290	30					
1	7	330	40					
1	8	370	40					
1	9	410	40					
1	10	440	30					
1	11	470	30					
1	12	490	20					
1	13	510	20					
1	14	530	20					
1	15	560	30					
1	16	570	10					
1	17	590	20					
1	18	610	20					
2	20	620	10					
1	21	645	25					
1	22	660	15					
1	23	700	40					
1	24	715	15					
1	25	730	15					
1	26	740	10					
1	27	755	15					
1	28	770	15					
1	29	785	15					
1	30	800	15					
1	31	820	20					
1	32	840	20					
1	33	855	15					
1	34	870	15					
1	35	890	20					
1	36	915	25					
1	37	930	15					
1	38	950	20					
1	39	970	20					
1	40	990	20					
1	41	1000	10					
Remarks								
Recor	ded by:		(SP				
	ate:		0.9 0.9	9.2020				
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Project N	lame Hoo	k Norton Road Sibfor	d Ferris	Record	of Results	for	Hole I	D
Project		C85855			CP (Dynar enetrome		DCP0	
Engineer	SP						Table N	No.
Client	Land and Partr	ners Ltd						
Test no nitial Depth	1 0.06	m		Chainage Weather		l l		Г
			Total	number of blows				
0	5	10	15	20	25	30	35	40
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Depth in mm (corrected by zero reading of DCP)								
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		Laye	r 1 CBR value	10, Layer 2 CBR	value 14			
Remarks								
		1				ı		
	corded by:			SP				
	Date:		09.09	.2020				

Project Nan	ne Hook	Norton Road Si	bford Ferris	Record of Re	sults for	Но	le ID
Project No.		C85855		TRL DCP (D Cone Penetr		DC	P04
Engineer	SP			Oone i cheu	ometer	Tab	le No.
Client	Land and Partne	ers Ltd					
Test no Initial Depth	1 0.05 m			Chainage Weather		l	Dry
Number of blows	Total blows	Reading mm	Difference mm	Number of blows	Total blows	Reading mm	Difference mm
0	0	30	0				
1	1	100	70				
1	2	165	65				
1	3	205	40				
1	4	240	35				
1	5	275	35				
1	6	300	25				
1	7	320	20				
1	8	345	25				
1	9	360	15				
1	10	365	5				
1	11	385	20				
1	12	405	20				
1	13	435	30				
1	14	465	30				
1	15	495	30				
1	16	520	25				
1	17	550	30				
1	18 19	580	30 30				
4	23	610 640	30				
1	24	670	30				
1	25	700	30				
1	26	720	20				
1	27	750	30				
1	28	775	25				
1	29	800	25				
1	30	830	30				
1	31	850	20				
1	32	870	20				
1	33	880	10				
1	34	900	20				
1	35	930	30				
1	36	950	20				
1	37	960	10				
1	38	980	20				
1	39	1000	20				
Remarks							
Recor	ded by:		5	SP	1		
	ate:			9.2020			
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				of Result		Hole ID				
lo.	C85855			OCP (Dyna Penetrom		DCP04				
SP					,	Table No.				
Land and Partne	ers Ltd									
1 0.05 m					•		[
5	10				30	35	40			
	10	13	20		30	33	40			
\longrightarrow										
	**									
	X									
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	L	ayer 1 CBR value 9	9.2, Layer 2 CB	R value 9.5						
			-							
orded by:		5	SP							
Date:		09.09	0.2020							
	SP Land and Partner 1 0.05 m	SP Land and Partners Ltd 1 0.05 m 5 10 crided by:	Layer 1 CBR value Storded by:	Cone SP Land and Partners Ltd 1 Chainag Weather Total number of blow SP Chainag Chainag	Cone Penetrom SP Land and Partners Ltd 1	Cone Penetrometer) SP Land and Partners Ltd 1	Cone Penetrometer) Table No Land and Partners Ltd Chainage Weather Total number of blows 5 10 15 20 25 30 35 Layer 1 CBR value 9.2, Layer 2 CBR value 9.5			

Project Nan	ne Hook	Norton Road Si C85855	bford Ferris	Record of Re TRL DCP (D)ynamic	;	Hole DCF	
Engineer	SP			Cone Penet	romete	')	Table	No.
Client	Land and Partne	ers Ltd						-
Test no Initial Depth	1 0.06 m			Chainage Weather				Dry
Number of blows	Total blows	Reading mm	Difference mm	Number of blows	Total blo		ading mm	Difference mm
1	1	75	0					
1	2	110	35					
1	3	136	26					
1	4	160	24					
1	5	190	30					
1	6	220	30					
1	7	250	30					
1	8	290	40					
1	9	320	30					
1	10	360	40					
1	11	400	40					
1	12	425	25					
1	13	460	35					
1	14	515	55					
1	15	570	55					
1	16	640	70					
1	17	675	35					
5	18	720	45	+ -				
1	23	760	40 20					
1	25	780 840	60	+				
1	26	900	60	+ -				
1	27	960	60					
1	28	1000	40					
				1				
				+				
				+ -				
Remarks		I	l	1 1				
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Project N	lame	Но	ok Nor	ton Roa	d Sibf	ord Fe	rris	F	Reco	rd o	f Re	sult	s fo	r	· Hole ID					
Project	No.			C858	355					. DCI e Pe							DCP()5		
Engineer	SP								COII	CFC	HELI	OIIIE	iei)		Table No.					
Client	Land	and Part	ners L	td																
est no nitial Depth		1 0.06	m						Chai]	
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			_				Tota		oer of b	olows						_				
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Remarks																				
Red	corded b	y:						SP												
	Date:						09.	09.202	20											

Project Nan Project No.	ne Hook	Norton Road Si C85855	bford Ferris	Record of Re TRL DCP (D	Hole ID DCP06					
	SP	00000		Cone Penetr	ometer)	Table No.				
Engineer						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ie ivo.			
Client	Land and Partne	ers Ltd								
Test no Initial Depth	1 0.05 m			Chainage Weather		[
Number of blows	Total blows	Reading mm	Difference mm	Number of blows	Total blows	Reading mm	Difference mm			
1	1	50	0							
1	2	85	35							
1	3	105	20							
1	4	130	25							
1	5	150	20							
1	6	170	20							
1	7	190	20							
1	8	210	20							
1	9	240	30							
1	10	260	20							
1	11	285	25							
1	12	305	20							
1	13	330	25							
1	14	360	30							
1	15	400	40							
1	16	435	35							
1	17	460	25							
1	18	485	25							
1	19	505	20							
1	20	520	15							
1	21	545	25							
1	22	575	30							
1	23	600	25							
1	24	615	15							
1	25	630	15							
1	26	640	10							
1	27	660	20							
1	28	675	15	1						
1	29	690	15							
1	30	700	10							
1	31	705	5							
1	32	715	10							
1	33	725	10							
1	34	735	10							
1	35	750	15							
1	36	760	10							
1	37	770	10							
1	38	790	20							
1	39	805	15							
1	40	820	15							
1	41	835	15							
Remarks Obstr	ruction encountered - r		•	· '		•				
Recor	ded by:			SP						
Di	ate:		09.0	9.2020						

,		k Nortor	Norton Road Sibford Ferris						Record of Results for								Hole ID						
Project No.				C85855					TRL DCP (Dynamic Cone Penetrometer)								DCP06						
Engineer	SP							John Fellettottletet)									Table No.						
Client	Land a	ınd Partr	tners Ltd																				
est no nitial Depth		1 0.05 m							Chainage Weather														
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Brighouse

Woodvale House Woodvale Road Brighouse West Yorkshire HD6 4AB

telephone

01484 400691

email

brighouse@jnpgroup.co.uk

Hartlepool

The Innovation Centre Venture Court Queens Meadow Business Park Hartlepool TS25 5TG

telephone

01429 239539

email

hartlepool@jnpgroup.co.uk

Chesham (HQ)

Link House St Mary's Way Chesham Buckinghamshire HP5 1HR

telephone

01494 771221

email

chesham@jnpgroup.co.uk

Leamington Spa

Marlborough House 48 Holly Walk Leamington Spa Warwickshire CV32 4XP

telephone

01926 889955

email

leamingtonspa@jnpgroup.co.uk

Glasgow

Oxford House 71 Oxford Street Glasgow G59 EP

telephone

0141 378 0808

email

glasgow@jnpgroup.co.uk

Sheffield

MBP2 Meadowhall Business Park Carbrook Hall Road Sheffield South Yorkshire S9 2EQ

telephone

0114 244 3500

email

sheffield@jnpgroup.co.uk