



Plate 11 View east across the central portion of the eastern field



Plate 12 View north east across the eastern field



Plate 13 View south across the eastern field



Plate 14 View south across the eastern field



Plate 15 View south east across the eastern field



APPENDIX B

Exploratory Hole Logs



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. BH01 Sheet 1 of 3	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448873E - 116089N		Hole Type CP	
Location: Horton Heath				Level: 24.16		Scale 1:50	
Client: Eastleigh Borough Council				Dates: 08/07/2020		Logged By	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20 - 0.60	D	N=8 (1,2/2,2,2,2)	0.20	23.96	 TOPSOIL TOPSOIL Soft orangish brown sandy CLAY WITTERING FORMATION	1	
		0.50 - 1.00	B						
		1.20 - 1.65	D						
		1.20	S						
		1.50 - 2.00	B	Ublow=21				2	
		1.70 - 1.80	D						
		2.00 - 2.45	U						
		2.50 - 2.60	D						
		2.50 - 3.00	B	N=11 (2,2/3,3,2,3)	3.10	21.06	Soft to firm grey sandy CLAY WITTERING FORMATION	3	
		3.00 - 3.45	D						
		3.00	S						
		3.50 - 3.60	D						
		4.00 - 4.45	U	Ublow=28					4
		4.50 - 4.60	D						
		5.00 - 5.45	D						
		5.00	S						
6.00 - 6.10	D	N=14 (2,2/3,3,4,4)	5.00	19.16	Firm to stiff laminated grey slightly sandy CLAY WITTERING FORMATION	5			
6.50 - 6.95	U								
7.50 - 7.60	D								
8.00 - 8.45	D								
8.00	S	N=23 (3,4/4,5,6,8)					6		
9.00 - 9.10	D								
9.50 - 9.95	U								
Ublow=43									
Ublow=61							7		
								8	
								9	
								10	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
150	16.50	2.80 14.00	2.20 12.50				



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Hurstpierpoint
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Borehole Log

Borehole No.

BH01

Sheet 2 of 3

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448873E - 116089N

Hole Type
CP

Location: Horton Heath

Level: 24.16

Scale
1:50

Client: Eastleigh Borough Council

Dates: 08/07/2020

Logged By

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		10.50 - 10.60	D	N=22 (2,4/5,5,6,6)						
		11.00 - 11.45 11.00	D S							
		12.00 - 12.10	D							
		12.50 - 12.95 12.50 - 13.00	UF B	Ublow=52						13
		13.00 - 13.45 13.00	D S	N=23 (3,4/5,5,6,7)						
		13.50 - 13.60	D							
		14.00 - 14.40	U	Ublow=100						14
		15.00 - 15.10	D	N=27 (4,5/5,6,8,8)						15
		15.50 - 15.95 15.50	D S							
		16.50 - 16.60	D							16
		17.00 - 17.45 17.00	D S	N=24 (3,4/5,5,6,8)						17
		18.00 - 18.10	D	N=25 (4,4/5,6,7,7)						18
		18.50 - 18.95 18.50	D S							
		19.50 - 19.60	D							19
		20.00 - 20.45 20.00	D S	N=27 (3,4/5,7,7,8)						20
Continued on Next Sheet										
Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks				
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to					
150	16.50	2.80 14.00	2.20 12.50							





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Unit 7, Danworth Farm
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Borehole Log

Borehole No.

BH01

Sheet 3 of 3

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448873E - 116089N

Hole Type
CP

Location: Horton Heath

Level: 24.16

Scale
1:50

Client: Eastleigh Borough Council

Dates: 08/07/2020

Logged By

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		21.00 - 21.10	D	N=29 (4,5/6,7,8,8)	25.45	-1.29			21
		21.50 - 21.95 21.50	D S						22
		22.50 - 22.60	D						23
		23.00 - 23.45 23.00	D S	24					
		24.00 - 24.10	D	25					
		25.00 - 25.45 25.00	D S	N=31 (5,5/6,8,8,9)				End of Borehole at 25.45m	26
									27
									28
									29
									30
Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks			
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to				
150	16.50	2.80 14.00	2.20 12.50						





Unit 7, Danworth Farm
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Trial Pit Log

Trial Pit No

TP01

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448671.34 - 116410.94
Level: 20.33

Date
08/07/2020

Location: Horton Heath

Dimensions (m):

1.50

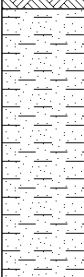
Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES	PP=4kg/cm2	0.30	20.03		Dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL		1
	0.40	ES					Very stiff light brown and orangish brown silty slightly sandy desiccated CLAY with rare brick tile from land drain. (REWORKED) WITTERING FORMATION		
	0.50	D							
	0.50	PP							
	1.00	D	PP=4kg/cm2	1.20	19.13		Firm light brown, orangish brown and bluish grey mottled sandy CLAY. Sand is fine. WITTERING FORMATION		2
	1.00	PP							
	1.50	D	PP=1kg/cm2	2.20	18.13		Firm becoming stiff dark bluish grey sandy CLAY. Sand is fine. WITTERING FORMATION		3
	1.50	PP							
	2.00	D	PP=1kg/cm2	3.00	17.33		End of Pit at 3.00m		4
	2.00	PP							
	2.50	D	PP=1.5kg/cm2	5					
	2.50	PP							
	3.00	D	PP=1.5kg/cm2						
	3.00	PP							

Remarks Groundwater not encountered. Land Drain at 0.6m bgl

Stability Sides stable





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Trial Pit Log

Trial Pit No

TP02

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448696.35 - 116375.69
Level: 19.97

Date
08/07/2020

Location: Horton Heath

Dimensions (m): 1.50

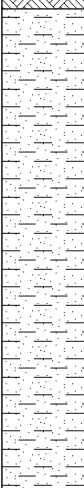
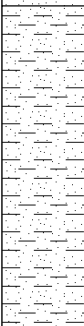
Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	PP=0.5kg/cm2	0.30	19.67		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fine angular to rounded flint. TOPSOIL	1
	0.40	ES					Soft becoming firm light brown, orangish brown and bluish grey mottled sandy CLAY. Sand is fine. WITTERING FORMATION	
	0.50	D						
	0.50	PP						
	1.00	D	PP=0.5kg/cm2	1.90	18.07		Firm becoming stiff dark bluish grey sandy CLAY. Sand is fine. WITTERING FORMATION	2
	1.00	PP						
	1.50	D	PP=0.5kg/cm2	3.00	16.97		End of Pit at 3.00m	3
	1.50	PP						
	2.00	D	PP=1.5kg/cm2	3.00	16.97			4
	2.00	PP						
	2.50	D	PP=1.5kg/cm2	3.00	16.97			5
	2.50	PP						
	3.00	D	PP=1.5kg/cm2	3.00	16.97			5
	3.00	PP						

Remarks Seepage at 2.5m bgl

Stability Sides stable





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Trial Pit Log

Trial Pit No
TP03
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448727.57 - 116335.39
Level: 21.24

Date
07/07/2020

Location: Horton Heath

Dimensions (m):
0.45 1.50
Depth 3.20

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES						
	0.40	ES		0.30	20.94			
	0.50	D						
	0.50	PP	PP=4kg/cm2	0.60	20.64			
	1.00	D						1
	1.00	PP	PP=1kg/cm2					
	1.50	D						
	1.50	PP	PP=0.5kg/cm2					
	2.00	D						2
	2.00	PP	PP=0.5kg/cm2					
	2.40	D		2.40	18.84			
	2.50	D						
	2.50	PP	PP=0kg/cm2	2.60	18.64			
	3.00	D						3
	3.00	PP	PP=1kg/cm2					
				3.20	18.04		End of Pit at 3.20m	

Remarks Seepage at 3.0m.

Stability Localised spalling





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Trial Pit Log

Trial Pit No

TP04

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448787.90 - 116299.32
Level: 22.86

Date
07/07/2020

Location: Horton Heath

Dimensions (m): 1.50

Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES		0.30	22.56		Very stiff dark brown silty slightly gravelly desiccated CLAY. Gravel is fmc angular to rounded flint. WITTERING FORMATION	
	0.40	PP	PP=4kg/cm2	0.50	22.36		Soft becoming firm light brown, orangish brown, brown and greyish brown mottled very sandy CLAY. Sand is fine. WITTERING FORMATION	
	0.60	D						
	0.60	PP	PP=1kg/cm2					
	1.00	D						
	1.00	PP	PP=1kg/cm2					1
	1.50	D						
	1.50	PP	PP=0.5kg/cm2					
	2.00	D						
	2.00	PP	PP=1kg/cm2					2
	2.50	D						
	2.50	PP	PP=1kg/cm2					
	2.80			2.80	20.06			
	3.00	D					Firm dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	
	3.00	PP	PP=1kg/cm2	3.00	19.86		End of Pit at 3.00m	3
								4
								5

Water Strikes	
Depth Strike	Rose to (m/kg)

Remarks

Stability Sides stable





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Trial Pit Log

Trial Pit No
TP05
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448974.11 - 116236.61
Level: 25.36

Date
08/07/2020

Location: Horton Heath

Dimensions (m): 1.50
0.45
Depth 3.50

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.30	25.06		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES					Very stiff light brown and orangish brown mottled silty slightly sandy desiccated CLAY with rare rootlets. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=4kg/cm2					
	1.00	D		1.20	24.16		Firm light brown, orangish brown and greyish brown mottled sandy CLAY. Sand is fine. WITTERING FORMATION	1
	1.00	PP	PP=3kg/cm2					
	1.50	D						
	1.50	PP	PP=1kg/cm2					
	2.00	D		2.80	22.56		Stiff becoming very stiff light purplish grey CLAY with rare roots. WITTERING FORMATION	2
	2.00	PP	PP=1kg/cm2					
	2.30	PP	PP=1kg/cm2					
	2.50	D						
	2.50	PP	PP=2kg/cm2	3.40	21.96		Firm becoming stiff dark purplish grey CLAY. WITTERING FORMATION	3
	2.70	PP	PP=2.5kg/cm2					
	3.00	D						
	3.00	PP	PP=3kg/cm2					
	3.30	PP	PP=3kg/cm2	3.50	21.86		End of Pit at 3.50m	
	3.50	PP	PP=2kg/cm2					

Remarks Spalling from 2.7m bgl to 3.0m bgl Collapsed to 2.0m with water to 1.5m. Backfilled for safety. No test in deep pit. Shallow 0.6m pit excavated and tested.

Stability Localised spalling





Unit 7, Danworth Farm
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Trial Pit Log

Trial Pit No

TP06

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448932.88 - 116165.18
Level: 24.53

Date
08/07/2020

Location: Horton Heath

Dimensions (m):

1.50

Depth
3.10

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.30	24.23		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fine angular to rounded flint. TOPSOIL	
	0.40	ES					Soft becoming firm light brown, orangish brown and bluish grey mottled sandy CLAY. Sand is fine. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=0.75kg/cm2					
	1.00	D		1.90	22.63		Bluish grey and dark greyish brown clayey fine SAND. WITTERING FORMATION	1
	1.00	PP	PP=0.75kg/cm2					
	1.50	D						
	1.50	PP	PP=1kg/cm2					
	2.00	D		2.20	22.33		Firm becoming stiff dark bluish grey very sandy CLAY medium interbedded with dark bluish grey fine SAND. WITTERING FORMATION	2
	2.00	PP	PP=0kg/cm2					
	2.30	PP	PP=2kg/cm2					
	2.50	D						
	2.50	PP	PP=2.5kg/cm2	3.10	21.43		End of Pit at 3.10m	3
	3.00	D						
	3.00	PP	PP=2.5kg/cm2					
								4
								5

Remarks Seepage at 1.1m bgl

Stability Sides stable





Unit 7, Danworth Farm
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Trial Pit Log

Trial Pit No

TP07

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448743.04 - 116469.76
Level: 22.10

Date
07/07/2020

Location: Horton Heath

Dimensions (m): 1.50

Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.10	ES					
	0.40	ES		0.30	21.80		
	0.50	D		0.50	21.60		
	0.50	PP	PP=4kg/cm2				
	1.00	D					1
	1.00	PP	PP=1.5kg/cm2				
	1.50	D					
	1.50	PP	PP=1.5kg/cm2				
	2.00	D					2
	2.00	PP	PP=1.5kg/cm2				
	2.50	D					
	2.50	PP	PP=1kg/cm2	2.60	19.50		
				2.90	19.20		
	3.00	D		3.00	19.10		3
	3.00	PP	PP=1kg/cm2				
						End of Pit at 3.00m	
							4
							5

Water Strikes	
Depth Strikes	Rises to (m2g)
Remarks	
Stability	Sides stable





Unit 7, Danworth Farm
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Trial Pit Log

Trial Pit No

TP08

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448869.07 - 116400.49
Level: 21.73

Date
07/07/2020

Location: Horton Heath

Dimensions (m): 1.50

Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded. TOPSOIL	
	0.40	ES		0.30	21.43		Very stiff brown silty slightly gravelly desiccated CLAY with rare rootlets. Gravel is fmc angular to rounded flint. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=4kg/cm2	0.60	21.13		Firm becoming stiff light brown, orangish brown and greyish brown mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION	
	0.70	PP	PP=1kg/cm2					
	1.00	D						
	1.00	PP	PP=2kg/cm2					1
	1.50	D						
	1.50	PP	PP=2kg/cm2					
	2.00	D						
	2.00	PP	PP=1.5kg/cm2					2
	2.50	D						
	2.50	PP	PP=1kg/cm2	2.55	19.18		Purplish brown and orangish brown mottled very clayey fine SAND. WITTERING FORMATION	
				2.60	19.13		Firm dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	
	3.00	D		3.00	18.73			3
	3.00	PP	PP=1kg/cm2				End of Pit at 3.00m	

Remarks Seepage at 2.8m and 3.0m.

Stability Localised spalling





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No

TP09

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448917.22 - 116380.47
Level: 22.10

Date
07/07/2020

Location: Horton Heath

Dimensions (m): 1.50

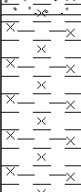
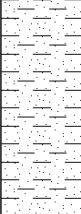
Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES		0.30	21.80		Very stiff brown silty slightly gravelly desiccated CLAY with rare rootlets. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=4kg/cm2	0.60	21.50		Very stiff orangish brown, light brown and greyish brown mottled silty slightly sandy desiccated CLAY. WITTERING FORMATION	1
	1.00	D						
	1.00	PP	PP=4kg/cm2	1.20	20.90		Stiff orangish brown, light brown and greyish brown mottled slightly sandy CLAY. WITTERING FORMATION	2
	1.50	D						
	1.50	PP	PP=2kg/cm2					
	2.00	D						
	2.00	PP	PP=2kg/cm2					
	2.50	D		2.50	19.60		Firm orangish brown and purplish brown mottled silty sandy very closely fissured CLAY. Sand is fine. WITTERING FORMATION	
	2.55	PP	PP=1kg/cm2	2.60	19.50		Firm dark grey sandy very closely fissured CLAY. Sand is fine. WITTERING FORMATION	
	3.00	D		3.00	19.10		End of Pit at 3.00m	3
	3.00	PP	PP=1.5kg/cm2					4
								5

Remarks Very slow seepage at 3.0m

Stability Sides stable





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No
TP10
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449067.36 - 116333.18
Level: 23.16

Date
08/07/2020

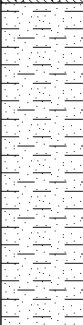
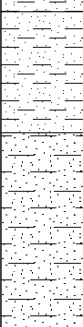
Location: Horton Heath

Dimensions (m):
Depth 3.00
0.45 1.50

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description				
	Depth	Type	Results								
	0.10	ES	PP=0.5kg/cm2	0.30	22.86		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded. TOPSOIL	1 -			
	0.40	ES					Soft orangish brown, light brown and greyish brown mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION				
	0.50	D									
	0.50	PP									
	1.00	D	PP=0.5kg/cm2	1.40	21.76		Soft light brown, orangish brown, bluish grey and dark grey mottled slightly sandy desiccated CLAY with occasional roots up to 20mm. Sand is fine. WITTERING FORMATION		2 -		
	1.00	PP									
	1.50	D									
	1.50	PP									
	2.00	D	PP=1kg/cm2	1.80	21.36		Dark bluish grey clayey fine SAND very closely interbedded with black fine SAND. WITTERING FORMATION			3 -	
	2.00	PP									
	2.50	D									
	2.50	PP									
3.00	D	PP=1kg/cm2	3.00	20.16		End of Pit at 3.00m	4 -				
3.00	PP										
											5 -

Water Strikes		Remarks	
Depth Strike	Rose to (m/bgl)		
		Seepage at 1.7m bgl, 2.0m bgl and 2.4m bgl Spalling on all sides from 1.7m to 3.0m. Pit fully collapsed to 1.2m before start of soakage testing. No test carried out. Backfilled for safety.	
		Stability	Localised spalling





Unit 7, Danworth Farm
Hurstpierpoint
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Trial Pit Log

Trial Pit No

TP11

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448626.06 - 116492.09
Level: 20.78

Date
08/07/2020

Location: Horton Heath

Dimensions (m): 1.50

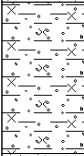
Depth
3.10

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	PP=1.5kg/cm2	0.30	20.48		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	1 2 3 4 5
	0.40	ES					Firm becoming stiff light brown, orangish brown and bluish grey mottled sandy CLAY. Sand is fine. WITTERING FORMATION	
	0.50	D						
	0.50	PP						
	1.00	D	PP=1.5kg/cm2					
	1.00	PP						
	1.20	ES	PP=1.5kg/cm2					
	1.20	PP						
	1.50	D						
				1.80	18.98		Firm light purplish brown and orangish brown mottled slightly sandy CLAY with rare iron staining. WITTERING FORMATION	
	2.00	D	PP=1kg/cm2					
	2.00	PP						
				2.40	18.38		Firm light purplish brown, orangish brown and reddish brown silty slightly gravelly CLAY with frequent iron staining. Sand is fine. Gravel is fmc angular to subangular weak siltstone. WITTERING FORMATION	
	2.50	D	PP=1kg/cm2					
	2.50	PP						
			2.90	17.88		Stiff becoming very stiff dark bluish grey sandy CLAY. Sand is fine. WITTERING FORMATION		
3.00	D	PP=2.5kg/cm2						
3.00	PP							
			3.10	17.68		End of Pit at 3.10m		

Remarks Groundwater not encountered

Stability Sides stable





Unit 7, Danworth Farm
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BN6 9GL

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Trial Pit Log

Trial Pit No

TP12

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448707.03 - 116498.15
Level: 22.29

Date
08/07/2020

Location: Horton Heath

Dimensions (m): 1.50

Depth
3.00

0.45



Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.30	21.99		Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fine angular to rounded flint. TOPSOIL	
	0.40	ES					Very stiff light brown and orangish brown silty sandy desiccated CLAY. Sand is fine. WITTERING FORMATION	
	0.50	D						
	0.50 - 0.60	B						
	0.50	PP	PP=4kg/cm2					
	0.70	ES		1.20	21.09		Light brown, orangish brown and bluish grey mottled very clayey silty fine SAND. WITTERING FORMATION	
	1.00	D						
	1.00	PP	PP=4kg/cm2					
	1.50	D						
	1.50 - 1.60	B						
	2.00	D		2.70	19.59		Firm light purplish grey and orangish brown mottled silty sandy CLAY. Sand is fine. WITTERING FORMATION	
	2.50	D						
	2.75	D						
	2.75	PP	PP=1kg/cm2					
	3.00	D						
	3.00	PP	PP=2.5kg/cm2	3.00	19.29		Stiff becoming very stiff dark bluish grey silty sandy CLAY with rare silty silt partings and one siltstone nodule 40mm across. WITTERING FORMATION	
							End of Pit at 3.00m	

Remarks Groundwater not encountered

Stability Sides stable





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Trial Pit Log

Trial Pit No
TP13
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448732.95 - 116441.16
Level: 21.79

Date
07/07/2020

Location: Horton Heath

Dimensions (m): 1.50
0.45
Depth 3.10

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 0.10	ES PP	PP=4kg/cm2	0.30	21.49		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40 0.40 0.50 0.50	ES PP D PP	PP=4kg/cm2 PP=4kg/cm2	0.80	20.99		Very stiff light brown silty slightly sandy desiccated CLAY with rare rootlets. Sand is fine. WITTERING FORMATION	
	1.00 1.00	D PP	PP=1.5kg/cm2				Firm orangish brown, light brown and greyish brown mottled slightly sandy CLAY. WITTERING FORMATION	1
	1.50 1.50	D PP	PP=1kg/cm2				Firm orangish brown, light brown and greyish brown mottled slightly sandy CLAY. WITTERING FORMATION	
	2.00 2.00	D PP	PP=1kg/cm2	2.10	19.69			2
	2.50 2.50	D PP	PP=0.5kg/cm2	2.70	19.09			
	3.00 3.00	D PP	PP=1kg/cm2	3.00 3.10	18.79 18.69		Orangish brown and purplish brown mottled very clayey fine SAND. WITTERING FORMATION	3
							Firm dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	
							End of Pit at 3.10m	

Water Strikes	
Depth Strike	Rose to (m)

Remarks

Stability Sides stable





Unit 7, Danworth Farm
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Trial Pit Log

Trial Pit No
TP14
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448671.16 - 116456.16
Level: 21.15

Date
08/07/2020

Location: Horton Heath

Dimensions (m): 1.50

Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES		0.30	20.85		Very stiff light brown and orangish brown silty sandy desiccated CLAY. Sand is fine. WITTERING FORMATION	
	0.50	D						
	0.50 - 0.60	B						
	0.50	PP	PP=4kg/cm2					
	0.70	ES						
	1.00	D						
	1.00	PP	PP=4kg/cm2	1.20	19.95		Light brown, orangish brown and light greyish brown mottled clayey silty fine SAND. WITTERING FORMATION	1
	1.50	D						
	1.50 - 1.60	B						
	2.00	D						2
	2.50	D		2.40	18.75		Firm dark bluish grey very sandy CLAY. Sand is fine. WITTERING FORMATION	
	2.50	PP	PP=1kg/cm2					
	3.00	D		3.00	18.15		End of Pit at 3.00m	3
	3.00	PP	PP=1kg/cm2					

Remarks Groundwater not encountered

Stability Sides stable





Unit 7, Danworth Farm
Hurstpierpoint
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Trial Pit Log

Trial Pit No
TP15
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448780.44 - 116496.28
Level: 21.05

Date
06/07/2020

Location: Horton Heath

Dimensions (m): 1.50

Depth
3.10

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.20	20.84		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc subangular to rounded flint.	
	0.40	ES					TOPSOIL	
	0.50	D					Very stiff light brown, orangish brown, purplish brown and light greyish brown mottled slightly silty desiccated CLAY.	
	0.50	PP	PP=2.5kg/cm2				WITTERING FORMATION	
	0.60	CBR						
	1.00	D						
	1.00	ES						
	1.00	PP	PP=3kg/cm2					1
	1.50	CBR						
	1.50	D						
	1.90	PP	PP=3kg/cm2	1.90	19.14		Firm light brown, orangish brown, purplish brown and light greyish brown mottled slightly silty desiccated CLAY.	2
	2.00	D					WITTERING FORMATION	
	2.10	PP	PP=1.5kg/cm2					
	2.50	D		2.40	18.64		Firm dark bluish grey sandy CLAY.	
	2.60	PP	PP=1.5kg/cm2				WITTERING FORMATION	
	3.00	D		3.10	17.94			3
							End of Pit at 3.10m	

Remarks Spalling between 2.4 and 3.1m

Stability Localised spalling





Unit 7, Danworth Farm
Hurstpierpoint
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Trial Pit Log

Trial Pit No

TP16

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448871.12 - 116467.91
Level: 20.76

Date
06/07/2020

Location: Horton Heath

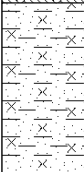
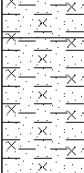
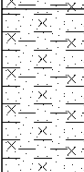
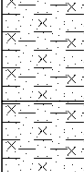
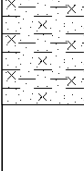
Dimensions
(m):

Scale
1:25

Client: Eastleigh Borough Council

Depth
3.00

Logged
RG

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	PP=3kg/cm2	0.30	20.46		Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	1
	0.40	ES					Stiff becoming very stiff light brown and orangish brown silty sandy desiccated CLAY. Sand is fine. WITTERING FORMATION	
	0.50	D						
	0.50	PP						
	0.90	ES	1.00	19.76		Firm orangish brown, light brown, brown and bluish grey mottled silty sandy CLAY. Sand is fine. WITTERING FORMATION	2	
	1.10	D						
	1.20	PP						
	1.20	PP						
	1.60	D	1.50	19.26		Soft becoming firm light purplish grey and orangish brown mottled silty sandy CLAY. Sand is fine. WITTERING FORMATION	3	
	1.70	PP						
	2.00	D						
	2.00	PP						
	2.50	D	2.40	18.36		Firm becoming stiff dark bluish grey silty sandy CLAY with rare silvery silt partings and one siltstone nodule 40mm across. WITTERING FORMATION	4	
	2.50	PP						
	3.00	D						
3.00	PP							
3.00	D	3.00	17.76		End of Pit at 3.00m	5		
3.00	PP							

Remarks Spalling 2.5m to 3.0m bgl. Seepage at 2.5m

Stability





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No

TP17

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448781.44 - 116448.02
Level: 21.42

Date
06/07/2020

Location: Horton Heath

Dimensions
(m):

Scale
1:25

Client: Eastleigh Borough Council

Depth
3.00

Logged
RG

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.20	21.22		Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES					Stiff light brown and orangish brown silty sandy desiccated CLAY. Sand is fine. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=1.5kg/cm2					
	0.60	B						
	1.00	D						
	1.00	PP	PP=1.5kg/cm2					1
	1.50	B		1.40	20.02		Firm light purplish grey and orangish brown mottled silty sandy CLAY. Sand is fine. WITTERING FORMATION	
	1.50	D						
	2.00	D						2
	2.00	PP	PP=1kg/cm2					
	2.50	D						
	2.50	PP	PP=1.2kg/cm2					
	2.80	PP	PP=2kg/cm2	2.70	18.72		Stiff dark bluish grey silty sandy CLAY with rare silvery silt partings and one siltstone nodule 40mm across. WITTERING FORMATION	
	3.00	D		3.00	18.42			3
							End of Pit at 3.00m	
								4
								5

Depth Strike	Remarks
	Stability





Unit 7, Danworth Farm
Hurstpierpoint
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Trial Pit Log

Trial Pit No
TP18
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448822.38 - 116407.27
Level: 21.50

Date
07/07/2020

Location: Horton Heath

Dimensions (m): 1.50
0.45
Depth 3.00

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.30	21.20		Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to subrounded flint TOPSOIL	
	0.40	ES					Firm dark brown, brown and orangish brown slightly sandy desiccated CLAY. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=1kg/cm2	0.70	20.80		Firm becoming stiff orangish brown, light brown, brown and light greyish brown mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION	1
	1.00	D						
	1.00	PP	PP=1.5kg/cm2					
	1.20	ES						
	1.50	D						
	1.50	PP	PP=2kg/cm2					
	2.00	D						2
	2.00	PP	PP=2kg/cm2					
	2.50	D		2.60	18.90		Firm orangish brown, purplish brown and light greyish brown mottled sandy CLAY. WITTERING FORMATION	
	2.50	PP	PP=1.5kg/cm2	2.70	18.80		Firm dark grey very sandy CLAY. WITTERING FORMATION	
	2.65	D						
	2.65	PP	PP=1kg/cm2					
	3.00	D		3.00	18.50		End of Pit at 3.00m	3
	3.00	PP	PP=1kg/cm2					

Remarks Slow seepage at 2.8m. Seepage at 2.8m Spalling 2.8m to 3.0m.

Stability Localised spalling





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No

TP19

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448925.60 - 116406.51
Level: 21.65

Date
06/07/2020

Location: Horton Heath

Dimensions
(m):

Scale
1:25

Client: Eastleigh Borough Council

Depth
3.00

Logged
RG

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.20	21.45		Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES					Stiff becoming very stiff light brown and orangish brown silty sandy desiccated CLAY. Sand is fine. WITTERING FORMATION	
	0.40	PP	PP=3.5kg/cm2	0.50	21.15		Firm orangish brown, light brown, brown and bluish grey mottled silty sandy CLAY. Sand is fine. WITTERING FORMATION	
	0.60	D						
	0.70	PP	PP=1.2kg/cm2					
	0.80	ES						
	1.00	D						1
				1.20	20.45		Soft becoming firm light purplish grey and orangish brown mottled silty sandy CLAY. Sand is fine. WITTERING FORMATION	
	1.50	D						
								
	2.00	D						2
	2.00	PP	PP=0.5kg/cm2					
								
	2.50	D						
	2.70	PP	PP=3kg/cm2	2.60	19.05		Very stiff dark bluish grey silty sandy CLAY with rare silvery silt partings and one siltstone nodule 40mm across. WITTERING FORMATION	
	3.00	D		3.00	18.65			3
	3.00	PP	PP=2kg/cm2				End of Pit at 3.00m	
								4
								5

Remarks Spalling 2.9m to 3.0m bgl. Seepage at 2.9m

Stability





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No

TP20

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448760.34 - 116376.57
Level: 21.13

Date
06/07/2020

Location: Horton Heath

Dimensions
(m):

Scale
1:25

Client: Eastleigh Borough Council

Depth
3.20

Logged
RG

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES		0.30	20.82		Very stiff light brown and orangish brown silty sandy slightly gravelly desiccated CLAY. Sand is fine. Gravel is fmc subangular to rounded flint. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=3kg/cm2					
	1.00	D		0.90	20.23		Firm becoming stiff orangish brown, light brown, brown and bluish grey mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION	1
	1.00	PP	PP=2kg/cm2					
	1.50	D						
	1.50	PP	PP=1.5kg/cm2					
				1.80	19.32		Soft becoming firm orangish brown and purplish brown very sandy CLAY. Sand is fine. WITTERING FORMATION	2
	2.00	D						
	2.00	PP	PP=0.5kg/cm2	2.10	19.02		Orangish brown and purplish brown clayey fine SAND. WITTERING FORMATION	
	2.50	D		2.60	18.52		Stiff becoming very stiff dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	3
	2.70	PP	PP=3kg/cm2					
	3.00	D						
				3.20	17.92		End of Pit at 3.20m	4
								5

Remarks Spalling 2.3m to 3.2m bgl. Seepage at 2.3m and 3.2m bgl

Stability





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No

TP21

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448842.51 - 116353.41
Level: 22.24

Date
07/07/2020

Location: Horton Heath

Dimensions (m): 1.50

Depth
3.00

0.45

Scale
1:25

Logged
RG

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty slightly gravelly CLAY with frequent rootlets. Gravel is fmc angular to subrounded flint. TOPSOIL	
	0.40	ES		0.30	21.94		Very stiff dark brown silty slightly gravelly dessicated CLAY. Gravel is fmc angular to rounded flint. WITTERING FORMATION	
	0.40	PP	PP=5kg/cm2					
	0.50	D		0.50	21.74		Stiff orangish brown, light brown, brown and greyish brown mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION	
	0.60	CBR						
	0.60	PP	PP=2kg/cm2					
	1.00	D						1
	1.00	PP	PP=2kg/cm2					
	1.50	CBR						
	1.50	D						
	1.50	PP	PP=2.5kg/cm2					
	2.00	D						2
	2.00	PP	PP=2kg/cm2					
	2.50	D						
	2.50	PP	PP=2kg/cm2					
				2.70	19.54			
							Firm dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	
	3.00	D						3
	3.00	PP	PP=1kg/cm2	3.00	19.24		End of Pit at 3.00m	

Remarks Slow seepage at 2.9m. Spalling between 2.9m and 3.0m.

Stability Localised spalling





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No

TP22

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448883.79 - 116347.25
Level: 22.50

Date
06/07/2020

Location: Horton Heath

Dimensions
(m):

Scale
1:25

Client: Eastleigh Borough Council

Depth
3.30

Logged
RG

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES		0.30	22.20		Stiff becoming very stiff light brown and orangish brown silty sandy slightly gravelly desiccated CLAY. Sand is fine. Gravel is fmc subangular to rounded flint. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=3kg/cm2					
	0.70	ES						
				0.80	21.70		Very stiff orangish brown, light brown, brown and bluish grey mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION	1
	1.00	D						
	1.00	PP	PP=3kg/cm2					
				1.20	21.30		Firm light purplish grey and orangish brown mottled silty sandy CLAY. Sand is fine. WITTERING FORMATION	
	1.50	D						
	1.50	PP	PP=1kg/cm2					
								
	2.00	D						
	2.00	PP	PP=0.8kg/cm2					2
								
	2.50	D						
	2.50	PP	PP=1.5kg/cm2					
				2.80	19.70			
							Firm becoming stiff purplish brown CLAY. WITTERING FORMATION	
	3.00	D						
	3.00	PP	PP=1.5kg/cm2	3.10	19.40			3
	3.20	PP	PP=2kg/cm2				Stiff dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	
				3.30	19.20		End of Pit at 3.30m	

Water Strikes		Remarks
Depth Strike	Rose to (m)	
		Stability





Unit 7, Danworth Farm
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Trial Pit Log

Trial Pit No
TP23
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448816.28 - 116325.90
Level: 22.59

Date
06/07/2020

Location: Horton Heath

Dimensions
(m):

Scale
1:25

Client: Eastleigh Borough Council

Depth
3.20

Logged
RG

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.20	22.39		Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES					Very stiff light brown and orangish brown silty sandy slightly gravelly desiccated CLAY. Sand is fine. Gravel is fmc subangular to rounded flint. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=3kg/cm2					
	1.00	D						
	1.00	ES						
	1.00	PP	PP=3kg/cm2	1.20	21.39		Firm becoming stiff orangish brown, light brown, brown and bluish grey mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION	1
	1.50	D						
	1.50	PP	PP=1.5kg/cm2					
	2.00	D						
	2.00	PP	PP=1.5kg/cm2					2
	2.50	D						
	2.50	PP	PP=1.5kg/cm2					
	2.75	PP	PP=1.5kg/cm2	2.70	19.89		Firm purplish brown sandy desiccated CLAY. Sand is fine. WITTERING FORMATION	
	3.00	D		2.80	19.79		Firm dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	3
	3.00	PP	PP=1.5kg/cm2					
				3.20	19.39		End of Pit at 3.20m	

Remarks Spalling 3.1m to 3.2m bgl. Seepage at 3.2m

Stability





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

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Trial Pit Log

Trial Pit No

TP24

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448849.00 - 116285.33
Level: 23.17

Date
06/07/2020

Location: Horton Heath

Dimensions
(m):

Scale
1:25

Client: Eastleigh Borough Council

Depth
3.10

Logged
RG

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grass over dark brown silty gravelly CLAY with frequent rootlets. Gravel is fmc angular to rounded flint. TOPSOIL	
	0.40	ES		0.30	22.87		Stiff becoming very stiff light brown and orangish brown silty sandy slightly gravelly desiccated CLAY. Sand is fine. Gravel is fmc subangular to rounded flint. WITTERING FORMATION	
	0.50	PP	PP=3kg/cm2					
	0.60	B						
				0.80	22.37		Firm orangish brown, light brown, brown and bluish grey mottled slightly sandy CLAY. Sand is fine. WITTERING FORMATION	1
	1.00	D						
	1.00	PP	PP=1kg/cm2					
	1.50	B						
	1.50	D						
	1.50	PP	PP=1kg/cm2					
	2.00	D						2
	2.00	PP	PP=1kg/cm2					
	2.50	D						
	2.50	PP	PP=1kg/cm2					
				2.70	20.47		Firm purplish brown sandy desiccated CLAY. Sand is fine. WITTERING FORMATION	
	2.80	PP	PP=1kg/cm2	2.90	20.27		Stiff dark grey sandy CLAY. Sand is fine. WITTERING FORMATION	3
	3.00	D						
	3.00	PP	PP=2kg/cm2	3.10	20.07		End of Pit at 3.10m	

Remarks Seepage at 3.1m

Stability





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Trial Pit Log

Trial Pit No
TP25
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448973.60 - 116398.49
Level: 21.86

Date
10/07/2020

Location: Horton Heath

Dimensions (m): 1.90

Depth
3.10

0.50

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15 - 1.15	ES		0.20	21.66		Grass over light brown slightly sandy CLAY possibly desiccated with frequent rootlets. TOPSOIL	
				0.40	21.46		Stiff light brown slightly sandy CLAY possibly desiccated with occasional rootlets. WITTERING FORMATION	
	0.50 0.50 0.60	D PP B	PP=0.75kg/cm2				Firm light grey with orangish staining CLAY possibly desiccated reducing with depth occasional rootlets. WITTERING FORMATION	
	1.00 1.00	D PP	PP=0.5kg/cm2	1.20	20.66		Orangish fine clayey SAND. WITTERING FORMATION	1
	1.50	D					Firm to stiff dark blueish grey sandy CLAY. Sand is fine grained. WITTERING FORMATION	
	2.00	D					Firm light grey sandy CLAY. WITTERING FORMATION	2
	2.50	D		2.60	19.26		Firm light grey sandy CLAY. WITTERING FORMATION	
	2.80	PP	PP=1kg/cm2	2.90	18.96		Firm light grey sandy CLAY. WITTERING FORMATION	
	3.00 3.00	D PP	PP=1kg/cm2	3.10	18.76		Firm light grey sandy CLAY. WITTERING FORMATION	3
							End of Pit at 3.10m	

Remarks Groundwater not encountered

Stability Sides stable





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Hurstpierpoint
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Trial Pit Log

Trial Pit No
TP26
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449038.24 - 116400.45
Level: 21.67

Date
10/07/2020

Location: Horton Heath

Dimensions (m):
2.00
0.50
Depth 3.30

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	21.47		Grass over light brown slightly sandy CLAY possibly desiccated with frequent rootlets. TOPSOIL	
	0.30	ES					Stiff light brown slightly sandy CLAY possibly desiccated with occasional rootlets. WITTERING FORMATION	
	0.50	D		0.50	21.17		Firm light grey orangish CLAY. WITTERING FORMATION	
	0.70	PP	PP=0.5kg/cm2					
	0.90	ES						
	1.00	D						
	1.00	PP	PP=0.5kg/cm2					1
	1.50	D		1.50	20.17		Firm to stiff dark blueish grey sandy CLAY. Sand is fine. WITTERING FORMATION	
	1.50	PP	PP=0.5kg/cm2					
	2.00	D						2
	2.00	PP	PP=0.25kg/cm2					
	2.50	D						
	3.00	D						3
				3.30	18.37		End of Pit at 3.30m	

Remarks Groundwater seepage in base of pit

Stability Sides stable





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Trial Pit Log

Trial Pit No
TP27
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449100.56 - 116360.89
Level: 23.85

Date
10/07/2020

Location: Horton Heath

Dimensions (m): 1.80

Depth
3.00

0.60

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	23.65		Grass over light brown slightly sandy CLAY possibly desiccated with frequent rootlets. TOPSOIL	
	0.30	ES					Stiff light brown slightly sandy CLAY possibly desiccated with occasional rootlets and chalk fine to medium sub angular to sub rounded of chalk and flint WITTERING FORMATION	
	0.50	D		0.50	23.35		Soft to firm light orangish brown slightly wet CLAY. WITTERING FORMATION	
	1.00	D		1.00	22.85		Soft to firm orangish brown very wet slightly sandy CLAY. Sand is fine to medium WITTERING FORMATION <i>Land drain 60mm dia.</i>	1
	1.20	ES						
	1.50	D		1.50	22.35		Blueish grey clayey fine SAND with bands of firm blueish grey CLAY. WITTERING FORMATION	
	2.00	D		2.20	21.65		Firm blueish grey CLAY. WITTERING FORMATION	2
	2.50	D						
	3.00	D		3.00	20.85		End of Pit at 3.00m	3
	3.00	PP	PP=0.75kg/cm2					

Remarks Groundwater seepage in base of pit. Side wall collapse at 1.5m bgl.

Stability Sides unstable





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Trial Pit Log

Trial Pit No
TP28
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448963.18 - 116340.33
Level: 23.05

Date
10/07/2020

Location: Horton Heath

Dimensions (m): 2.00
Depth 3.10

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	22.85		Grass over dark brown silty CLAY with frequent roots and rootlets TOPSOIL	
	0.50 0.50 0.60	D PP B	PP=2.5kg/cm2	0.50	22.55		Very stiff possibly desiccated orange and grey mottled CLAY with occasional rootlets WITTERING FORMATION	
	0.80	ES					Stiff orange and grey mottled CLAY with rare rootlets WITTERING FORMATION	
	1.00 1.00	D PP	PP=2kg/cm2					1
	1.50	D		1.50	21.55		Firm blueish grey sandy CLAY. Sand is fine. WITTERING FORMATION	
				1.70	21.35		Firm blueish grey CLAY WITTERING FORMATION	
	2.00	D						2
	2.50	D						
	2.90 3.00 3.00	PP D PP	PP=1kg/cm2 PP=1.5kg/cm2	3.10	19.95			3
							End of Pit at 3.10m	
								4
								5

Water Strikes		Remarks	
Depth Strike	Rose to (m)		
		Groundwater seepage in base of pit	
		Stability	Sides stable





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Trial Pit Log

Trial Pit No
TP29
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449100.70 - 116298.23
Level: 24.33

Date
10/07/2020

Location: Horton Heath

Dimensions (m): 2.00
Depth 3.00

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15 - 0.30	ES	PP=0kg/cm2	0.20	24.13		Grass over light brown slightly sandy CLAY probably dedicated with frequent rootlets. Sand is fine. TOPSOIL	
	0.50	D		0.50	23.83		Light brown slightly sandy CLAY possibly desiccated with occasional rootlets. Sand is fine. WITTERING FORMATION	
	0.50	PP					Soft to firm light orangish brown wet sticky CLAY. WITTERING FORMATION	
	1.00	D					Bluish light grey slightly clayey fine SAND. WITTERING FORMATION	1
	1.50	D		1.50	22.83		Dark bluish grey fine to medium very wet SAND. WITTERING FORMATION	
	2.00	D					End of Pit at 3.00m	2
	2.50	D		2.40	21.93			
	3.00	D		3.00	21.33			3
								4
								5

Remarks Groundwater not encountered. Side wall collapse at 1.6m bgl

Stability Sides unstable





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Trial Pit Log

Trial Pit No
TP30
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449022.37 - 116331.82
Level: 23.18

Date
10/07/2020

Location: Horton Heath

Dimensions (m): 2.10
0.50
Depth 3.00

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	22.98		Grass over light brown slightly sandy CLAY possibly desiccated with frequent rootlets. TOPSOIL	
	0.30	ES					Firm to stiff light brown slightly sandy CLAY possibly desiccated with occasional rootlets with occasional flint and chalk gravel. Gravel is fine to medium and sub angular to sub rounded.	
	0.50	D		0.50	22.68		WITTERING FORMATION	
	0.50	PP	PP=1kg/cm2	0.60	22.58		Firm grey with orangish staining CLAY with occasional rootlets and rare chalk gravel. Chalk gravel is fine. WITTERING FORMATION	
	1.00	D		1.00	22.18		Soft to firm grey with orangish staining slightly wet CLAY with occasional rootlets and rare chalk gravel. Chalk gravel is fine. WITTERING FORMATION	1
	1.50	D					Dark orangish reddish very fine silty SAND. WITTERING FORMATION	
				1.80	21.38		Bluish grey very wet fine clayey SAND. WITTERING FORMATION	2
	2.00	D						
				2.30	20.88		Firm dark greyish CLAY WITTERING FORMATION	
	2.50	D						
	2.80	PP	PP=0.75kg/cm2					
	3.00	D		3.00	20.18			3
	3.00	PP	PP=1.25kg/cm2				End of Pit at 3.00m	
								4
								5

Remarks Water seepage at 1.5 m bgl. Side wall collapse at 1m bgl.

Stability Sides unstable





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Trial Pit Log

Trial Pit No
TP31
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449021.79 - 116291.64
Level: 23.93

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 2.00

Depth
3.10

0.50

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	23.73		Grass over brown sandy SILT with frequent rootlets. Sand is fine. TOPSOIL	
	0.30	ES					Stiff light brown sandy CLAY with occasional rootlets. Sand is fine. WITTERING FORMATION	
	0.50	D		0.50	23.43		Firm to stiff light grey CLAY with orangish staining. WITTERING FORMATION	
	0.50	PP	PP=0.75kg/cm2					
	0.70	ES						
	1.00	D						1
	1.00	PP	PP=3.1kg/cm2					
	1.50	D						
	1.50	PP	PP=1.25kg/cm2					
	2.00	D						2
	2.00	PP	PP=1.5kg/cm2					
	2.50	D		2.50	21.43		Firm to stiff orangish interbedded CLAY with purplish grey sandy CLAY. Sand is fine. WITTERING FORMATION	
	2.50	PP	PP=0.75kg/cm2	2.70	21.23		Firm dark grey slightly sandy CLAY. Sand is fine. WITTERING FORMATION	
	3.00	D		3.10	20.83		End of Pit at 3.10m	3
								4
								5

Remarks Groundwater seepage in base of pit

Stability Sides stable





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Trial Pit Log

Trial Pit No
TP32
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448921.29 - 116251.31
Level: 24.04

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 2.10

Depth
3.00

0.45

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.10	23.94		Grass over light brown sandy CLAY possibly desiccated with frequent rootlets. Sand is fine.	
				0.30	23.74		TOPSOIL	
	0.40	ES					Stiff light brown sandy gravelly CLAY possibly desiccated with occasional rootlets. Sand is fine. Gravel is coarse.	
	0.50	D					WITTERING FORMATION	
							Stiff light brown sandy CLAY with orangish red staining and occasional rootlets. Sand is fine.	
							WITTERING FORMATION	
	0.90	PP	PP=2kg/cm2					1
	1.00	D						
	1.50	D						
	1.90	PP	PP=2.5kg/cm2	2.00	22.04		Firm light reddish grey CLAY.	2
	2.00	D					WITTERING FORMATION	
	2.20	PP	PP=0.5kg/cm2					
	2.40	PP	PP=0.5kg/cm2					
	2.50	D						
	2.60	PP	PP=0.5kg/cm2	2.60	21.44		Firm orangish dark brown CLAY with occasional charcoal.	
	2.70	PP	PP=0.5kg/cm2				WITTERING FORMATION	
				2.80	21.24		Firm to stiff very dark grey CLAY.	
							WITTERING FORMATION	
	3.00	D		3.00	21.04			3
	3.00	PP	PP=1.5kg/cm2				End of Pit at 3.00m	

Remarks Groundwater seepage in base of pit. Side wall collapse at 2.6m bgl.

Stability Sides unstable





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Trial Pit Log

Trial Pit No

TP33

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449043.19 - 116234.00
Level: 25.86

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 1.90

Depth
3.10

0.55



Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	25.66		Grass over light brown sandy CLAY possibly desiccated with frequent rootlets. Sand is fine. TOPSOIL	
	0.30	ES					Stiff light brown CLAY with occasional rootlets. WITTERING FORMATION	
	0.50	D						
	0.50	PP	PP=2.75kg/cm2					
	1.00	D		1.00	24.86		Firm to stiff light brown orangish CLAY. WITTERING FORMATION	1
	1.00	PP	PP=1.5kg/cm2					
	1.50	D						
	2.00	D						2
	2.20	PP	PP=1kg/cm2					
	2.50	D						
	2.80	PP	PP=2kg/cm2	2.70	23.16		Firm dark brown and black unconsolidated CLAY. WITTERING FORMATION	
	3.00	D		2.80	23.06		Stiff dark grey CLAY. WITTERING FORMATION	3
	3.10	PP	PP=2.5kg/cm2	3.10	22.76		End of Pit at 3.10m	

Remarks Groundwater seepage in base of pit

Stability Sides stable





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Trial Pit Log

Trial Pit No

TP34

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448860.46 - 116225.74
Level: 23.71

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 1.90

Depth
3.00

0.55

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.13	ES		0.20	23.50		Grass over light brown sandy CLAY possibly desiccated with frequent rootlets. Sand is fine. TOPSOIL
	0.30	ES					Stiff light brown sandy CLAY possibly desiccated with occasional rootlets. Sand is fine. WITTERING FORMATION
	0.40	PP	PP=1kg/cm2	0.40	23.30		
	0.50	D					
	0.60	B					
	1.00	D					
	1.00	PP	PP=1.5kg/cm2				
	1.50	D					
	2.00	D					
	2.10	PP	PP=1kg/cm2				
	2.40			2.40	21.30		
	2.50	D					Firm light orangish brown CLAY. WITTERING FORMATION
	2.60	PP	PP=0.5kg/cm2				
	2.80			2.80	20.90		
	2.90	PP	PP=2kg/cm2				Stiff very dark grey CLAY. WITTERING FORMATION
	3.00	D		3.00	20.70		
	3.00	PP	PP=2.5kg/cm2				
							End of Pit at 3.00m

Remarks Water seepage at 2.8m bgl

Stability Sides stable





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Trial Pit Log

Trial Pit No
TP35
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448891.24 - 116187.93
Level: 24.14

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 2.00
0.50
Depth 3.40

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				0.20	23.94		Brown very sandy CLAY possibly desiccated with frequent rootlets. Sand is fine. Topped with turf. TOPSOIL	
	0.40	PP	PP=3.75kg/cm2	0.40	23.74		Stiff brown very sandy CLAY possibly desiccated with occasional rootlets. Sand is fine. WITTERING FORMATION	
	0.50	D					Stiff orangish brown sandy CLAY with occasional rootlets Sand if fine to medium. WITTERING FORMATION	
	0.60	ES					Firm orangish slightly sandy CLAY. Sand is fine. WITTERING FORMATION	1
	0.90	ES		1.00	23.14			
	0.90	PP	PP=2.75kg/cm2					
	1.00	D						
	1.10	PP	PP=0.5kg/cm2					
	1.15	ES						
	1.50	D						
	1.50	PP	PP=0.5kg/cm2					
	1.90	PP	PP=0.5kg/cm2					2
	2.00	D						
	2.10	PP	PP=0.5kg/cm2					
	2.40	PP	PP=1kg/cm2					
	2.50	D						
	2.80	PP	PP=0.5kg/cm2					
	3.00	D		3.00	21.14		Stiff light grey CLAY. WITTERING FORMATION	3
	3.00	PP	PP=1kg/cm2					
	3.20	PP	PP=1.5kg/cm2					
	3.40	PP	PP=2kg/cm2	3.40	20.74		End of Pit at 3.40m	4
								5

Remarks Water seepage at 2.3m bgl

Stability Sides stable





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP36
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448997.28 - 116200.02
Level: 26.37

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 2.10

Depth
2.90

0.50

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	26.17		Grass over light brown sandy CLAY possibly desiccated with frequent rootlets. Sand is fine. TOPSOIL	
	0.40	ES					Light brown sandy CLAY possibly desiccated with occasional rootlets. Sand is fine. WITTERING FORMATION	
	0.50	D		0.50	25.87		Orange medium SAND. WITTERING FORMATION	
				0.80	25.57		Orangish yellowish medium SAND. WITTERING FORMATION	1
	1.00	D						
	1.50	D						
	1.80	PP	PP=1kg/cm2	1.70	24.67		Firm light grey sandy CLAY. Sand is medium. WITTERING FORMATION	2
	2.00	D						
				2.20	24.17		Stiff dark grey CLAY. WITTERING FORMATION	
	2.40	PP	PP=1.25kg/cm2					
	2.50	D						
	2.60	PP	PP=1.5kg/cm2					
	2.90	D		2.90	23.47		End of Pit at 2.90m	3
								4
								5

Remarks Running Sand at 1.6m bgl. Side wall collapse due to the running sand at 1.6m bgl

Stability Sides unstable





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No
TP37
Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448981.46 - 116131.67
Level: 26.63

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 2.00
Depth 3.30

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES					Grass over dark brown possibly desiccated sandy CLAY with frequent rootlets. Sand is fine to medium. TOPSOIL	
	0.25	PP	PP=4.2kg/cm2	0.20	26.43		Very stiff light brown possibly desiccated slightly sandy CLAY with occasional rootlets. Sand is fine to medium. WITTERING FORMATION	
	0.30	ES						
	0.50	D						
	0.50	PP	PP=3.5kg/cm2	0.50	26.13		Stiff orange and grey slightly sandy CLAY. Sand is fine to medium. WITTERING FORMATION	
	0.90	ES						
	0.90	PP	PP=1.6kg/cm2	0.90	25.73		Firm orange and grey very sandy CLAY. Sand is medium. WITTERING FORMATION	1
	1.00	D						
	1.50	D						
	1.50	PP	PP=1kg/cm2	1.60	25.03		Band of grey medium-grained SAND. WITTERING FORMATION	
				1.75	24.88		Dark grey medium to fine SAND interbedded with stiff grey bluish CLAY. WITTERING FORMATION	2
	2.00	D						
	2.00	PP	PP=2.2kg/cm2					
	2.50	D						
				2.80	23.83			
	3.00	D					Stiff bluish grey sandy CLAY WITTERING FORMATION	3
				3.30	23.33			
	3.50	PP	PP=1.6kg/cm2				End of Pit at 3.30m	4

Remarks Running sand @ 2.1m bgl. Collapse at 1.5m bgl

Stability Sides unstable





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP38

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448914.02 - 116135.22
Level: 24.39

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 1.90

Depth
2.90

0.45

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES		0.20	24.19		Dark brown sandy CLAY possibly desiccated with frequent rootlets. Sand is fine. TOPSOIL	
	0.30	PP	PP=2.5kg/cm2				Stiff dark brown slightly sandy CLAY with occasional rootlets. Sand is Fine.	
	0.40	PP	PP=1.3kg/cm2	0.40	23.99		WITTERING FORMATION	
	0.50	D					Firm yellowish grey sandy CLAY. Sand is fine to medium.	
	0.60	ES					WITTERING FORMATION	
	1.00	D						1
	1.00	PP	PP=1kg/cm2					
	1.20	ES						
	1.30	PP	PP=0.75kg/cm2					
	1.50	D						
	1.70	PP	PP=0.5kg/cm2					
	2.00	D						2
	2.10	PP	PP=1kg/cm2	2.10	22.29		Firm bluish grey slightly sandy CLAY. Sand is Fine.	
	2.20	PP	PP=1.2kg/cm2				WITTERING FORMATION	
	2.50	PP	PP=0.75kg/cm2					
	2.90	D		2.90	21.49		End of Pit at 2.90m	3
								4
								5

Remarks Water seepage in base of pit

Stability Sides stable





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP39

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448977.63 - 116102.70
Level: 27.39

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 1.90
0.50
Depth 2.50

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Light greyish brown possibly desiccated sandy CLAY with frequent rootlets. SAND is fine to medium-grained. Topped with turf. TOPSOIL	
	0.40	ES		0.30	27.09		Very stiff light grey with orangish staining possibly desiccated sandy CLAY with occasional rootlets. Sand is fine-grained. WITTERING FORMATION	
	0.40	PP	PP=4.5kg/cm2					
	0.50	D						
	0.80	PP	PP=1.5kg/cm2	0.70	26.69		Stiff orangish greyish slightly sandy CLAY. Sand is fine to medium. WITTERING FORMATION	
	1.00	D		1.10	26.29		Firm to stiff orange and grey sandy CLAY. Sand is medium. WITTERING FORMATION	1
	1.50	D						
				1.80	25.59		Dark grey brownish slightly clayey medium SAND. WITTERING FORMATION	2
	2.00	D						
	2.20	PP	PP=2kg/cm2	2.20	25.19		Stiff grey bluish slightly sandy CLAY. Sand is fine. WITTERING FORMATION	
	2.50	D		2.50	24.89		End of Pit at 2.50m	3
								4
								5

Remarks Ground water seepage @ 2.2m bgl. Side wall collapse at 1.5m bgl/

Stability Sides unstable





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP40

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448943.06 - 116088.26
Level: 26.84

Date
09/07/2020

Location: Horton Heath

Dimensions (m): 1.70

Depth
2.90

0.50

Scale
1:25

Logged
TM

Client: Eastleigh Borough Council

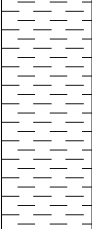
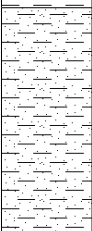
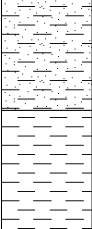
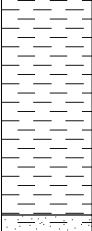
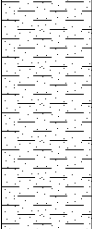
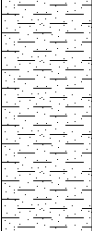
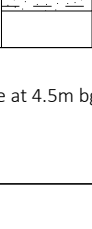
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.20	26.64		Grass over topsoil dark brown /reddish sandy CLAY with frequent roots. TOPSOIL	
	0.30	ES					Stiff light orangish and grey sandy CLAY with occasional rootlets. Sand is medium. WITTERING FORMATION	
	0.50 0.50	D PP	PP=2kg/cm2					
	0.80	ES		0.75	26.09		Stiff orange and grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION	1
	1.00	D						
				1.30	25.54		Firm light grey very sandy CLAY/ clayey SAND. Sand is fine WITTERING FORMATION	
	1.50	D						
	2.00 2.00	D PP	PP=1.8kg/cm2	2.00	24.84		Stiff light grey blueish CLAY. WITTERING FORMATION	2
	2.50 2.50	D PP	PP=1.5kg/cm2	2.90	23.94			
	3.00	D					End of Pit at 2.90m	3
								4
								5

Remarks Groundwater seepage at 1.5m bgl and running sand

Stability Sides unstable below water table



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS01 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448632E - 116529N		Hole Type WLS	
Location: Horton Heath				Level: 21.38		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 08/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES	4.5kg/cm2	0.20	21.18		Grass over dark brown silty CLAY with frequent roots and rootlets and occasional flint gravel	1 2 3 4 5
		0.25	PP					TOPSOIL	
		0.40	ES	4.5kg/cm2				Very stiff possibly desiccated orange and grey mottled CLAY with frequent rootlets	
		0.50	D						
		0.50	PP						
		0.75	PP	4.5kg/cm2	1.20	20.18		WITTERING FORMATION	
		1.00	D						
		1.00	PP						
		1.00							
		1.00							
		1.50	D	3.5kg/cm2	2.30	19.08		Stiff to very stiff orange and grey mottled slightly sandy CLAY. Sand is fine	
		1.50	PP						
		2.00	D	3.2kg/cm2 N=14 (2,2/2,4,4,4)	2.30	19.08		WITTERING FORMATION	
		2.00	PP						
		2.00							
2.50	D	4.0kg/cm2	2.30	19.08		Very stiff light grey and orange brown mottled CLAY (weakly cemented MUDSTONE)			
2.50	PP								
2.50									
3.00	D	3.5kg/cm2 N=16 (2,3/4,4,4,4)	3.40	17.98		WITTERING FORMATION			
3.00	PP								
3.00									
3.50	D	3.0kg/cm2	3.40	17.98		Stiff dark grey and grey mottled slightly sandy CLAY. Sand is fine			
3.50	PP								
3.50									
4.00	D	2.5kg/cm2 N=17 (3,2/4,4,4,5)	5.00	16.38		WITTERING FORMATION			
4.00	PP								
4.00									
4.50	D	2.8kg/cm2	5.00	16.38		WITTERING FORMATION			
4.50	PP								
5.00	D	3.5kg/cm2	5.00	16.38		WITTERING FORMATION			
5.00	PP								
Continued on Next Sheet									

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	AGS
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage at 4.5m bgl	



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Borehole Log

Borehole No.

WS01

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448632E - 116529N

Hole Type	WLS
1	0.0000
2	0.0000
3	0.0000
4	0.0000
5	0.0000
6	0.0000
7	0.0000
8	0.0000
9	0.0000
10	0.0000
11	0.0000
12	0.0000
13	0.0000
14	0.0000
15	0.0000
16	0.0000
17	0.0000
18	0.0000
19	0.0000
20	0.0000
21	0.0000
22	0.0000
23	0.0000
24	0.0000
25	0.0000
26	0.0000
27	0.0000
28	0.0000
29	0.0000
30	0.0000
31	0.0000
32	0.0000
33	0.0000
34	0.0000
35	0.0000
36	0.0000
37	0.0000
38	0.0000
39	0.0000
40	0.0000
41	0.0000
42	0.0000
43	0.0000
44	0.0000
45	0.0000
46	0.0000
47	0.0000
48	0.0000
49	0.0000
50	0.0000
51	0.0000
52	0.0000
53	0.0000
54	0.0000
55	0.0000
56	0.0000
57	0.0000
58	0.0000
59	0.0000
60	0.0000
61	0.0000
62	0.0000
63	0.0000
64	0.0000
65	0.0000
66	0.0000
67	0.0000
68	0.0000
69	0.0000
70	0.0000
71	0.0000
72	0.0000
73	0.0000
74	0.0000
75	0.0000
76	0.0000
77	0.0000
78	0.0000
79	0.0000
80	0.0000
81	0.0000
82	0.0000
83	0.0000
84	0.0000
85	0.0000
86	0.0000
87	0.0000
88	0.0000
89	0.0000
90	0.0000
91	0.0000
92	0.0000
93	0.0000
94	0.0000
95	0.0000
96	0.0000
97	0.0000
98	0.0000
99	0.0000
100	0.0000

Location: Horton Heath

Level: 21.38

Scale
1:25

Client: Eastleigh Borough Council

Dates: 08/07/2020

Logged By
FG

[illegible]

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS02 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448653E - 116382N		Hole Type WLS	
Location: Horton Heath				Level: 19.54		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 08/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES		0.20	19.34	 Grass over dark brown silty CLAY with frequent roots and rootlets and occasional flint gravel TOPSOIL		
		0.25	PP	4.5kg/cm2					
					0.40	19.14	 Very stiff possibly desiccated orange and grey mottled CLAY with frequent rootlets WITTERING FORMATION		
		0.50	D						
		0.50	PP	3.1kg/cm2					
		0.60	ES						
		0.75	PP	2.3kg/cm2					
					1.10	18.44	 Stiff orange and grey mottled CLAY WITTERING FORMATION		
		1.00	D						
		1.00	PP	1.8kg/cm2 N=5 (1,0/1,1,2,1)					
		1.00							
		1.50	D		1.80	17.74	 Firm to stiff orange and grey mottled sandy CLAY. Sand is fine WITTERING FORMATION		
		1.50	PP	2.0kg/cm2					
					2.10	17.44	 Firm to stiff orange brown and grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION		
		2.00	D						
		2.00	PP	1.8kg/cm2 N=10 (1,2/2,3,3,2)					
		2.00							
					2.30	17.24	 Firm orange brown slightly sandy CLAY WITTERING FORMATION		
		2.50	D						
		2.50	PP	3.5kg/cm2					
				2.60	16.94	 Stiff light grey and dark grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION			
	3.00	D							
	3.00	PP	2.5kg/cm2 N=13 (2,3/2,4,4,3)						
	3.00								
				3.30	16.24	 Stiff grey laminated CLAY WITTERING FORMATION			
	3.50	D							
	3.50	PP	3.5kg/cm2						
						 Stiff to very stiff dark grey and light grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION			
	4.00	D							
	4.00	PP	3.5kg/cm2 N=13 (1,3/2,3,4,4)						
	4.00								
	4.50	D							
	4.50	PP	3.2kg/cm2						
				5.00	14.54	 Continued on Next Sheet			
	5.00	D							
	5.00	PP	3.9kg/cm2						

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage at 1.5m bgl and 4.2m bgl 3	



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Borehole Log

WS02

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448653E - 116382N

Hole Type	WLS
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Location: Horton Heath

Level:	19.54
--------	-------

Scale
1:25

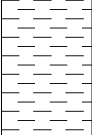
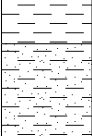
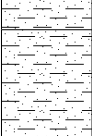
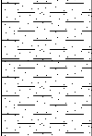
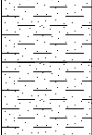
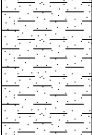
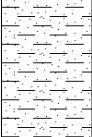
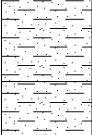
Client: Eastleigh Borough Council

Dates: 08/07/2020

Logged By
FG

[illegible]

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS03 Sheet 1 of 1	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448773E - 116405N		Hole Type WLS	
Location: Horton Heath				Level: 21.35		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 07/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20	21.15		Grass over dark brown silty CLAY with frequent roots and rootlets and occasional flint gravel TOPSOIL	1 2 3 4 5
	0.25	PP	4.5kg/cm2					Very stiff possibly desiccated orange and grey mottled CLAY with frequent rootlets WITTERING FORMATION	
	0.40	ES			0.80	20.55			
	0.50	D							
	0.50	PP	4.0kg/cm2						
	0.70	ES							
	0.75	PP	4.0kg/cm2		1.20	20.15			
	1.00	D							
	1.00	PP	1.8kg/cm2 N=7 (0,1/1,2,2,2)						
	1.00				1.75	19.60			
	1.50	D							
	1.50	PP	1.1kg/cm2		2.20	19.15			
	2.00	D							
	2.00	PP	3.0kg/cm2 N=11 (1,2/2,3,2,4)						
	2.00				3.60	17.75			
	2.50	D							
	2.50	PP	2.0kg/cm2						
3.00	D			5.00	16.35				
3.00	PP	1.8kg/cm2 N=13 (2,2/2,3,5,3)							
3.00									
3.50	D								
3.50	PP	1.6kg/cm2							
4.00	D								
4.00	PP	3.4kg/cm2 N=13 (1,2/3,3,3,4)							
4.00									
4.50	PP	2.4kg/cm2							
		5.00	PP	3.5kg/cm2 N=17 (2,3/3,4,5,5)					
		5.00							
End of Borehole at 5.00m									

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage in sandy layers between 3m and 5m bgl	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS04 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448867E - 116438N		Hole Type WLS	
Location: Horton Heath		Level: 21.22		Scale 1:25		Logged By FG	
Client: Eastleigh Borough Council		Dates: 06/07/2020					

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.15	21.07		Grass over dark brown silty CLAY with frequent roots and rootlets TOPSOIL	1 2 3 4 5
		0.25	PP	3.5kg/cm2				Very stiff possibly desiccated orange and grey mottled CLAY with frequent rootlets and occasional flint gravel WITTERING FORMATION	
		0.30	ES		0.35	20.87			
		0.50	D						
		0.50	PP	1.8kg/cm2				Firm orange and grey mottled sandy CLAY with occasional flint gravel. Sand is fine WITTERING FORMATION	
		0.75	PP	1.4kg/cm2					
		0.90	ES						
		1.00	D						
		1.00	PP	1.5kg/cm2 N=10 (1,2/2,2,3,3)	1.10	20.12			
			1.50	D				Firm to stiff orange and grey slightly sandy CLAY. Sand is fine WITTERING FORMATION	
		1.50	PP	1.5kg/cm2	1.55	19.67			
			2.00	D				Orange slightly clayey fine to medium SAND WITTERING FORMATION	
		2.00		N=12 (1,2/2,3,3,4)	2.10	19.12			
		2.50	D						
			2.50	PP	1.5kg/cm2				
	3.00	D							
	3.00	PP	1.4kg/cm2 N=12 (2,2/3,3,2,4)						
	3.00								
	3.50	D		3.40	17.82				
		3.50	PP	1.5kg/cm2				Firm to stiff light grey and dark grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION	
	4.00	D							
	4.00	PP	1.4kg/cm2 N=17 (2,4/3,4,4,6)						
		4.50	D		4.50	16.72		Stiff dark grey slightly sandy CLAY. Sand is medium WITTERING FORMATION	
	5.00	D							
	5.00	PP	2.8kg/cm2	5.00	16.22		Continued on Next Sheet		

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage between 4m and 4.5m bgl	



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Borehole Log

WS04

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448867E - 116438N

Hole Type	WLS
1	0.0000
2	0.0000
3	0.0000
4	0.0000
5	0.0000
6	0.0000
7	0.0000
8	0.0000
9	0.0000
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90	0.0000
91	0.0000
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95	0.0000
96	0.0000
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98	0.0000
99	0.0000
100	0.0000

Location: Horton Heath

Level: 21.22

Scale
1:25

Client: Eastleigh Borough Council

Dates: 06/07/2020

Logged By
FG

[illegible]

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS05 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448938E - 116439N		Hole Type WLS	
Location: Horton Heath				Level: 21.04		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 06/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.15	20.89		Grass over dark brown silty CLAY with frequent roots and rootlets TOPSOIL	
		0.25	PP	4.0kg/cm2				Very stiff possibly desiccated orange and grey mottled slightly gravelly CLAY with frequent roots and rootlets WITTERING FORMATION	
		0.40	ES						
		0.50	D						
		0.50	PP	3.8kg/cm2	0.60	20.44			
		0.75	PP	3.0kg/cm2					
		1.00	D						
		1.00	ES						
		1.00	PP	2.5kg/cm2 N=7 (0,0/2,1,2,2)	1.20	19.84		Stiff orange and grey mottled possibly desiccated CLAY with occasional rootlets and rare flint gravel WITTERING FORMATION	
		1.50	D						
		1.50	PP	1.5kg/cm2					
		2.00	D		1.90	19.14			
		2.00	PP	2.6kg/cm2 N=10 (1,2/2,3,2,3)					
		2.00							
		2.50	D		2.30	18.74			
		2.50	PP	2.3kg/cm2					
		3.00	D						
		3.00	PP	2.5kg/cm2 N=8 (2,1/2,2,2,2)					
	3.00								
	3.50	D		3.30	17.74				
	3.50	PP	1.8kg/cm2						
	4.00	D							
	4.00	PP	2.8kg/cm2 N=11 (1,2/3,2,3,3)						
	4.00								
	4.50	D							
	4.50	PP	1.4kg/cm2						
	5.00	D							
	5.00	PP	1.8kg/cm2	5.00	16.04				
Continued on Next Sheet								5	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage at 3m bgl	



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Borehole Log

WS05

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448938E - 116439N

Hole Type	WLS
1	0.0000
2	0.0000
3	0.0000
4	0.0000
5	0.0000
6	0.0000
7	0.0000
8	0.0000
9	0.0000
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Location: Horton Heath

Level:	21.04
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Scale
1:25

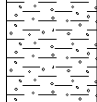
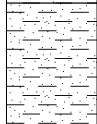
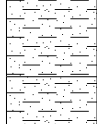
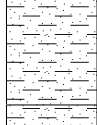
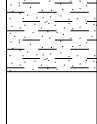
Client: Eastleigh Borough Council

Dates: 06/07/2020

Logged By
FG

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 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS06 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 449033E - 116360N		Hole Type WLS	
Location: Horton Heath				Level: 22.52		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 08/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20	22.32	 Grass over dark brown silty CLAY with frequent roots and rootlets and rare flint gravel TOPSOIL		
		0.25 0.30	PP ES	4.0kg/cm2					
		0.50 0.50	D PP	3.5kg/cm2	0.55	21.97	 Very stiff possibly desiccated orange and grey mottled slightly gravelly CLAY with frequent rootlets WITTERING FORMATION		
		0.75	PP	1.5kg/cm2					
		1.00 1.00 1.00	D PP	1.2kg/cm2 N=3 (0,0/0,0,1,2)	1.20	21.32	 Firm orange and grey mottled slightly sandy CLAY. Sand is medium WITTERING FORMATION	1	
		1.50 1.50	D PP	2.4kg/cm2	1.70	20.82	 Stiff orange and grey mottled slightly sandy CLAY. Sand is medium WITTERING FORMATION		
		2.00 2.00 2.00	D PP	2.4kg/cm2 N=5 (1,2/1,1,2,1)	2.00	20.52	 Stiff brown and grey mottled sandy CLAY. Sand is fine to medium WITTERING FORMATION	2	
							No sample recovery		
			3.00		N=9 (2,2/2,2,2,3)	3.00	19.52	 Stiff light grey and dark grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION	3
			3.50 3.50	D PP	1.2kg/cm2				
			4.00 4.00 4.00	D PP	1.8kg/cm2 N=10 (2,1/2,3,2,3)				4
		4.50 4.50	D PP	2.5kg/cm2					
		5.00 5.00	D PP	2.3kg/cm2	5.00	17.52		5	
Continued on Next Sheet									

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
		2.00	1.20			Groundwater struck at 2m bgl	



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Borehole Log

Borehole No.

WS06

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449033E - 116360N

Hole Type	WLS
1	0.0000
2	0.0000
3	0.0000
4	0.0000
5	0.0000
6	0.0000
7	0.0000
8	0.0000
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91	0.0000
92	0.0000
93	0.0000
94	0.0000
95	0.0000
96	0.0000
97	0.0000
98	0.0000
99	0.0000
100	0.0000

Location: Horton Heath

Level:	22.52
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Scale
1:25

Client: Eastleigh Borough Council

Dates: 08/07/2020

Logged By
FG

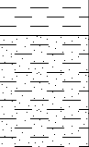
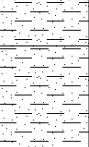
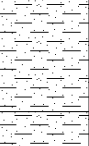
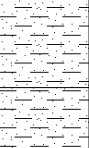
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 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS07 Sheet 1 of 1	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 449123E - 116329N		Hole Type WLS	
Location: Horton Heath				Level: 24.88		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 08/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES	3.5kg/cm2	0.20	24.68	 Grass over dark brown silty CLAY with frequent roots and rootlets and rare flint gravel TOPSOIL	1	
	0.25	PP							
	0.35	ES							
			0.50	D	3.8kg/cm2	0.60	24.28	 Very stiff possibly desiccated orange and grey mottled CLAY with occasional rootlets WITTERING FORMATION	
	0.50	PP							
			0.75	PP	1.0kg/cm2			 Firm orange and grey mottled very sandy CLAY. Sand is fine WITTERING FORMATION	
	0.80	ES							
			1.00	D	1.0kg/cm2 N=10 (1,1/1,2,3,4)				
	1.00	PP							
	1.00								
			1.50	D	N=10 (1,2/2,2,2,4)				2
			2.00	D	N=18 (2,2/2,3,5,8)			 Grey brown and orange mottled slightly clayey fine SAND WITTERING FORMATION	
			2.00						
		2.50	D	N=27 (1,4/7,7,7,6)			 Blueish grey slightly clayey fine SAND with occasional bands of grey CLAY WITTERING FORMATION	3	
		3.00	D						
		3.00							
		3.50	D						
		4.00	D					4	
		4.00							
		5.00	D	N=26 (3,5/6,6,6,8)	5.00	19.88	 End of Borehole at 5.00m	5	
		5.00							

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage at 3m bgl	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS08 Sheet 1 of 1	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448766E - 116307N		Hole Type WLS	
Location: Horton Heath				Level: 22.54		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 06/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.15	22.39	 Grass over dark brown silty CLAY with frequent roots and rootlets and occasional flint gravel TOPSOIL		
		0.25	PP	4.0kg/cm2					
		0.50	D				 Very stiff possibly desiccated orange and grey mottled CLAY with frequent rootlets WITTERING FORMATION		
		0.50	PP	4.2kg/cm2					
		0.70	ES						
		0.75	PP	4.2kg/cm2					
		1.00	D		1.10	21.44	 Firm to stiff orange and grey mottled sandy CLAY with rare rootlets. Sand is fine WITTERING FORMATION	1	
		1.00	PP	4.0kg/cm2 N=11 (1,2/2,2,3,4)					
		1.50	D		1.70	20.84	 Firm orange brown and grey mottled sandy CLAY. Sand is fine WITTERING FORMATION		
		1.50	PP	2.4kg/cm2					
		2.00	D		2.10	20.44	 Firm orange and grey mottled very sandy CLAY. Sand is fine WITTERING FORMATION	2	
		2.00	PP	1.5kg/cm2 N=16 (1,3/3,4,4,5)					
		2.50	D		2.80	19.74	 Firm to stiff dark grey sandy CLAY. Sand is fine WITTERING FORMATION		
		2.50	PP	1.2kg/cm2					
		3.00	D		3.20	19.34	 Firm dark grey slightly sandy CLAY. Sand is fine WITTERING FORMATION	3	
	3.00	PP	1.5kg/cm2 N=22 (3,4/5,5,5,7)						
	3.50	D							
	3.50	PP	1.8kg/cm2						
	4.00	D							
	4.00	PP	1.6kg/cm2 N=15 (2,3/3,3,5,4)						
	4.50	D							
	4.50	PP							
	5.00	D		5.00	17.54	End of Borehole at 5.00m	5		
	5.00	PP	N=22 (2,3/4,6,6,6)						

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage between 3m and 3.5m bgl	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS09 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448877E - 116306N		Hole Type WLS	
Location: Horton Heath				Level: 23.00		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 06/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		0.20	ES	4.5kg/cm2	0.20	22.80		Grass over dark brown silty CLAY with frequent roots and rootlets	1 2 3 4 5	
		0.25	PP					TOPSOIL		
		0.50	D	4.3kg/cm2	0.70	22.30		Very stiff possibly desiccated orange and grey mottled CLAY with occasional rootlets and flint gravel		
		0.50	PP							WITTERING FORMATION
		0.60	ES							
		0.75	PP	4.2kg/cm2	1.25	21.75		Very stiff possibly desiccated orange and grey mottled CLAY with occasional rootlets		
		1.00	D	3.0kg/cm2 N=9 (2,1/2,3,2,2)						
		1.00	PP							
		1.20	ES							
		1.50	D	2.1kg/cm2	1.80	21.20		Stiff orange and grey mottled slightly sandy CLAY. Sand is fine		
		1.50	PP							
		2.00	D	2.5kg/cm2 N=4 (1,1/1,1,1,1)	2.10	20.90		Stiff orange grey and brown mottled slightly sandy CLAY. Sand is fine		
		2.00	PP							
		2.00								
		2.50	D	1.8kg/cm2	2.60	20.40		Stiff light grey and brown mottled slightly sandy CLAY. Sand is fine		
2.50	PP									
3.00	D	2.0kg/cm2 N=16 (1,3/3,4,4,5)	3.05	19.95		Stiff orange and brown mottled slightly sandy CLAY. Sand is fine				
3.00	PP									
3.00										
3.50	D	2.3kg/cm2	4.80	18.20		Stiff to very stiff dark grey slightly sandy CLAY. Sand is fine				
3.50	PP									
4.00	D	2.8kg/cm2 N=13 (2,2/3,3,3,4)	5.00	18.00		WITTERING FORMATION				
4.00	PP									
4.00										
4.50	D	1.0kg/cm2								
4.50	PP									
5.00	D	3.8kg/cm2								
5.00	PP									
Continued on Next Sheet										

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Water within sandy lenses between 4.4m and 4.6m bgl	



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Borehole Log

WS09

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448877E - 116306N

Hole Type	WLS
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Location: Horton Heath

Level:	23.00
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Scale
1:25

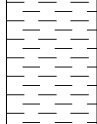
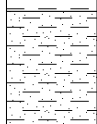
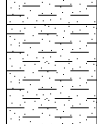
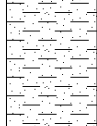
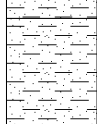
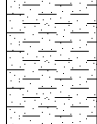
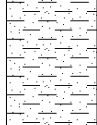
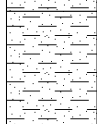
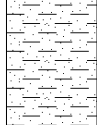
Client: Eastleigh Borough Council

Dates: 06/07/2020

Logged By
FG

[illegible]

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS10 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448914E - 116284N		Hole Type WLS	
Location: Horton Heath				Level: 23.50		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 07/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES		0.20	23.30		Grass over dark brown silty CLAY with frequent roots and rootlets and occasional flint gravel TOPSOIL	
		0.25	PP	4.0kg/cm2					
		0.50	D		0.65	22.85		Very stiff possibly desiccated orange and grey mottled CLAY with occasional rootlets WITTERING FORMATION	
		0.50	PP	3.9kg/cm2					
		0.60	ES						
		0.70	ES						
		0.75	PP	3.6kg/cm2	1.10	22.40		Very stiff possibly desiccated orange grey and red mottled slightly sandy CLAY with occasional rootlets. Sand is fine WITTERING FORMATION	
		1.00	D						
		1.00	PP	3.2kg/cm2					
		1.00		N=5 (1,1/1,2,1,1)					
		1.50	D		1.90	21.60		Stiff orange and grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION	
		1.50	PP	2.0kg/cm2					
		2.00	D		3.10	20.40		Firm to stiff orange grey and brown mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION	
		2.00	PP	2.0kg/cm2					
		2.00		N=6 (1,1/1,2,1,2)					
		2.50	D		4.40	19.10		Stiff light grey and dark grey mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION	
		2.50	PP	1.8kg/cm2					
		3.00	D						
	3.00	PP	2.5kg/cm2	5.00	18.50		Stiff to very stiff dark grey slightly sandy CLAY. Sand is fine WITTERING FORMATION		
	3.00		N=15 (1,2/3,4,4,4)						
	3.50	D							
	3.50	PP	2.8kg/cm2	5.00	18.50		Continued on Next Sheet		
	4.00	D							
	4.00	PP	2.3kg/cm2						
	4.00		N=10 (2,2/1,3,3,3)	5.00	18.50		Stiff to very stiff dark grey slightly sandy CLAY. Sand is fine WITTERING FORMATION		
	4.50	D							
	4.50	PP	2.5kg/cm2	5.00	18.50		Continued on Next Sheet		
	5.00	D							
	5.00	PP	3.0kg/cm2						

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Slight groundwater seepage at 4m bgl	



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Borehole Log

Borehole No.

WS10

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448914E - 116284N

Hole Type
WLS

Location: Horton Heath

Level: 23.50

Scale
1:25

Client: Eastleigh Borough Council

Dates: 07/07/2020

Logged By
FG

[illegible]

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS11 Sheet 1 of 1	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 449074E - 116265N		Hole Type WLS	
Location: Horton Heath				Level: 24.92		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 08/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES		0.20	24.72		Grass over dark brown silty CLAY with frequent roots and rootlets and rare flint gravel TOPSOIL	
		0.25	PP	4.0kg/cm2				Very stiff possibly desiccated orange and grey mottled CLAY with occasional rootlets WITTERING FORMATION	
		0.45	ES		0.60	24.32		Stiff orange and grey mottled slightly sandy CLAY WITTERING FORMATION	
		0.50	D						
		0.50	PP	3.5kg/cm2					
		0.75	PP	2.0kg/cm2					
		1.00	D		1.10	23.82		Firm to stiff orange and grey sandy CLAY. Sand is fine WITTERING FORMATION	
		1.00	PP	1.7kg/cm2 N=2 (0,0/0,0,1,1)					
		1.00							
		1.50	D		1.70	23.22		Firm to stiff orange brown and grey mottled slightly sandy laminated CLAY. Sand is fine WITTERING FORMATION	
		1.50	PP	2.0kg/cm2					
		2.00	D		2.20	22.72		Firm to stiff dark grey and blueish grey mottled very sandy CLAY. Sand is fine WITTERING FORMATION	
		2.00	PP	1.5kg/cm2 N=8 (2,2/1,2,2,3)					
		2.00							
	2.50	D							
	2.50	PP	1.5kg/cm2						
	3.00	D		3.90	21.02		Blueish grey clayey fine SAND WITTERING FORMATION		
	3.00	PP	1.5kg/cm2 N=13 (1,2/3,3,3,4)						
	3.00								
	3.50	D							
	3.50	PP	1.8kg/cm2						
	4.00	D							
	4.00	PP	2.8kg/cm2 N=40 (2,7/9,9,11,11)						
	4.00								
	4.50	D							
	5.00	D		5.00	19.92				
	5.00		N=24 (2,4/5,4,8,7)						
								End of Borehole at 5.00m	5

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
		2.20	1.80			Groundwater seepage at 2.2m bgl and 3m bgl	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS12 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448858E - 116257N		Hole Type WLS	
Location: Horton Heath				Level: 23.56		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 06/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES	4.0kg/cm2	0.20	23.36		Grass over dark brown silty CLAY with frequent roots and rootlets and occasional flint gravel TOPSOIL	1 2 3 4 5
		0.25	PP						
		0.30	ES						
		0.50	D	3.5kg/cm2				Very stiff possibly desiccated grey and occasionally orange CLAY with frequent rootlets WITTERING FORMATION	
		0.50	PP						
		0.75	PP						
		1.00	D	4.1kg/cm2 N=8 (1,1/1,2,3,2)	1.10	22.46		Stiff to very stiff orange and grey mottled CLAY with occasional rootlets WITTERING FORMATION	
		1.00	PP						
		1.00	PP						
		1.50	D	3.5kg/cm2	1.80	21.76		Stiff orange grey and brown mottled slightly sandy CLAY. Sand is fine WITTERING FORMATION	
		1.50	PP						
		2.00	D						
		2.00	PP	2.5kg/cm2 N=14 (1,2/4,3,3,4)	2.10	21.46		Very stiff orange brown and grey mottled CLAY WITTERING FORMATION	
		2.00	PP						
		2.50	D						
2.50	PP	4.0kg/cm2							
3.00	D								
3.00	PP								
3.00	PP	3.5kg/cm2 N=20 (3,4/4,4,6,6)	3.20	20.36		Very stiff dark grey slightly sandy CLAY. Sand is fine WITTERING FORMATION			
3.50	D								
3.50	PP								
4.00	D	4.0kg/cm2 N=30 (2,4/7,6,7,10)							
4.00	PP								
4.00	PP								
4.50	D								
5.00	D	3.2kg/cm2	5.00	18.56					
5.00	PP								
Continued on Next Sheet									

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	
						Groundwater seepage between 4m and 4.6m bgl





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Borehole Log

Borehole No.

WS12

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448858E - 116257N

Hole Type	WLS
1	0.0000
2	0.0000
3	0.0000
4	0.0000
5	0.0000
6	0.0000
7	0.0000
8	0.0000
9	0.0000
10	0.0000
11	0.0000
12	0.0000
13	0.0000
14	0.0000
15	0.0000
16	0.0000
17	0.0000
18	0.0000
19	0.0000
20	0.0000
21	0.0000
22	0.0000
23	0.0000
24	0.0000
25	0.0000
26	0.0000
27	0.0000
28	0.0000
29	0.0000
30	0.0000
31	0.0000
32	0.0000
33	0.0000
34	0.0000
35	0.0000
36	0.0000
37	0.0000
38	0.0000
39	0.0000
40	0.0000
41	0.0000
42	0.0000
43	0.0000
44	0.0000
45	0.0000
46	0.0000
47	0.0000
48	0.0000
49	0.0000
50	0.0000
51	0.0000
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74	0.0000
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76	0.0000
77	0.0000
78	0.0000
79	0.0000
80	0.0000
81	0.0000
82	0.0000
83	0.0000
84	0.0000
85	0.0000
86	0.0000
87	0.0000
88	0.0000
89	0.0000
90	0.0000
91	0.0000
92	0.0000
93	0.0000
94	0.0000
95	0.0000
96	0.0000
97	0.0000
98	0.0000
99	0.0000
100	0.0000

Location: Horton Heath

Level:	23.56
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Scale
1:25

Client: Eastleigh Borough Council

Dates: 06/07/2020

Logged By
FG

[illegible]

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS13 Sheet 1 of 1	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 449034E - 116169N		Hole Type WLS	
Location: Horton Heath				Level: 28.88		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 07/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES		0.25	28.62		Grass over dark brown silty sandy CLAY with frequent roots and rootlets and rare flint gravel TOPSOIL	
		0.50	D					Stiff brown possibly desiccated sandy CLAY. Sand is fine to medium WITTERING FORMATION	
		0.60	ES		0.70	28.18		Firm to stiff orange brown sandy CLAY. Sand is fine to medium WITTERING FORMATION	
		1.00	D	N=23 (4,6/3,7,7,6)	1.10	27.78		Stiff orange and grey mottled slightly sandy CLAY. Sand is medium WITTERING FORMATION	1
		1.20	PP	3.5kg/cm2	1.30	27.58		Orange brown and grey mottled slightly clayey medium SAND WITTERING FORMATION	
		1.50	D		1.70	27.18		Stiff orange grey and brown mottled slightly sandy laminated CLAY. Sand is fine to medium WITTERING FORMATION	
		2.00	D	3.2kg/cm2	2.10	26.78		Orange brown and grey slightly clayey fine to medium SAND with occasional bands of orange CLAY WITTERING FORMATION	2
		2.00	PP	N=9 (1,1/2,2,2,3)					
		2.00							
		2.50	D		2.90	25.98		Dark grey fine to medium SAND WITTERING FORMATION	3
		3.00	D	N=6 (1,1/1,1,2,2)	3.20	25.68		Stiff blue grey slightly sandy CLAY. Sand is medium WITTERING FORMATION	
		3.00							
		3.50	D	2.3kg/cm2					4
		3.50	PP						
		4.00	D	2.6kg/cm2					
	4.00	PP	N=16 (2,3/4,4,4,4)						
	4.00								
	4.50	D		5.00	23.88			5	
	5.00	D	N=13 (2,2/3,3,4,3)						
	5.00								
							End of Borehole at 5.00m		

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage at 4m bgl. Water at 4m inhibited sample recovery	



Geo-Environmental

Probe Log

Borehole No.

DP13

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 449034.19 - 116169.04

Hole Type
DP

Location: Horton Heath

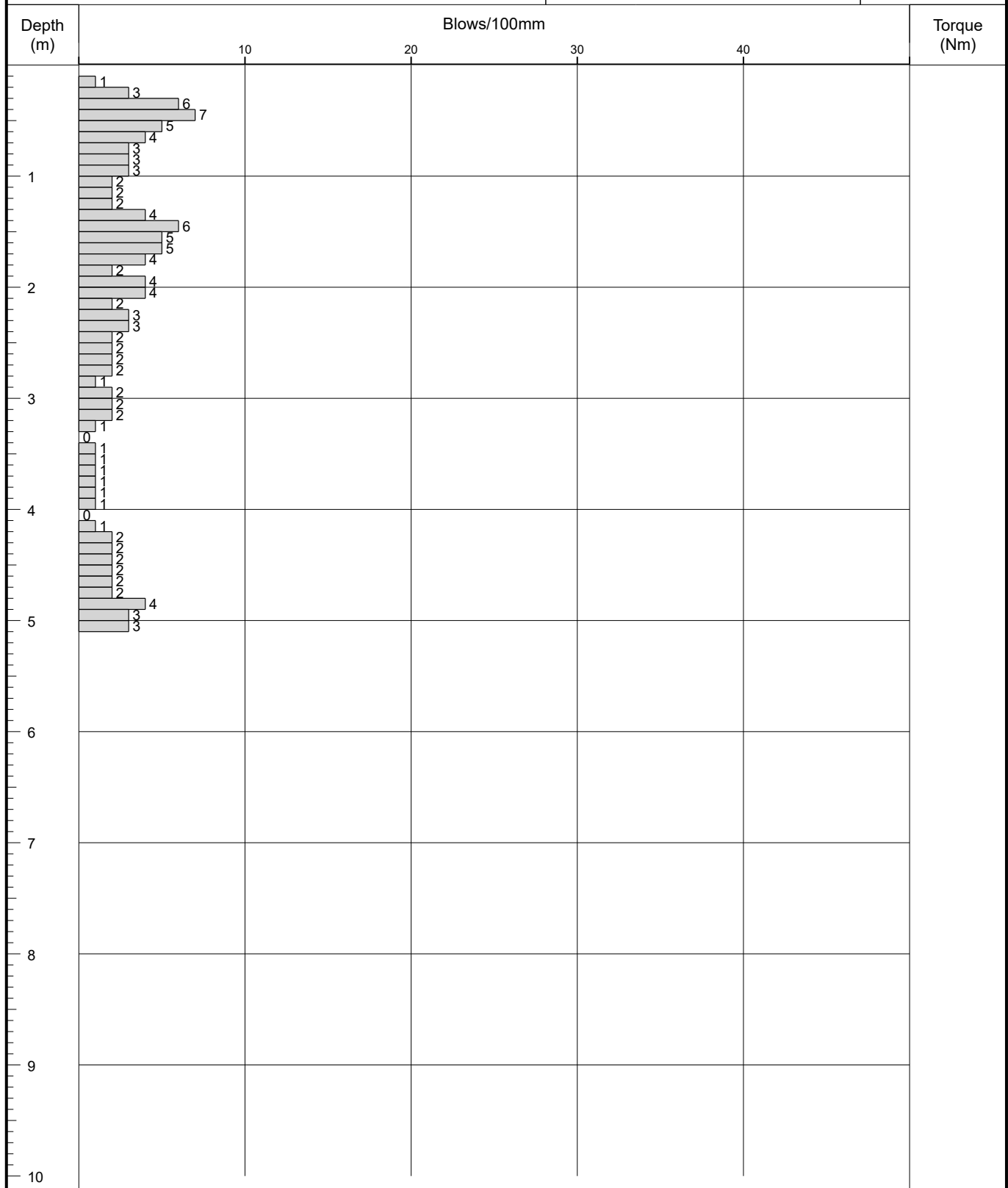
Level: 28.88

Scale
1:50

Client: Eastleigh Borough Council

Dates: 06/07/2020 - 06/07/2020

Logged By



Remarks

Fall Height

Cone Base Diameter

Hammer Wt

Final Depth 5.00

Probe Type DPSH

Log Scale 1:50



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS14 Sheet 1 of 2	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448860E - 116163N		Hole Type WLS	
Location: Horton Heath				Level: 23.24		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 07/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES	4.0kg/cm2	0.20	23.04		Grass over dark brown silty CLAY with frequent roots and rootlets and rare flint gravel TOPSOIL	1 2 3 4 5
		0.25	PP						
		0.30	ES						
		0.50	D	4.0kg/cm2	0.80	22.44		Very stiff possibly desiccated orange and grey mottled CLAY with frequent rootlets WITTERING FORMATION	
		0.50	PP						
		0.75	PP	3.3kg/cm2	2.10	21.14		Firm to stiff orange and grey mottled slightly sandy CLAY with rare rootlets. Sand is medium WITTERING FORMATION	
		0.80	ES						
		1.00	D	2.0kg/cm2 N=10 (1,2/2,2,3,3)	2.90	20.34		Stiff brown grey and orange mottled slightly sandy CLAY. Sand is medium WITTERING FORMATION	
		1.00	PP						
		1.00							
		1.50	D	2.3kg/cm2	3.40	19.84		Stiff light grey CLAY WITTERING FORMATION	
		1.50	PP						
2.00	D	2.5kg/cm2 N=8 (1,2/1,2,2,3)	4.10	19.14		Very stiff dark grey and light grey and occasionally brown CLAY WITTERING FORMATION			
2.00	PP								
2.00									
2.50	D	2.3kg/cm2	5.00	18.24		Stiff dark grey slightly sandy CLAY. Sand is fine WITTERING FORMATION			
2.50	PP								
3.00	D	3.0kg/cm2 N=15 (1,2/3,4,4,4)							
3.00	PP								
3.00									
3.50	D	3.5kg/cm2							
3.50	PP								
4.00	D	3.0kg/cm2 N=13 (2,2/3,3,3,4)							
4.00	PP								
4.00									
4.50	D	2.5kg/cm2							
4.50	PP								
5.00	D	2.6kg/cm2							
5.00	PP								
Continued on Next Sheet									

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to	
						Groundwater not encountered





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Borehole Log

WS14

Sheet 2 of 2

Project Name: One Horton Heath

Project No.	GE18771
-------------	---------

Co-ords: 448860E - 116163N

Hole Type
WLS

Location: Horton Heath

Level: 23.24

Scale
1:25

Client: Eastleigh Borough Council

Dates: 07/07/2020

Logged By
FG

[illegible]



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Borehole Log

Borehole No.

WS15

Sheet 2 of 2

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448859E - 116131N

Hole Type	WLS
-----------	-----

Location: Horton Heath

Level: 22.87

Scale
1:25

Client: Eastleigh Borough Council

Dates: 07/07/2020

Logged By
FG

[illegible]

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS16 Sheet 1 of 1	
Project Name: One Horton Heath		Project No. GE18771		Co-ords: 448941E - 116122N		Hole Type WLS	
Location: Horton Heath				Level: 25.94		Scale 1:25	
Client: Eastleigh Borough Council				Dates: 07/07/2020		Logged By FG	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES	3.0kg/cm2	0.20	25.74		Grass over dark brown silty CLAY with frequent roots and rootlets TOPSOIL	1 2 3 4 5
		0.25	PP						
		0.30	ES						
		0.50	D	3.0kg/cm2	0.60	25.34		Stiff possibly desiccated orange and grey mottled CLAY with occasional rootlets and flint gravel WITTERING FORMATION	
		0.50	PP						
		0.75	PP						
		1.00	D	N=11 (1,2/1,2,3,5)	1.20	24.74		Firm to stiff orange and grey mottled sandy CLAY. Sand is medium WITTERING FORMATION	
		1.00							
		1.50	D						
		2.00	D	N=0 (1,0/0,0,0,0)	1.40	24.54		Brown grey and orange slightly clayey medium SAND WITTERING FORMATION	
		2.00							
		2.50	D						
2.80		23.14		Greyish brown medium SAND WITTERING FORMATION					
3.00	D								
3.00	PP								
3.00		N=13 (2,2/3,3,3,4)	3.40	22.54		Firm greyish brown sandy CLAY WITTERING FORMATION			
3.50	PP								
4.00	PP								
4.00		N=15 (2,2/5,4,4)	4.00	21.94		Stiff to very stiff dark grey slightly sandy CLAY. Sand is fine WITTERING FORMATION			
4.00									
End of Borehole at 4.00m									

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Groundwater seepage at 1m bgl. Probe	



Geo-Environmental

Probe Log

Borehole No.

DP16

Sheet 1 of 1

Project Name: One Horton Heath

Project No.
GE18771

Co-ords: 448941.35 - 116121.65

Hole Type
DP

Location: Horton Heath

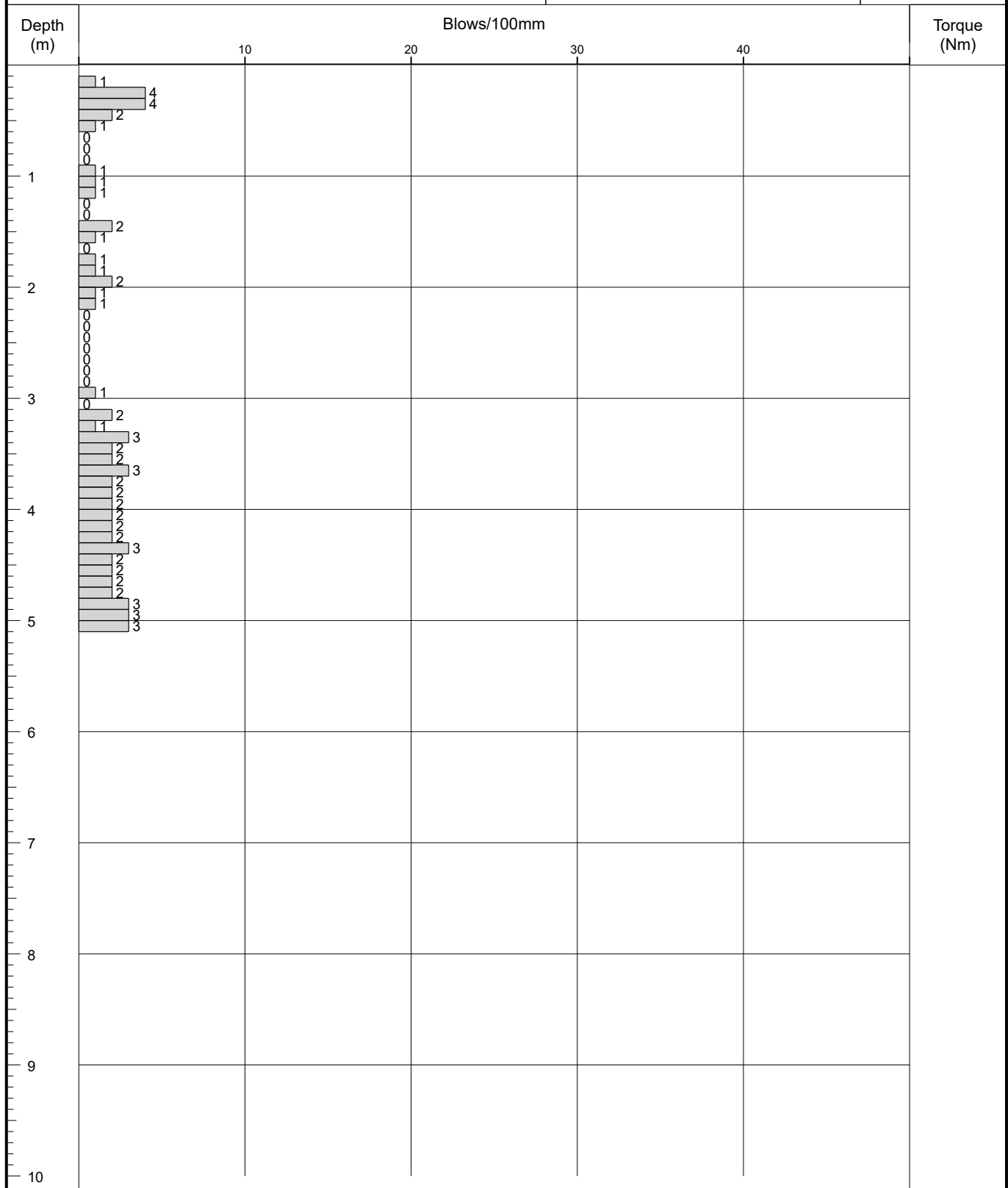
Level: 25.94

Scale
1:50

Client: Eastleigh Borough Council

Dates: 06/07/2020 - 06/07/2020

Logged By



Remarks

Fall Height

Cone Base Diameter

Hammer Wt

Final Depth 5.00

Probe Type DPSH

Log Scale 1:50





APPENDIX C

Geotechnical Laboratory Results





TEST CERTIFICATE

Liquid and Plastic Limits

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



4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 27/07/2020
Sampled By: Not Given

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

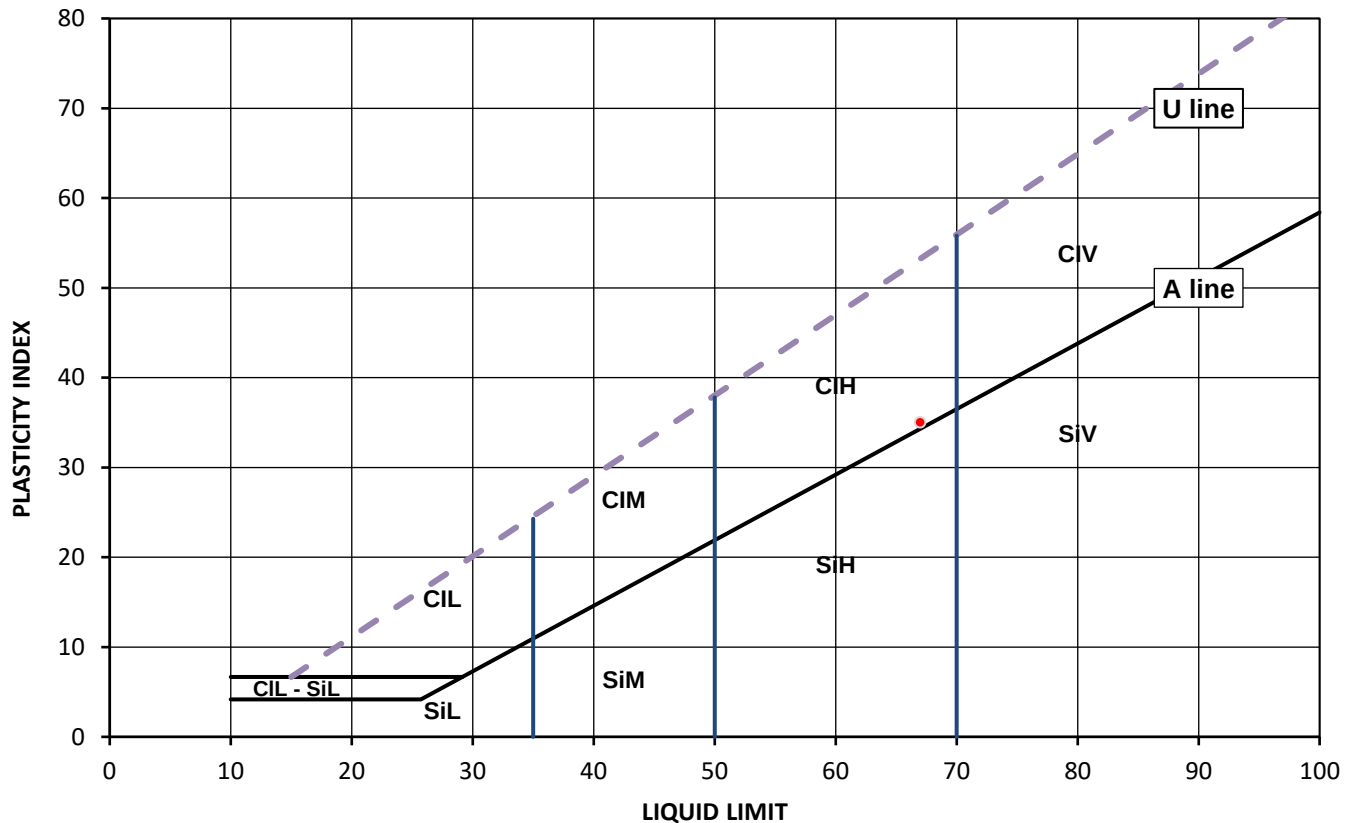
Test Results:

Laboratory Reference: 1566629
Hole No.: TP17
Sample Reference: Not Given
Soil Description: Multicolour silty CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	67	32	35	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

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



Environmental Science

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 27/07/2020
Sampled By: Not Given

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

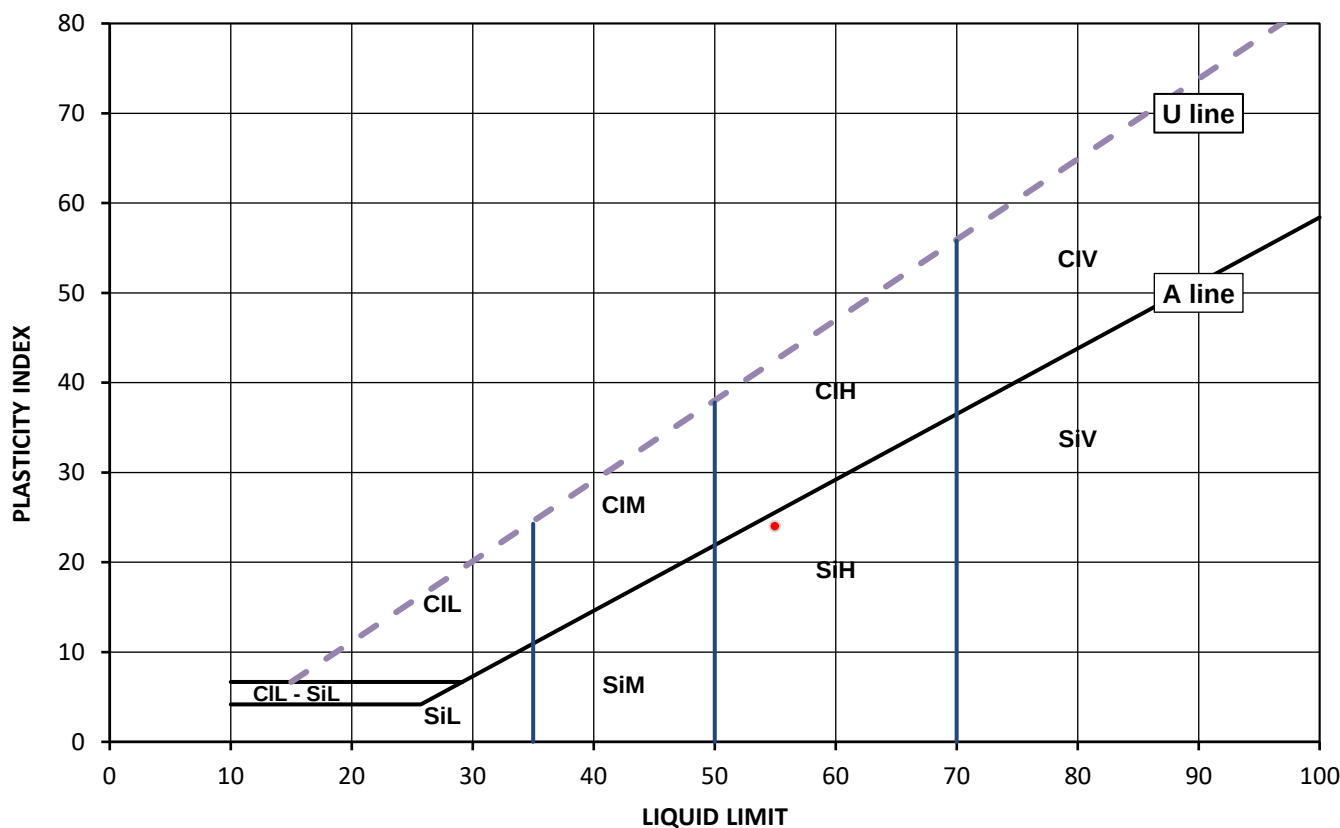
Test Results:

Laboratory Reference: 1566630
Hole No.: TP24
Sample Reference: Not Given
Soil Description: Brownish grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	55	31	24	100



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

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M 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:

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Northampton NN4 7EB



Environmental Science

4041

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Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 27/07/2020
Sampled By: Not Given

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

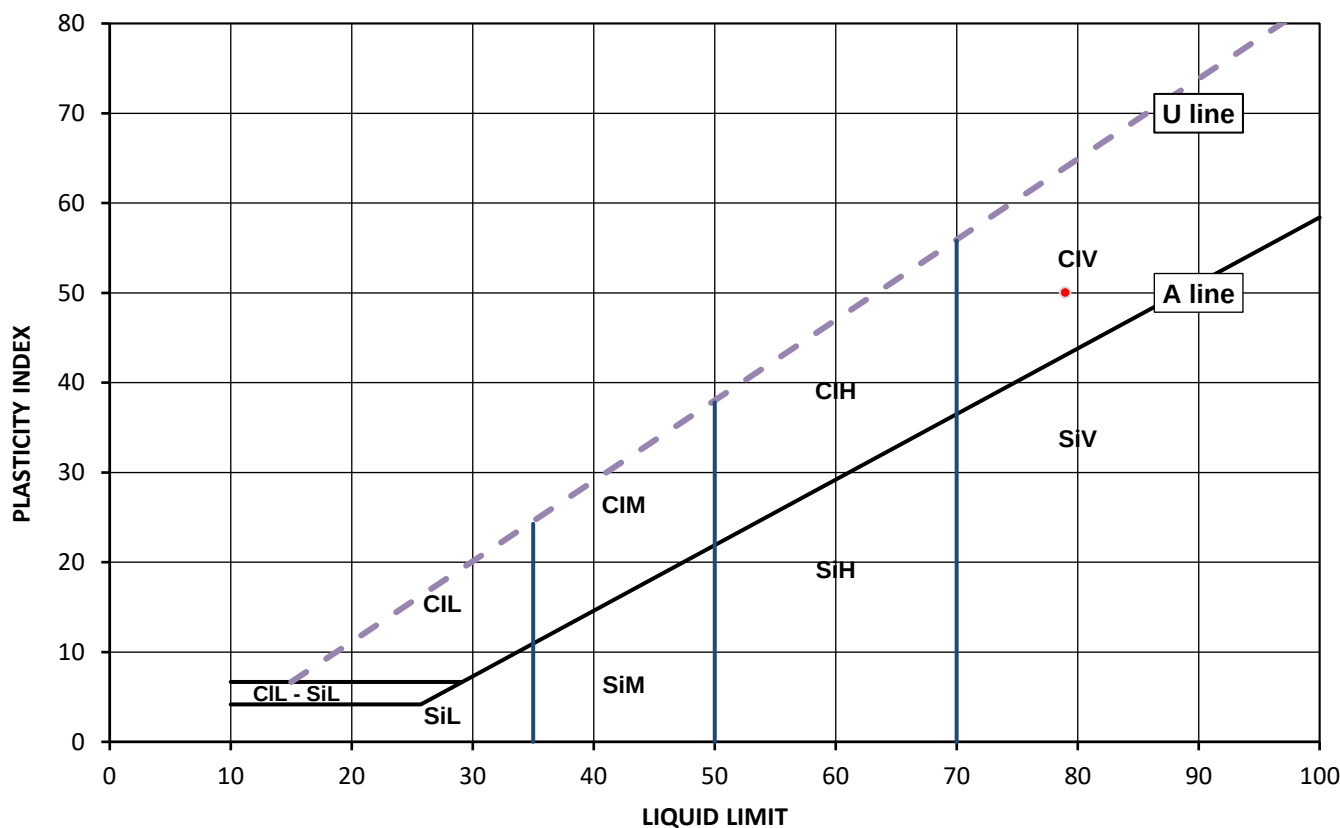
Test Results:

Laboratory Reference: 1566631
Hole No.: TP34
Sample Reference: Not Given
Soil Description: Light grey mottled red CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	79	29	50	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

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Page 1 of 1

Date Reported: 17/08/2020

GF 232.10



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Liquid and Plastic Limits

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Contact: Fiona Goode
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Date Sampled: 10/07/2020
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Date Tested: 27/07/2020
Sampled By: Not Given

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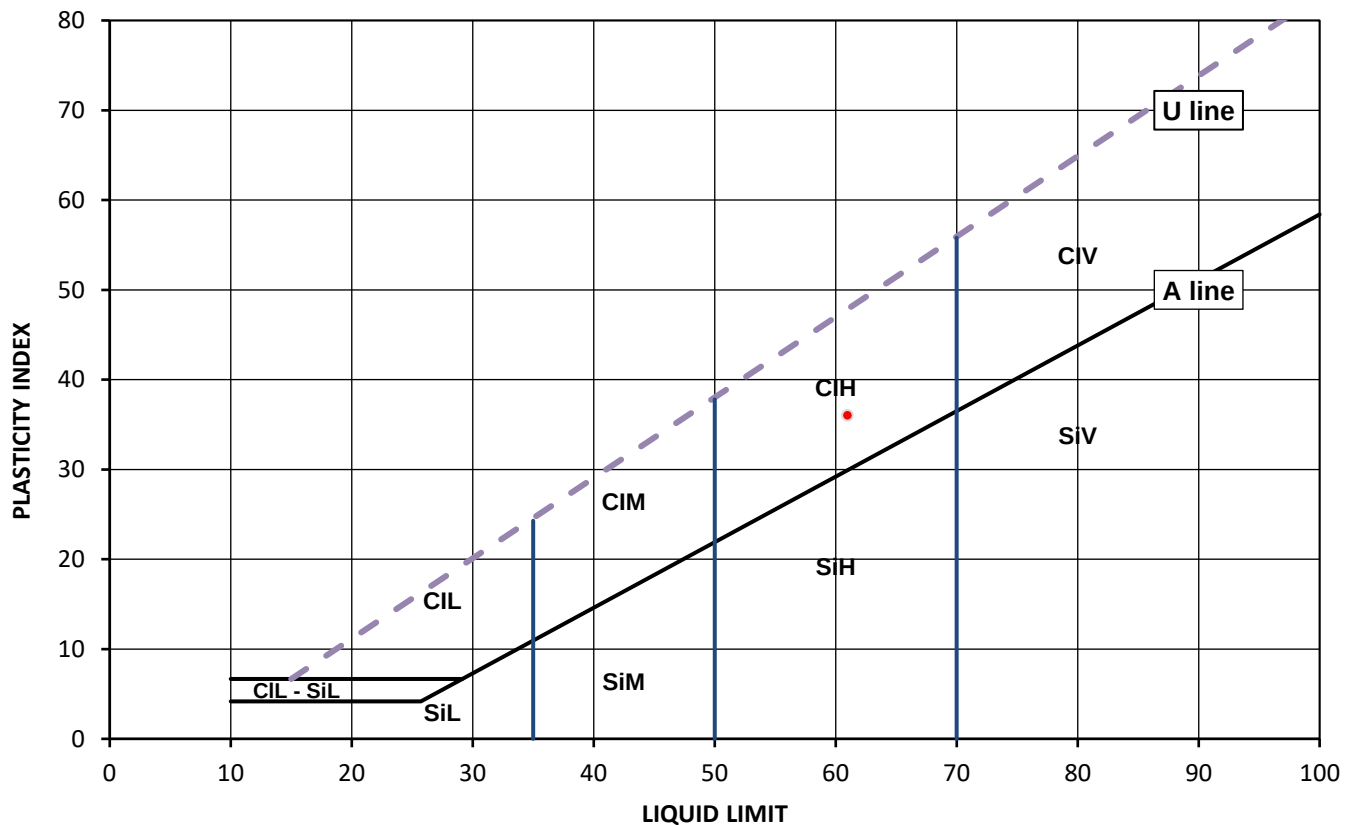
Test Results:

Laboratory Reference: 1566632
Hole No.: TP28
Sample Reference: Not Given
Soil Description: Yellowish brown slightly gravelly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
21	61	25	36	97



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

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg ClHO)

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

Remarks:

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Environmental Science

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Contact: Fiona Goode
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Date Sampled: 10/07/2020
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Date Tested: 27/07/2020
Sampled By: Not Given

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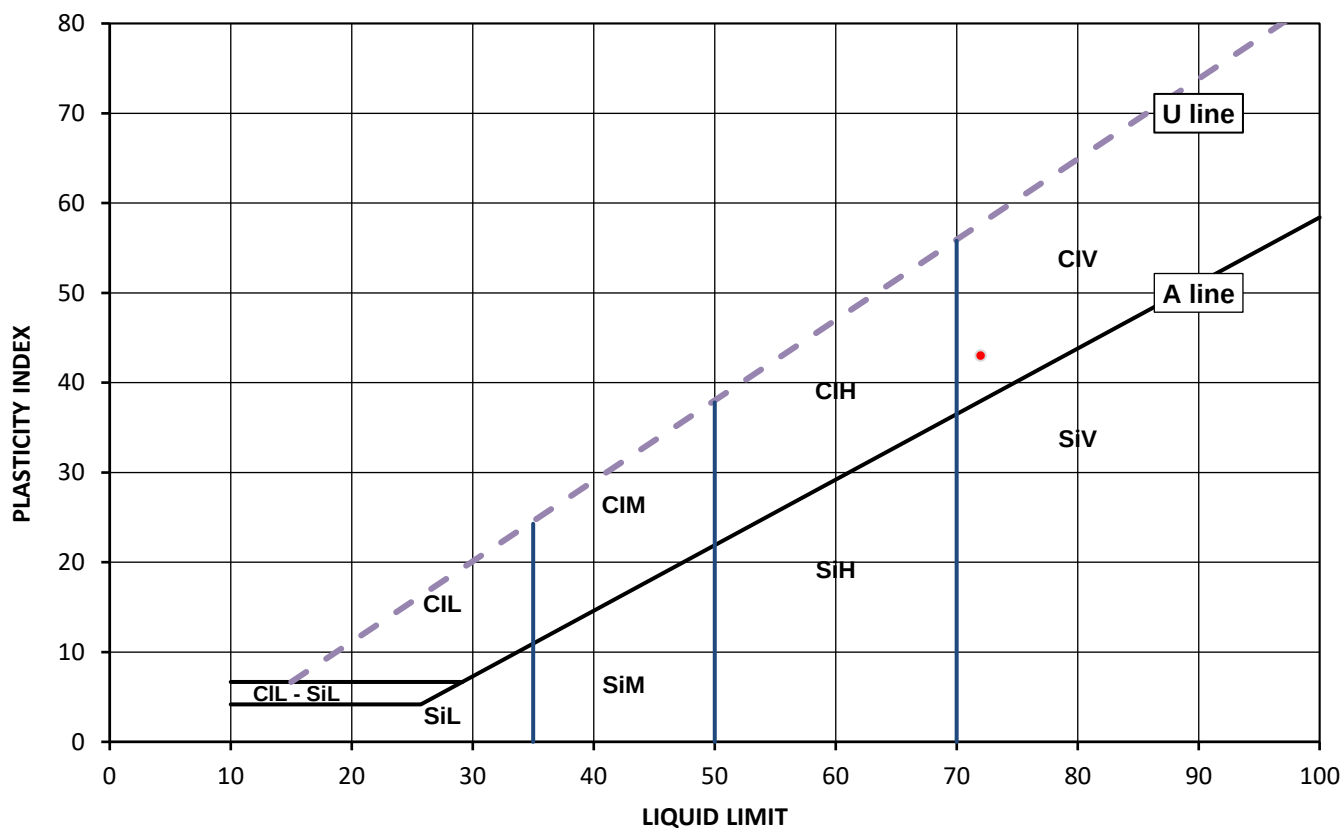
Test Results:

Laboratory Reference: 1566633
Hole No.: TP25
Sample Reference: Not Given
Soil Description: Brownish grey CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	72	29	43	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

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Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 27/07/2020
Sampled By: Not Given

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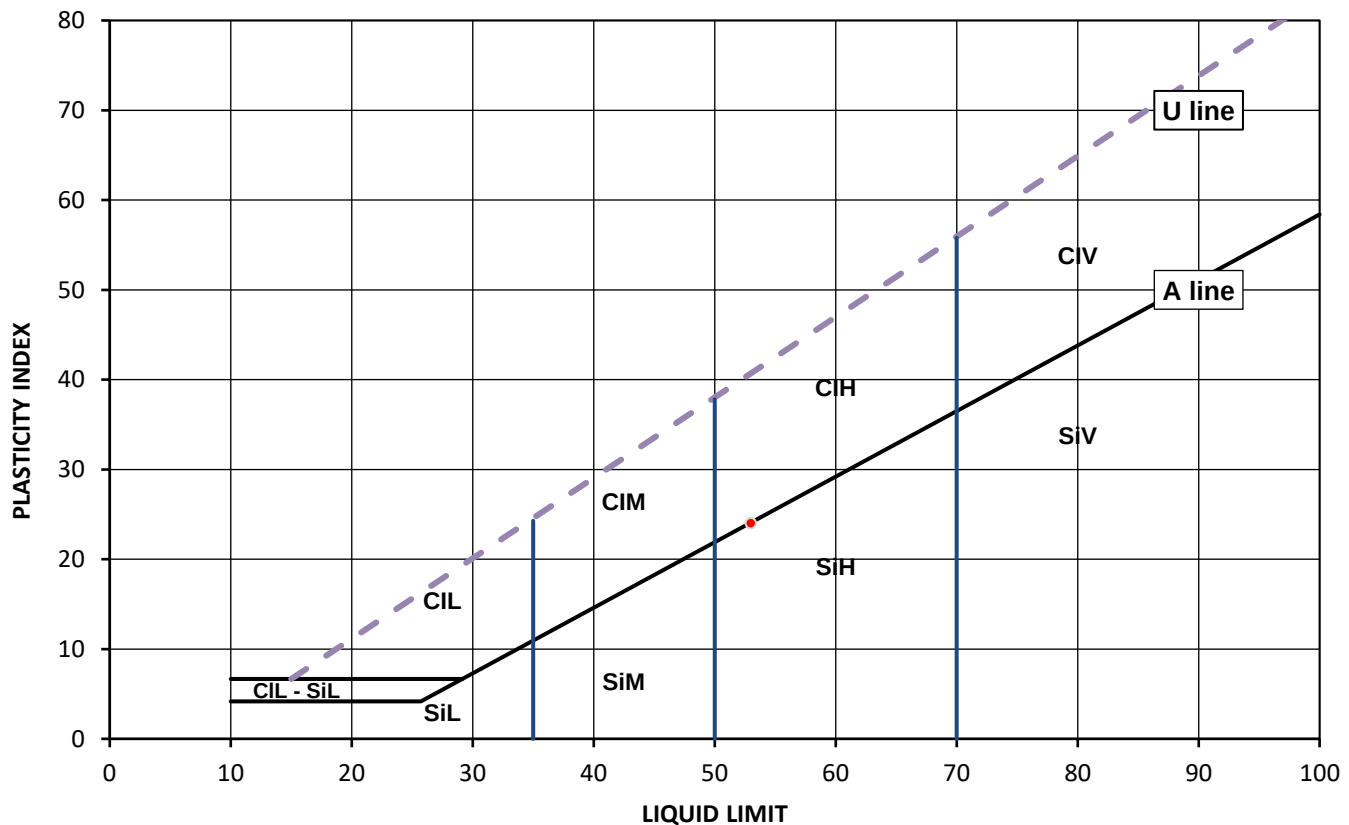
Test Results:

Laboratory Reference: 1566634
Hole No.: TP15
Sample Reference: Not Given
Soil Description: Brownish grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
20	53	29	24	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Environmental Science

4041

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Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 27/07/2020
Sampled By: Not Given

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

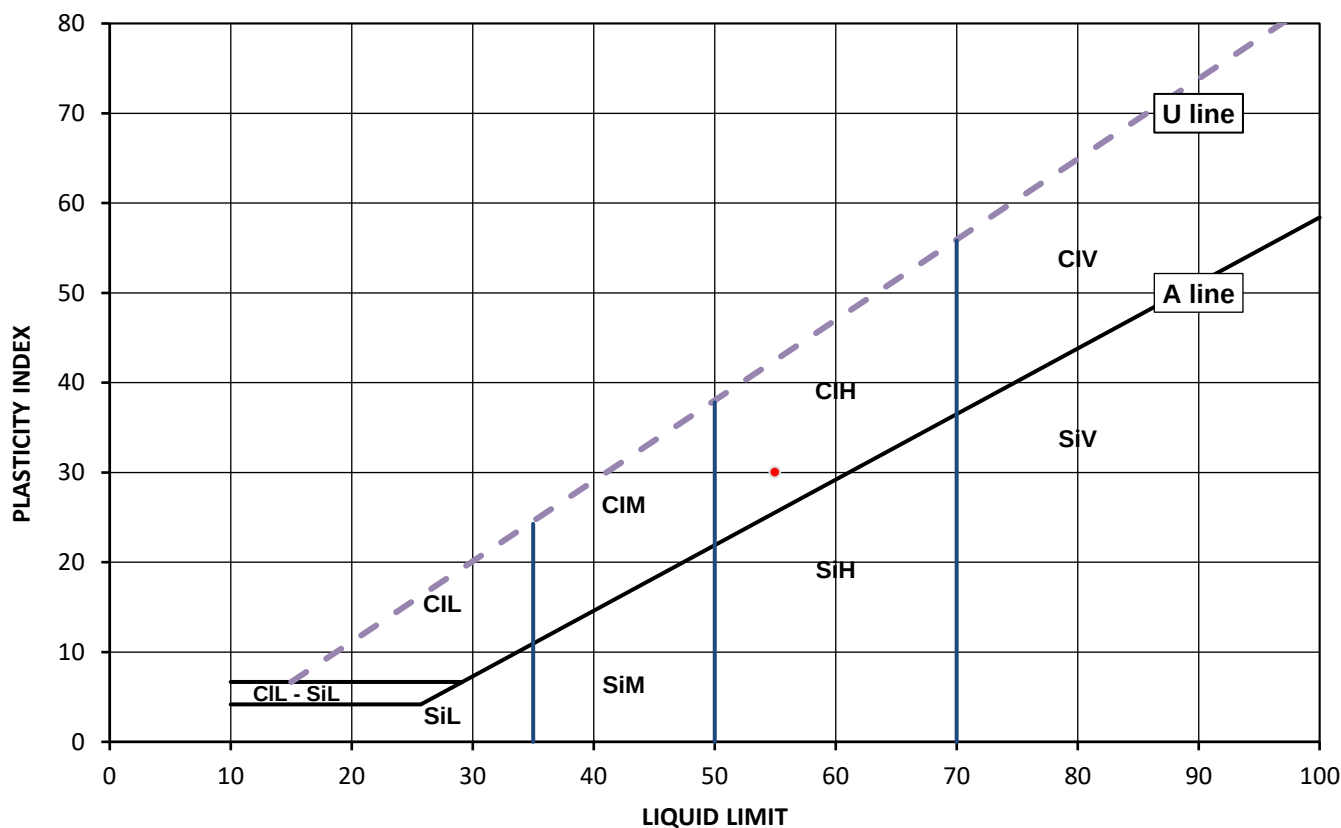
Test Results:

Laboratory Reference: 1566635
Hole No.: TP21
Sample Reference: Not Given
Soil Description: Yellowish brown mottled grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	55	25	30	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Environmental Science

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Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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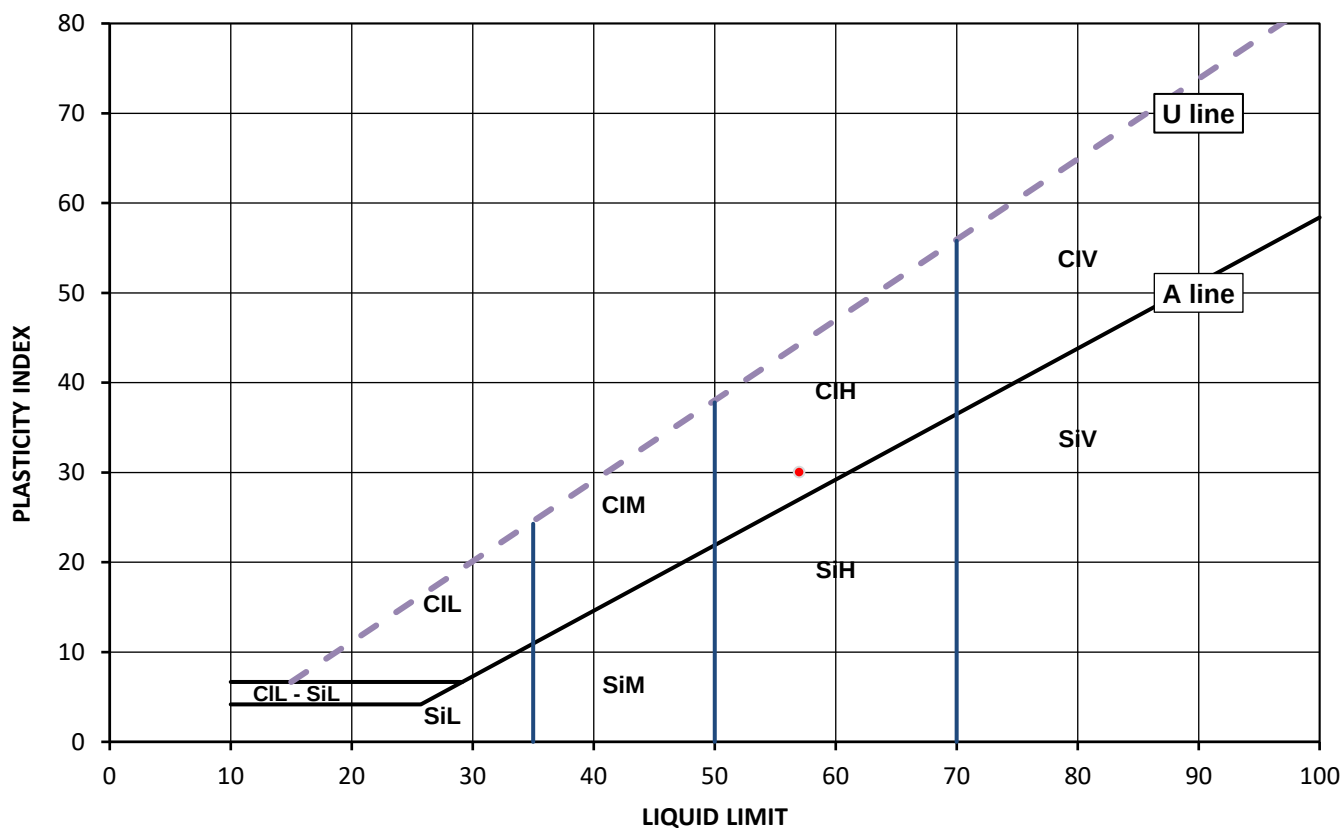
Test Results:

Laboratory Reference: 1566642
Hole No.: WS10
Sample Reference: Not Given
Soil Description: Orangish brown to light grey slightly sandy CLAY

Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	57	27	30	100



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

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M 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:

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4041

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Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
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BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
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Sampled By: Not Given

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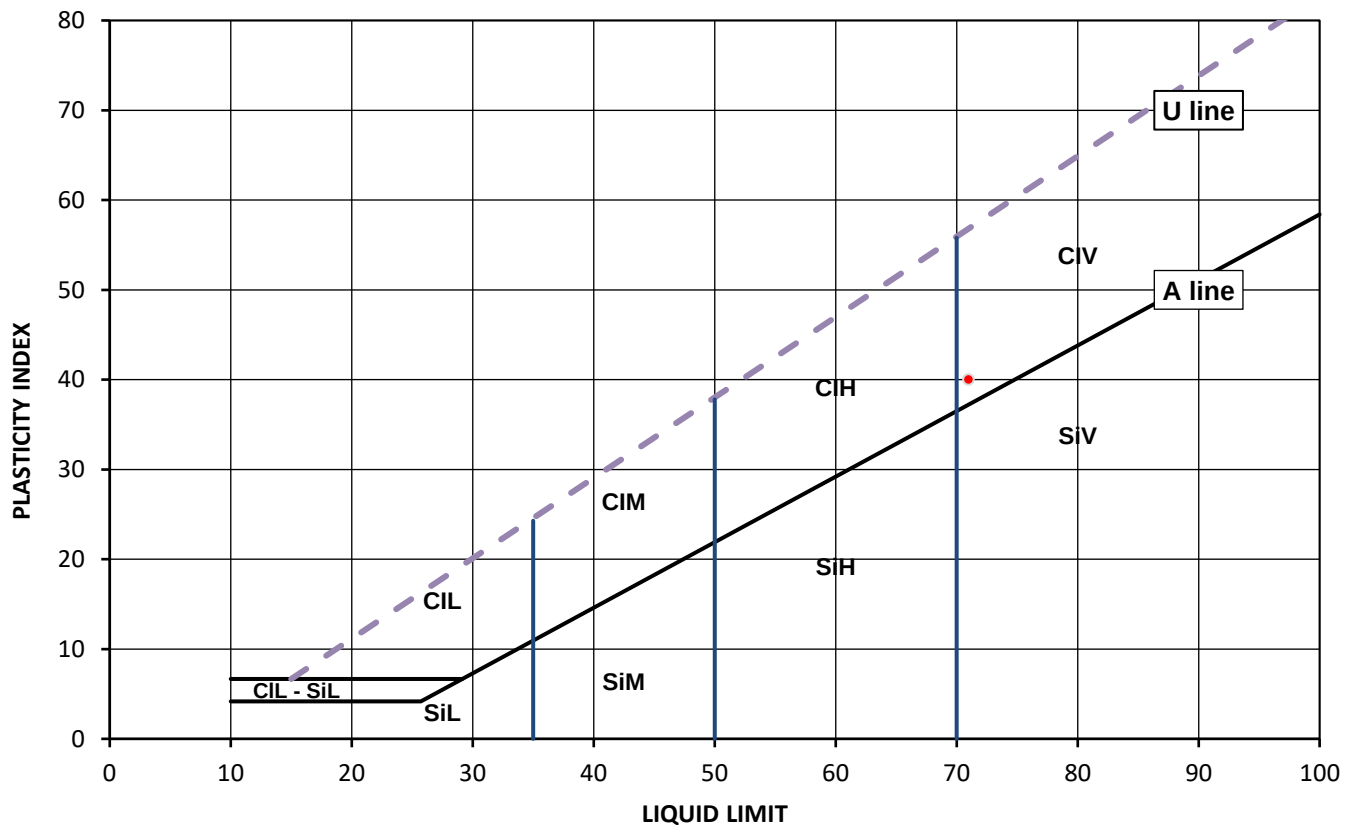
Test Results:

Laboratory Reference: 1566643
Hole No.: WS12
Sample Reference: Not Given
Soil Description: Light grey to orangish brown CLAY

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
26	71	31	40	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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4041

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Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 07/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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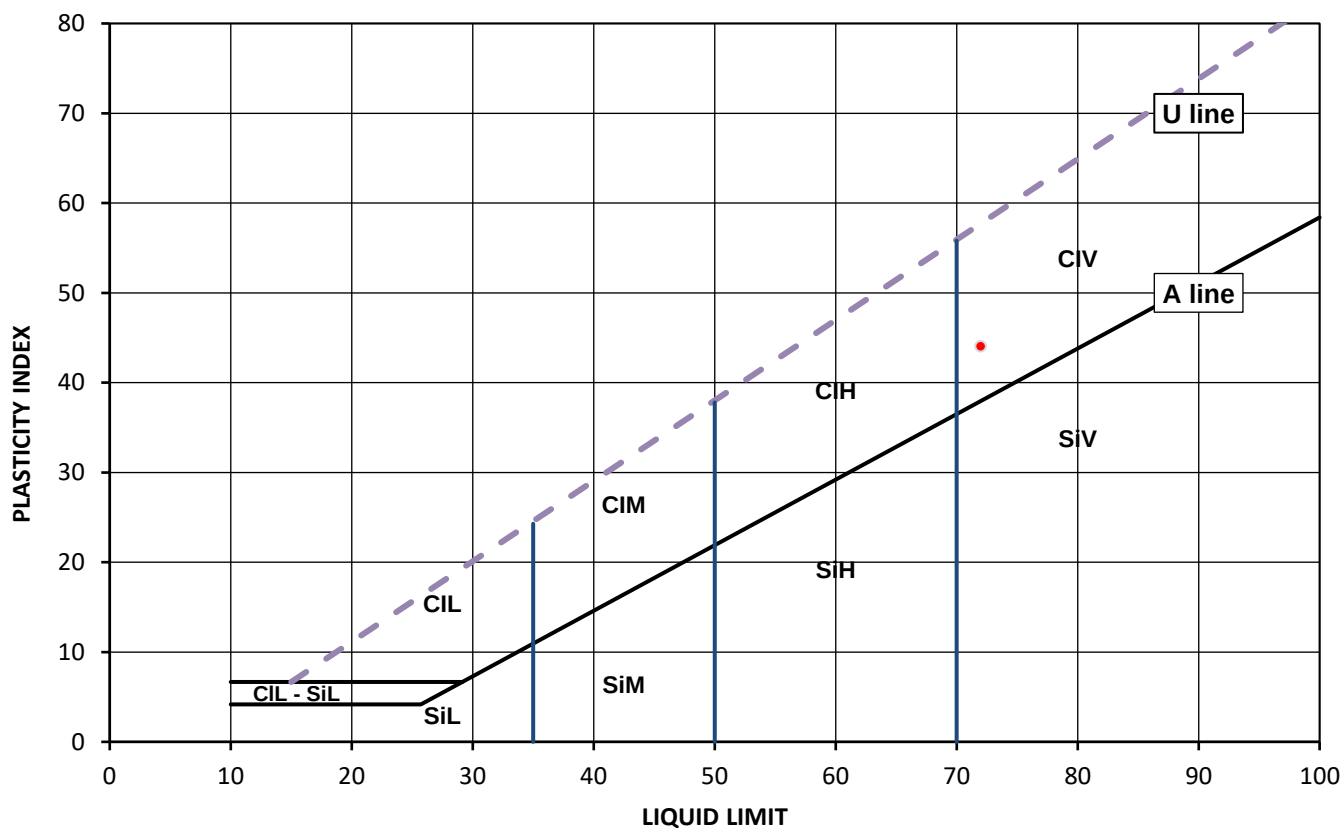
Test Results:

Laboratory Reference: 1566644
Hole No.: WS15
Sample Reference: Not Given
Soil Description: Orangish brown to grey CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
34	72	28	44	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Contact: Fiona Goode
Site Address: One Horton

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Date Sampled: 07/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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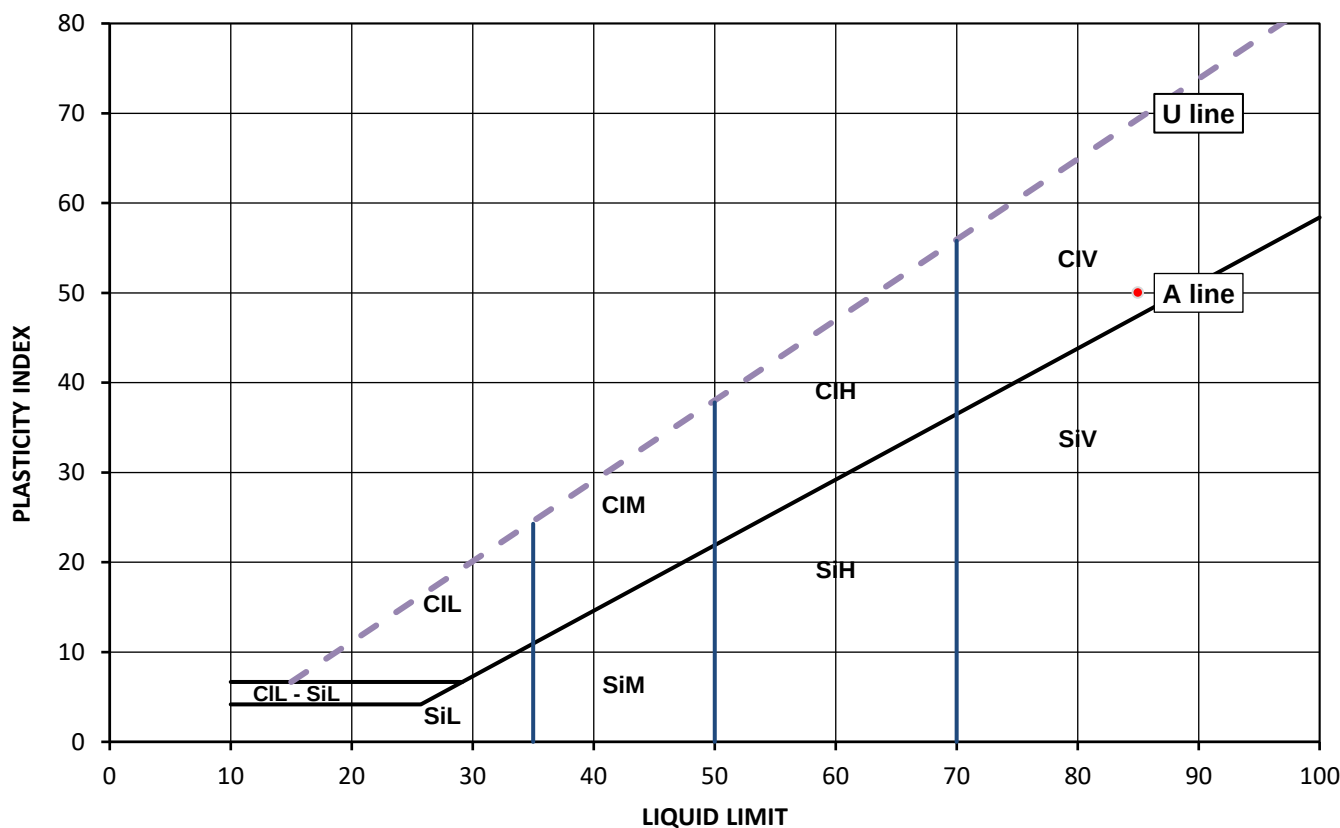
Test Results:

Laboratory Reference: 1566645
Hole No.: TP11
Sample Reference: Not Given
Soil Description: Orangish brown to grey CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
38	85	35	50	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

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BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 07/07/2020
Date Received: 08/07/2020
Date Tested: 28/07/2020
Sampled By: Not Given

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

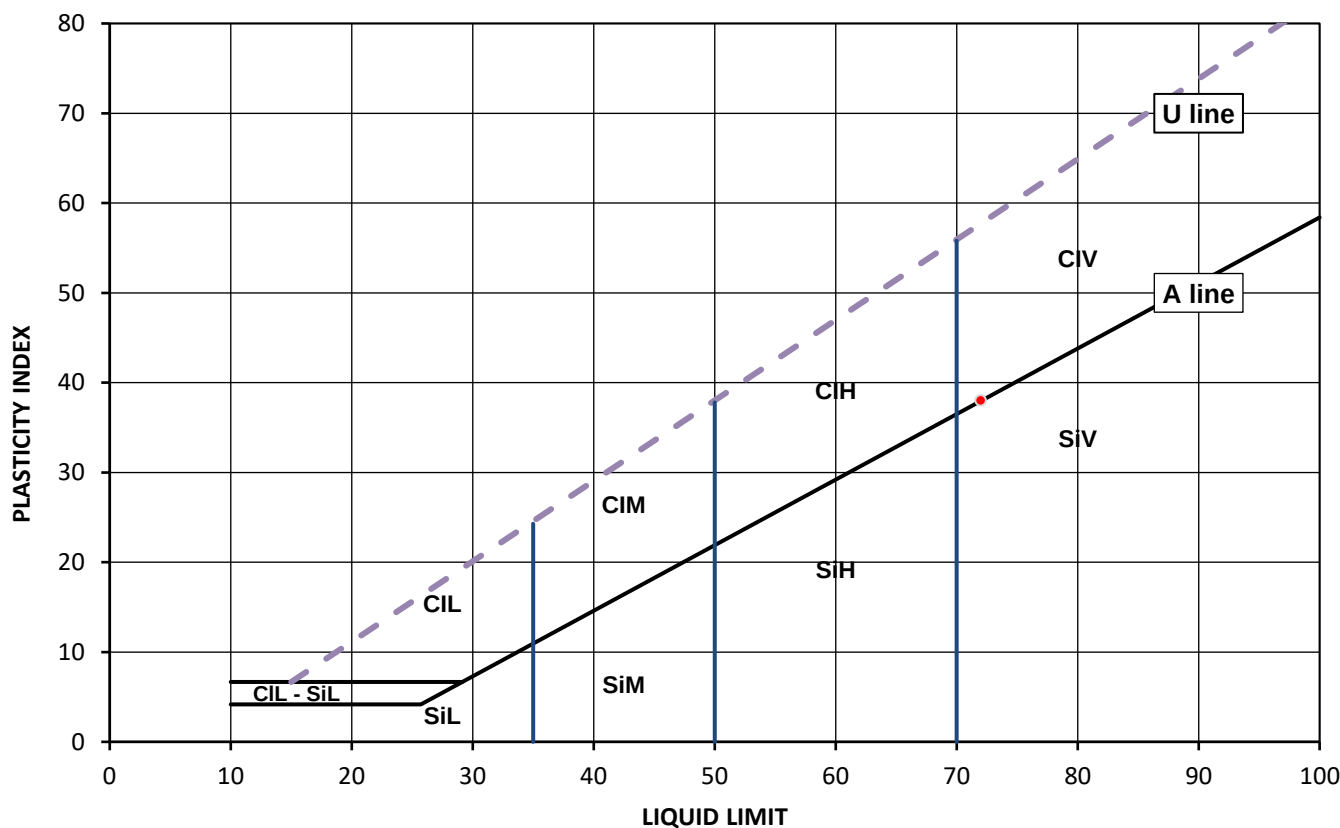
Test Results:

Laboratory Reference: 1566646
Hole No.: TP11
Sample Reference: Not Given
Soil Description: Mottled brown CLAY

Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	72	34	38	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

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Sampled By: Not Given

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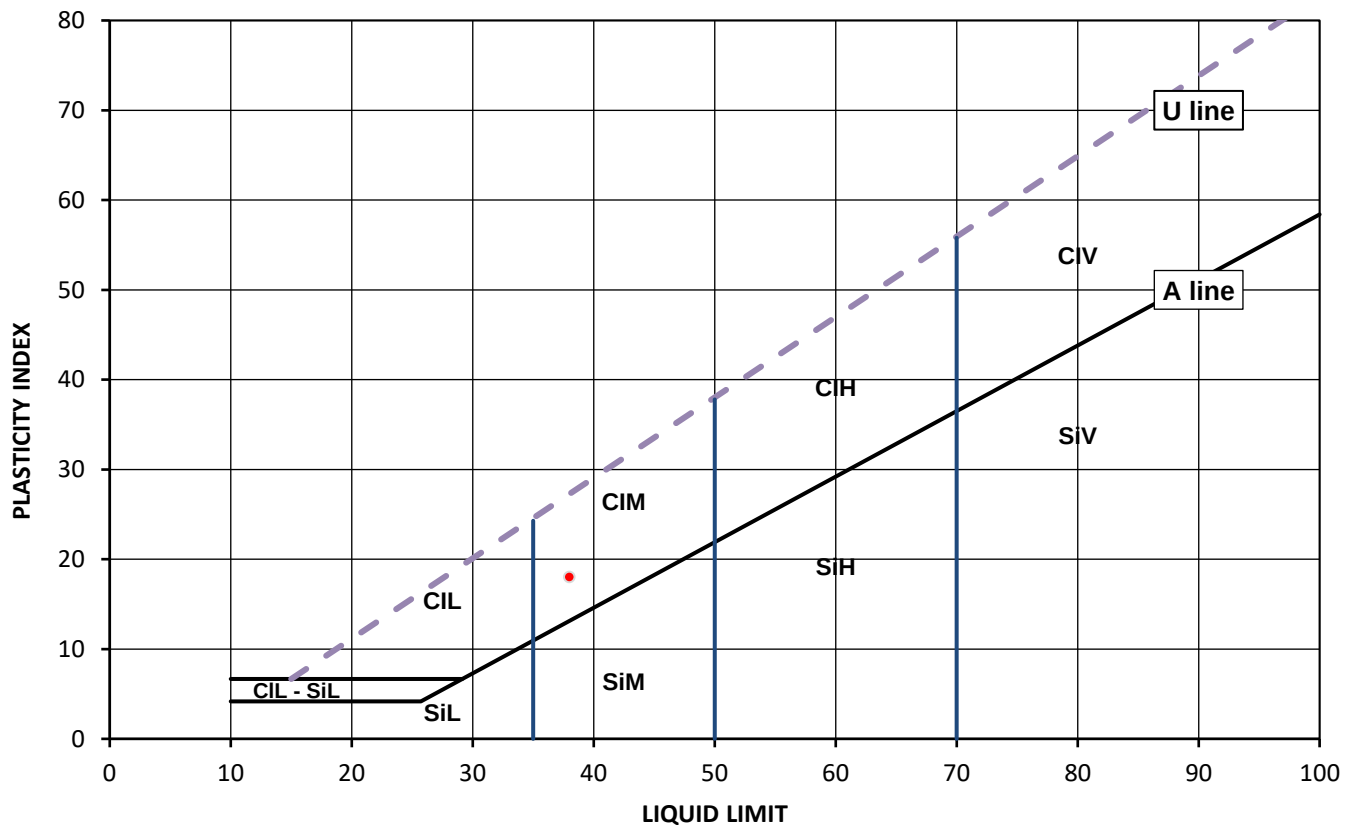
Test Results:

Laboratory Reference: 1566647
Hole No.: TP12
Sample Reference: Not Given
Soil Description: Brown sandy CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
22	38	20	18	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

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



Environmental Science

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 07/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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

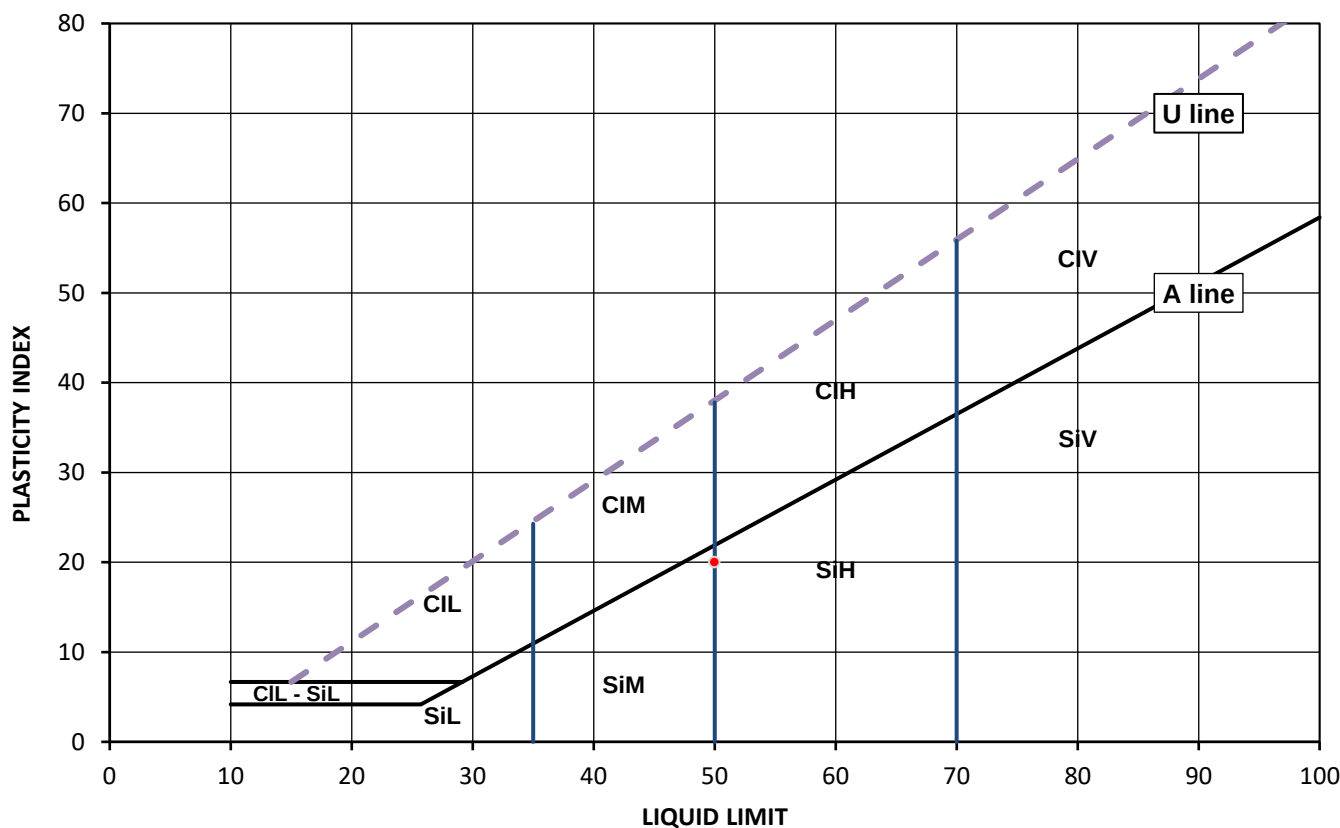
Test Results:

Laboratory Reference: 1566648
Hole No.: TP13
Sample Reference: Not Given
Soil Description: Orangish brown to grey sandy CLAY

Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
35	50	30	20	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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

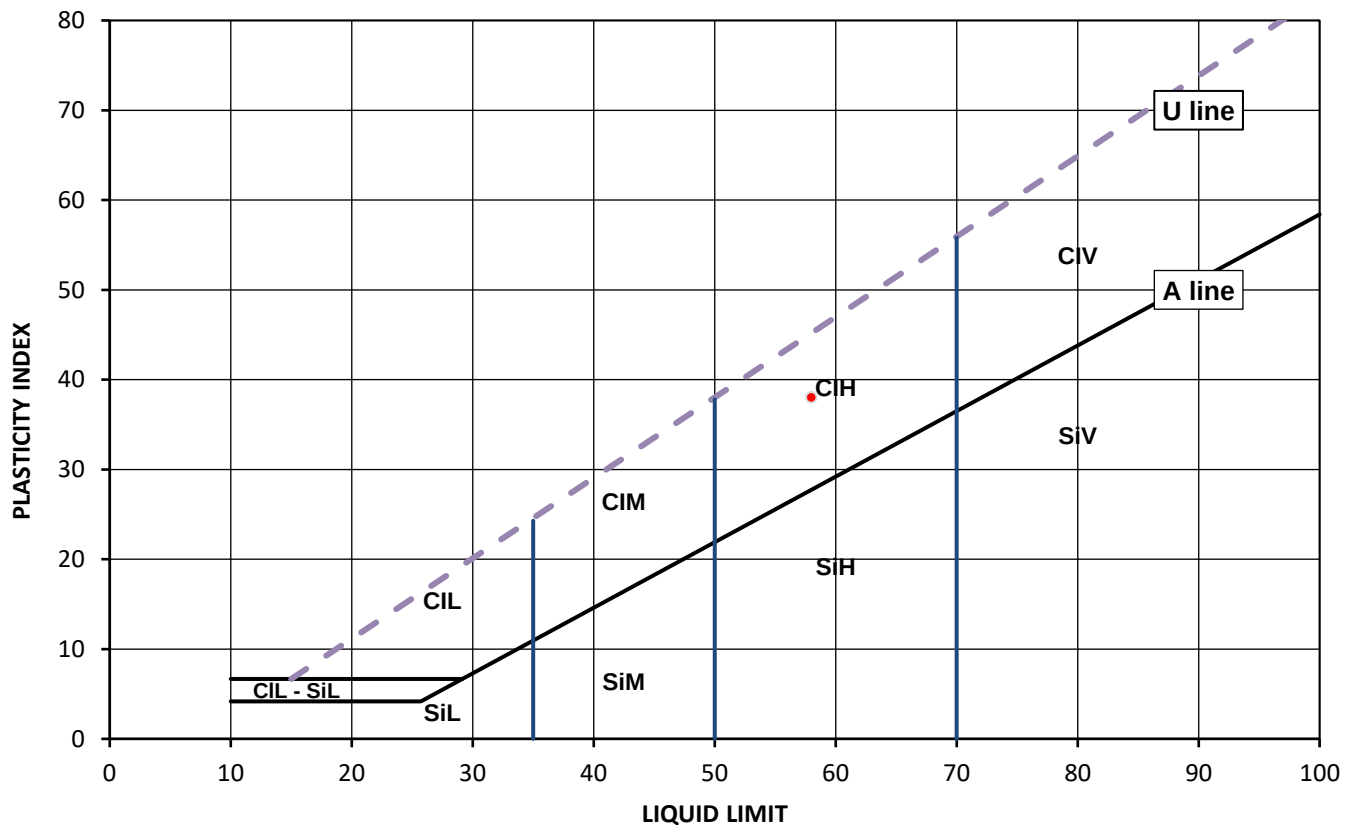
Test Results:

Laboratory Reference: 1566649
Hole No.: TP16
Sample Reference: Not Given
Soil Description: Orangish brown to grey slightly sandy CLAY

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
35	58	20	38	100



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

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M 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

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Sampled By: Not Given

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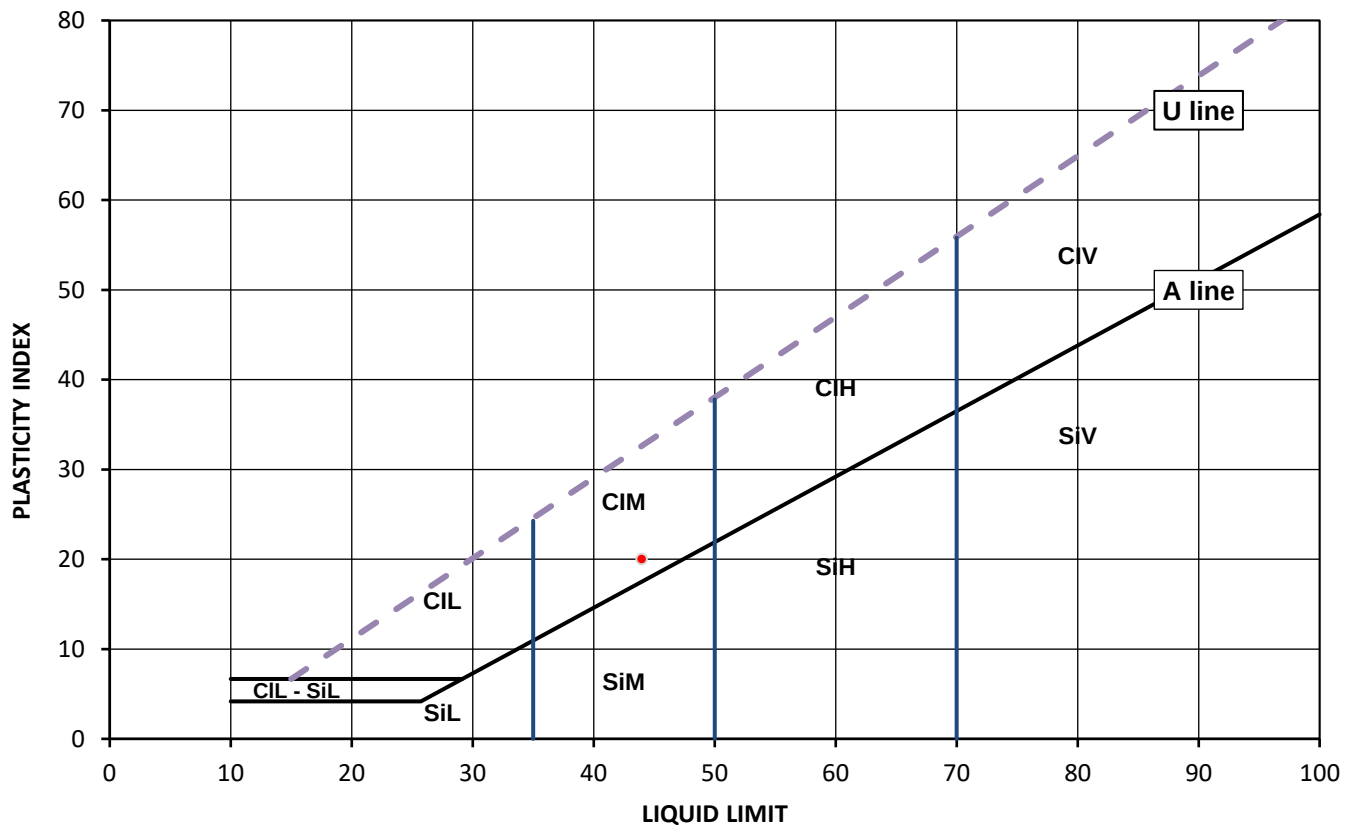
Test Results:

Laboratory Reference: 1566650
Hole No.: TP19
Sample Reference: Not Given
Soil Description: Brown slightly gravelly sandy CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	44	24	20	99



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

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M 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

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Sampled By: Not Given

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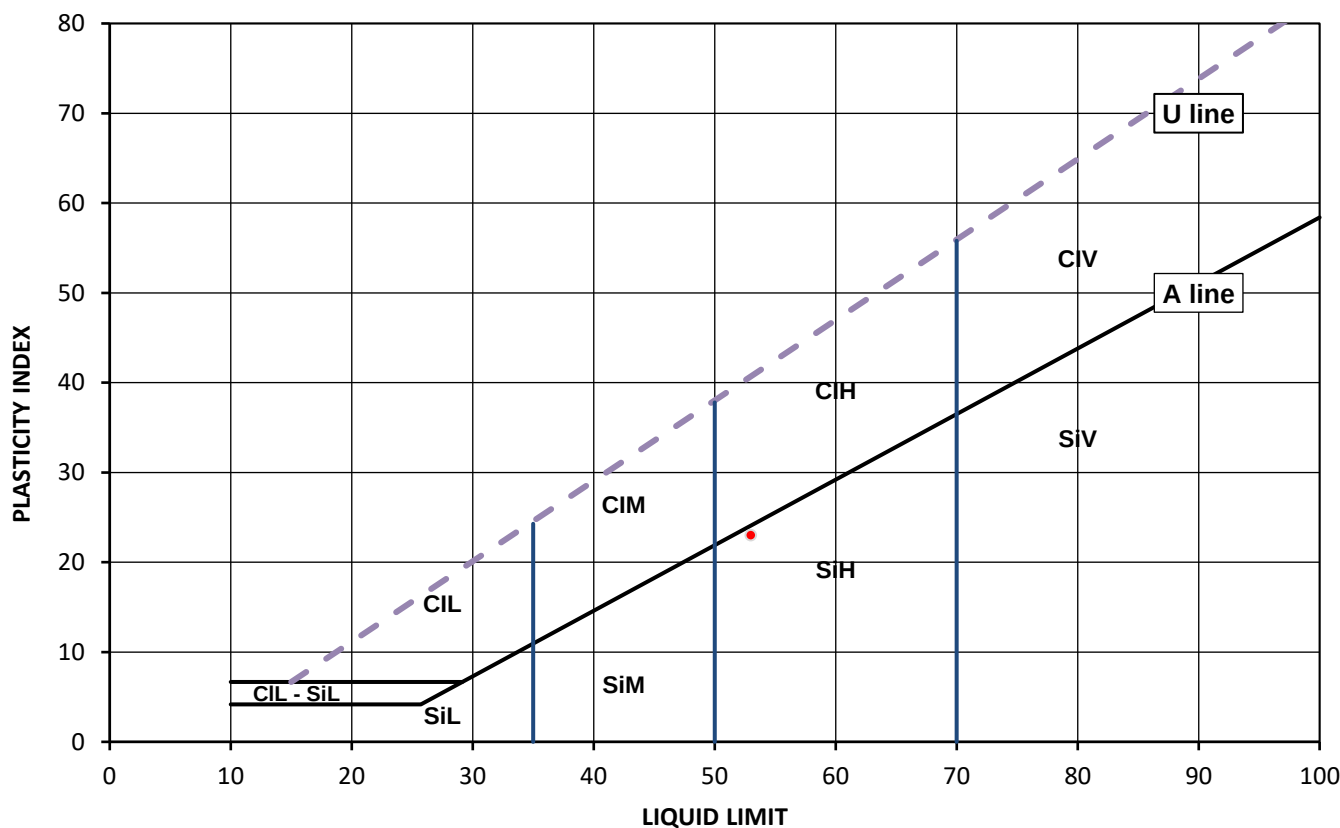
Test Results:

Laboratory Reference: 1566651
Hole No.: TP19
Sample Reference: Not Given
Soil Description: Orangish brown slightly sandy CLAY

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
34	53	30	23	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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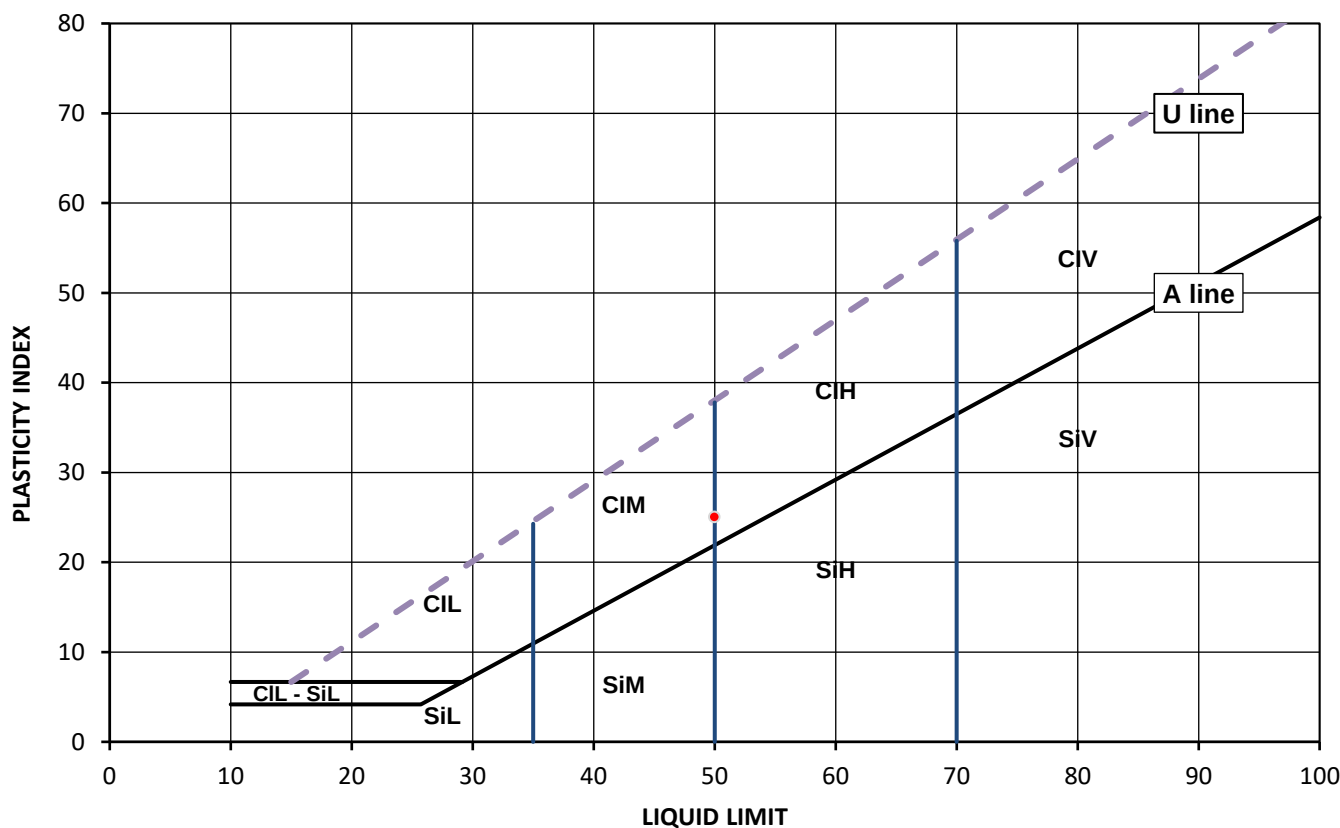
Test Results:

Laboratory Reference: 1566652
Hole No.: TP20
Sample Reference: Not Given
Soil Description: Orangish brown to grey slightly sandy CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	50	25	25	100



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

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M 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

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Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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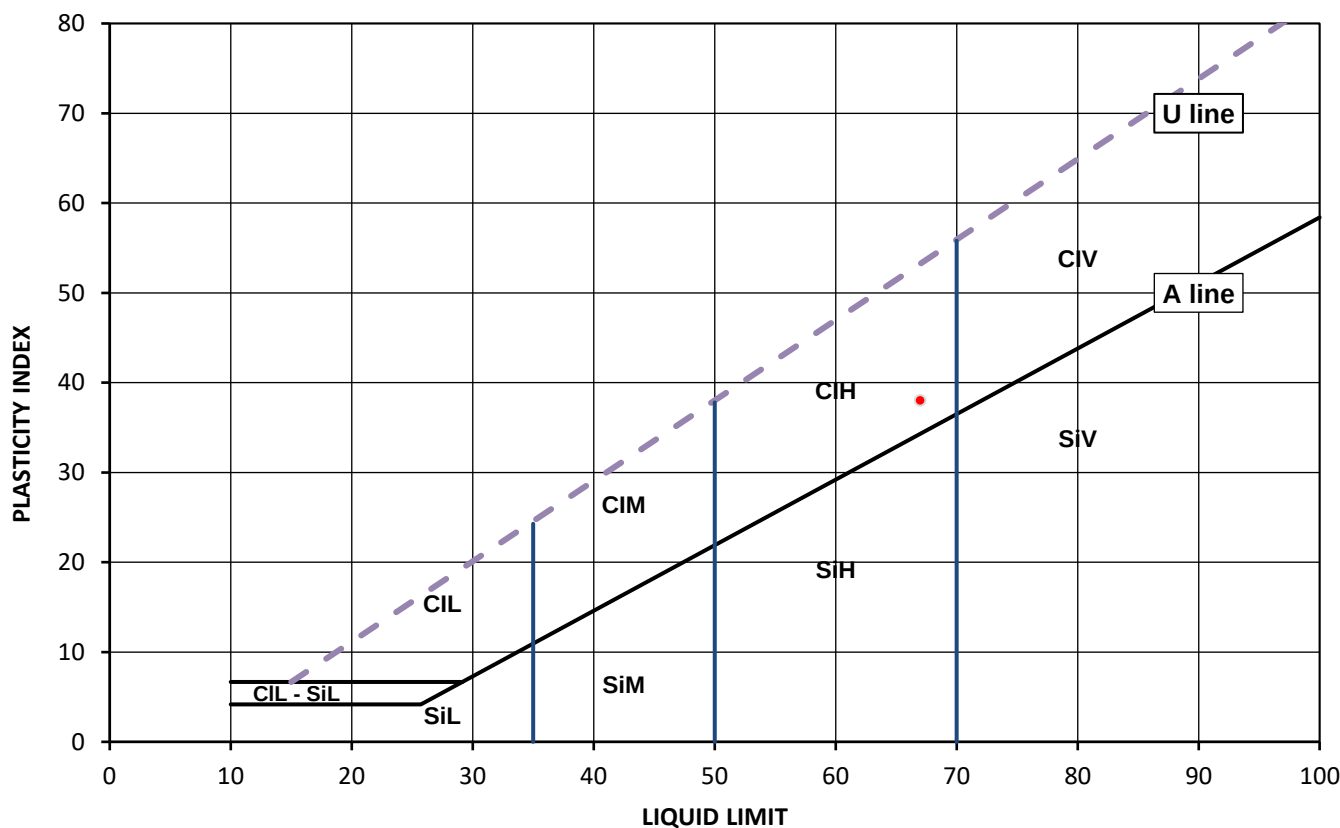
Test Results:

Laboratory Reference: 1566653
Hole No.: TP20
Sample Reference: Not Given
Soil Description: Mottled brown slightly gravelly CLAY

Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
21	67	29	38	99



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

Cl	Plasticity	Liquid Limit
Cl	L Low	below 35
Si	M 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

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Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 07/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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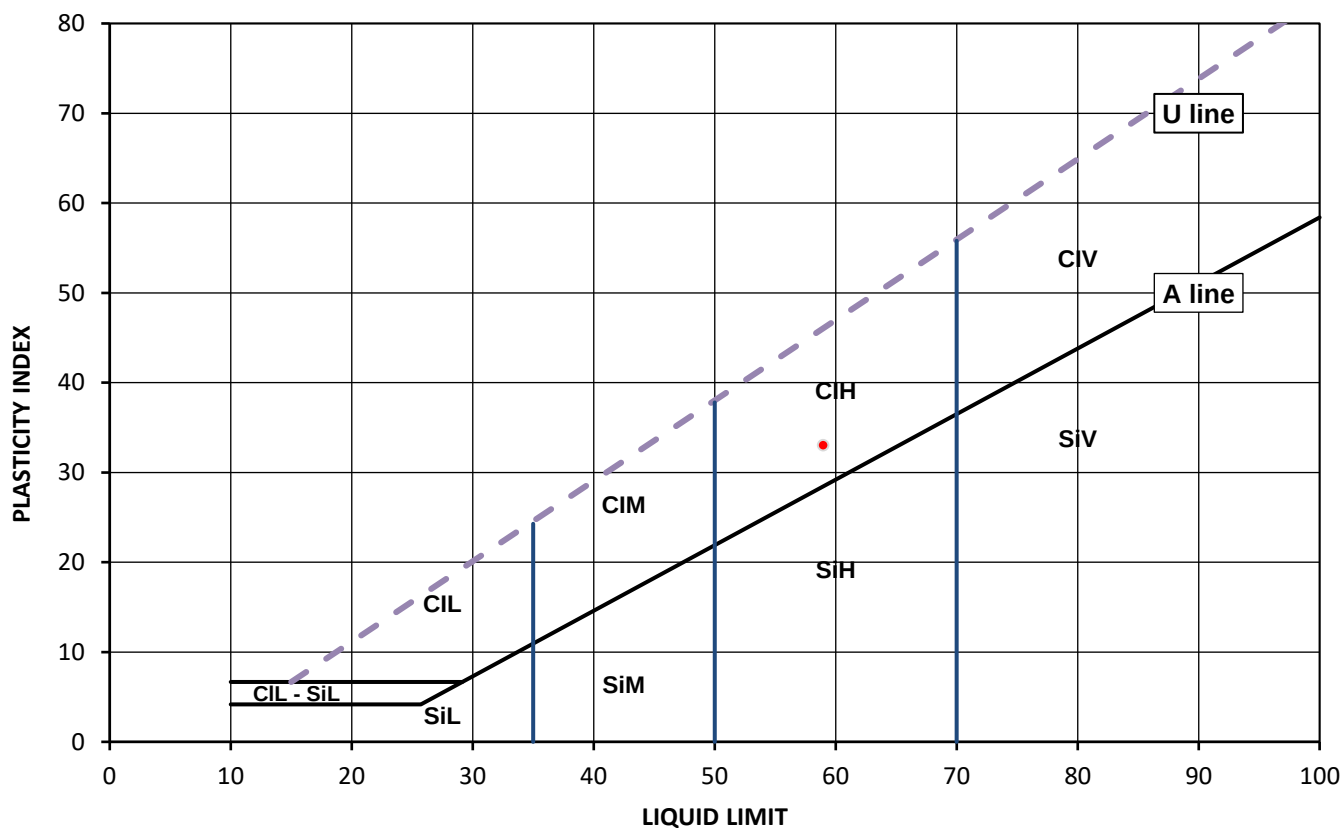
Test Results:

Laboratory Reference: 1566654
Hole No.: TP23
Sample Reference: Not Given
Soil Description: Orangish brown to grey slightly sandy CLAY

Depth Top [m]: 2.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
38	59	26	33	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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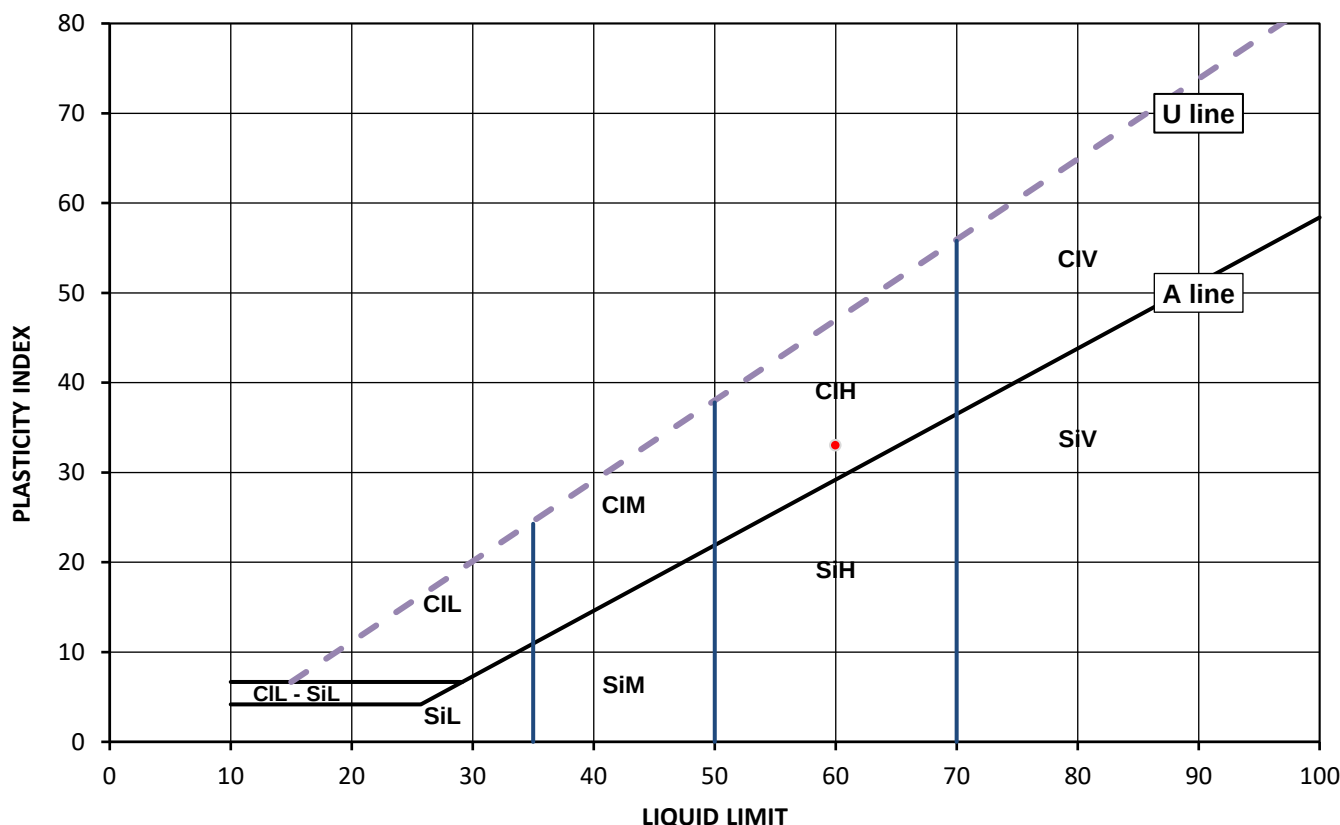
Test Results:

Laboratory Reference: 1566655
Hole No.: TP26
Sample Reference: Not Given
Soil Description: Mottled brown CLAY

Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
37	60	27	33	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Site Address: One Horton

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Date Sampled: 10/07/2020
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Sampled By: Not Given

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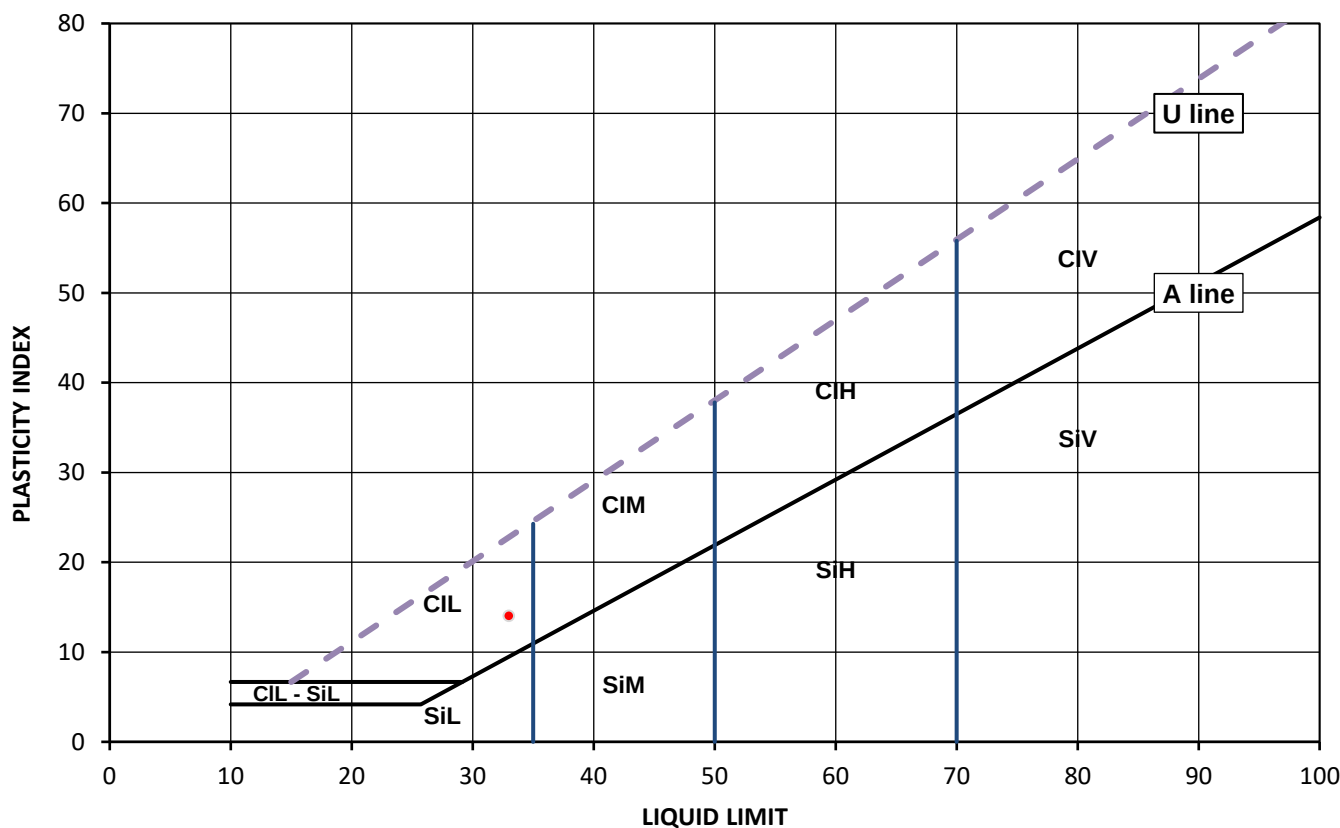
Test Results:

Laboratory Reference: 1566656
Hole No.: WS7
Sample Reference: Not Given
Soil Description: Orangish brown very sandy CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after >425um removed by hand

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
15	33	19	14	94



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 09/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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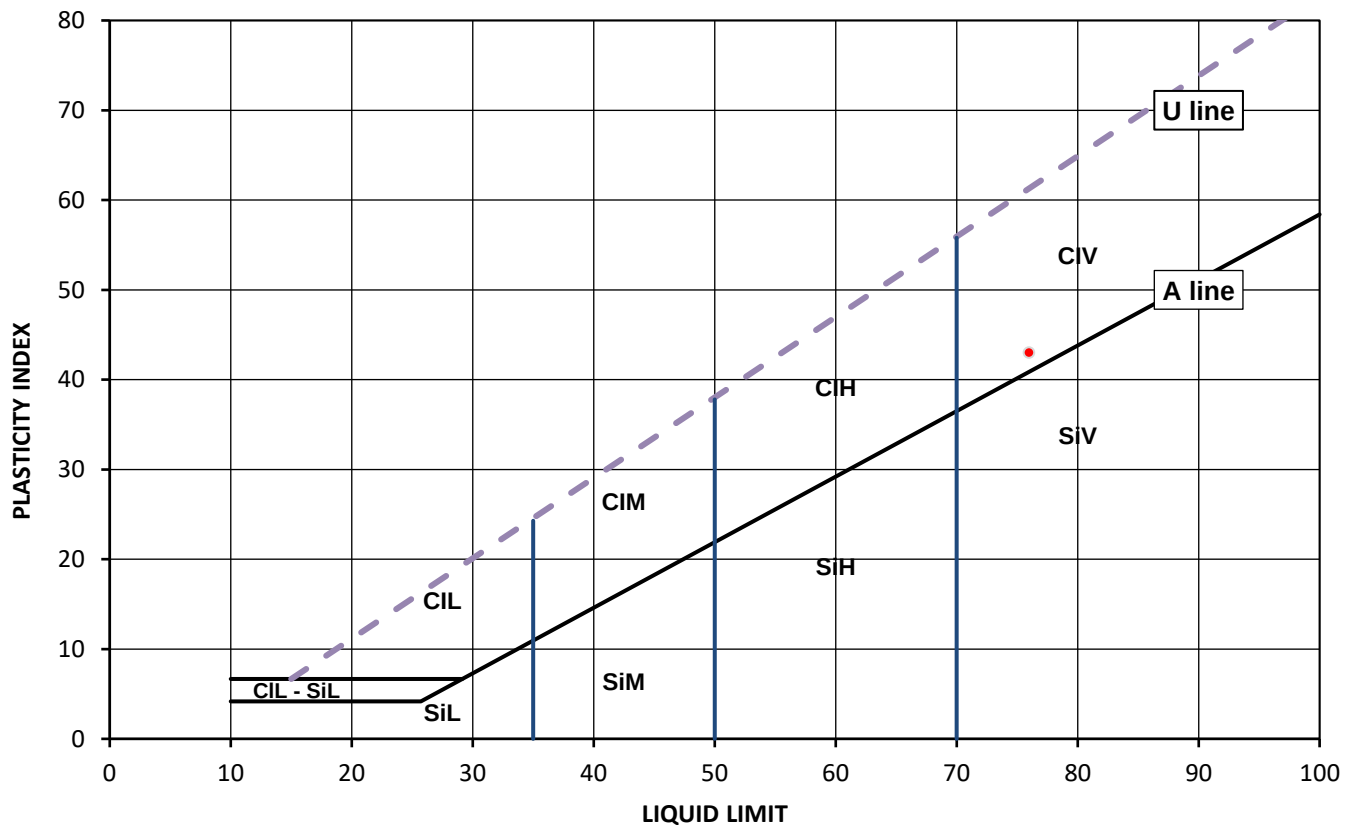
Test Results:

Laboratory Reference: 1566657
Hole No.: TP32
Sample Reference: Not Given
Soil Description: Reddish brown to grey CLAY

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	76	33	43	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Date Sampled: 09/07/2020
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Sampled By: Not Given

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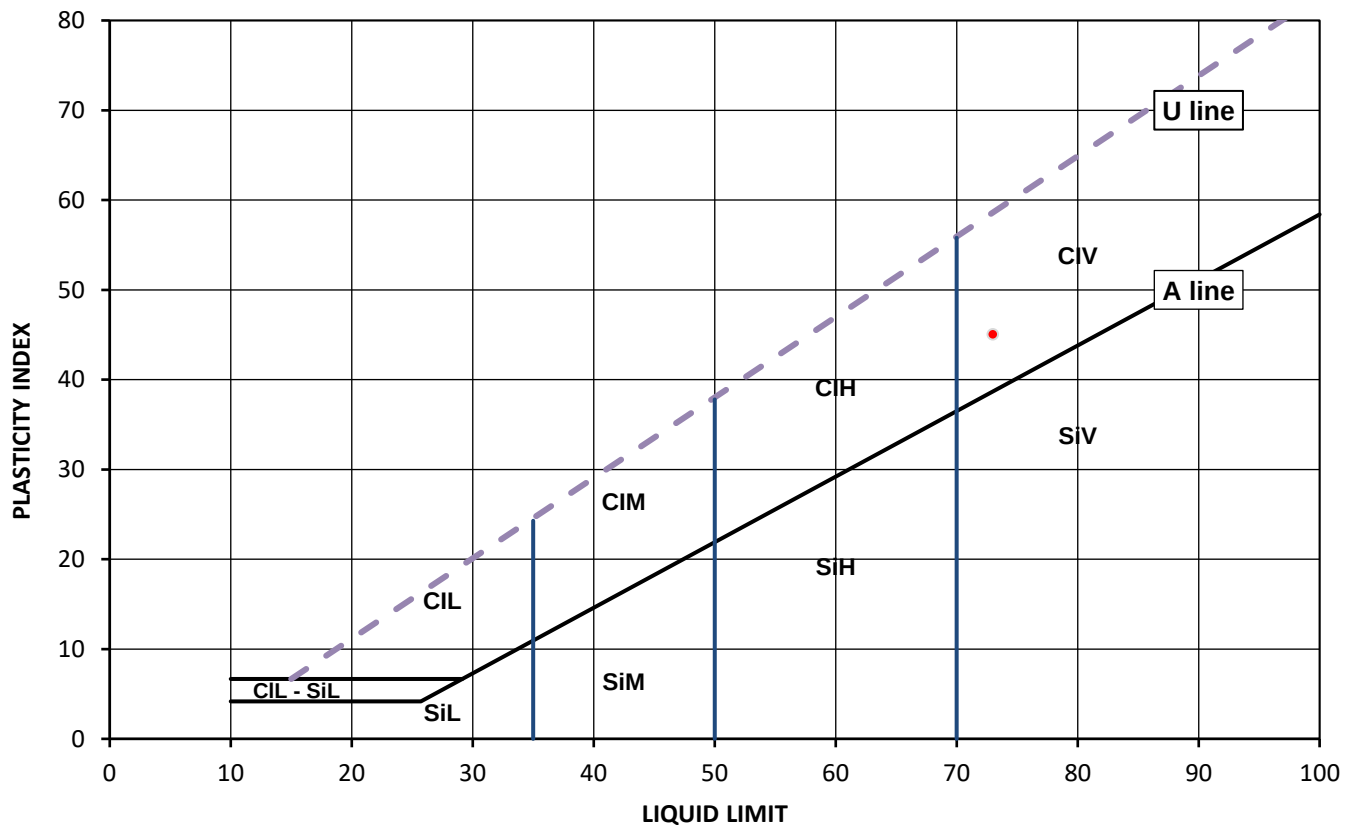
Test Results:

Laboratory Reference: 1566658
Hole No.: TP34
Sample Reference: Not Given
Soil Description: Light brown to reddish brown CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
28	73	28	45	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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Date Tested: 29/07/2020
Sampled By: Not Given

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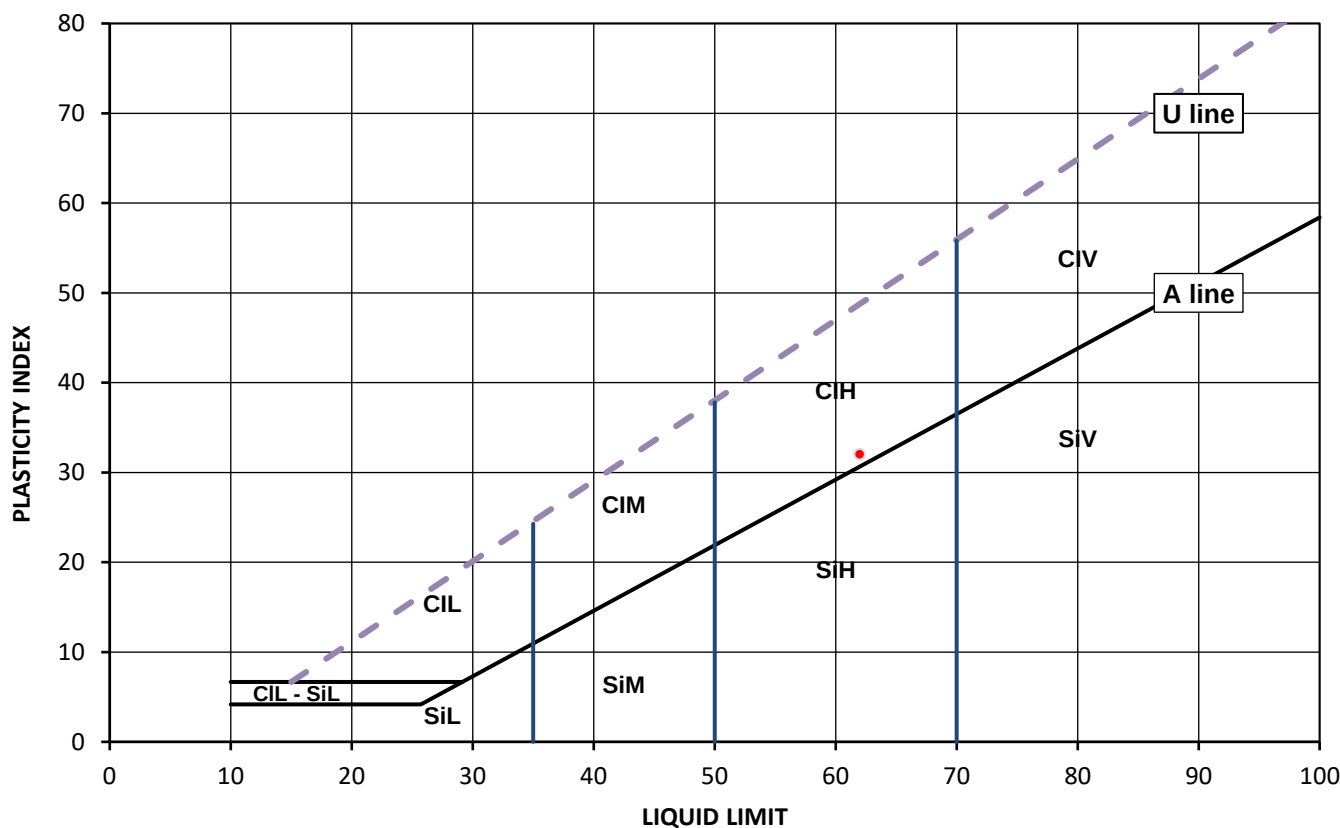
Test Results:

Laboratory Reference: 1566659
Hole No.: TP34
Sample Reference: Not Given
Soil Description: Mottled brown CLAY

Depth Top [m]: 2.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
36	62	30	32	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

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PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

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



Environmental Science

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 09/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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

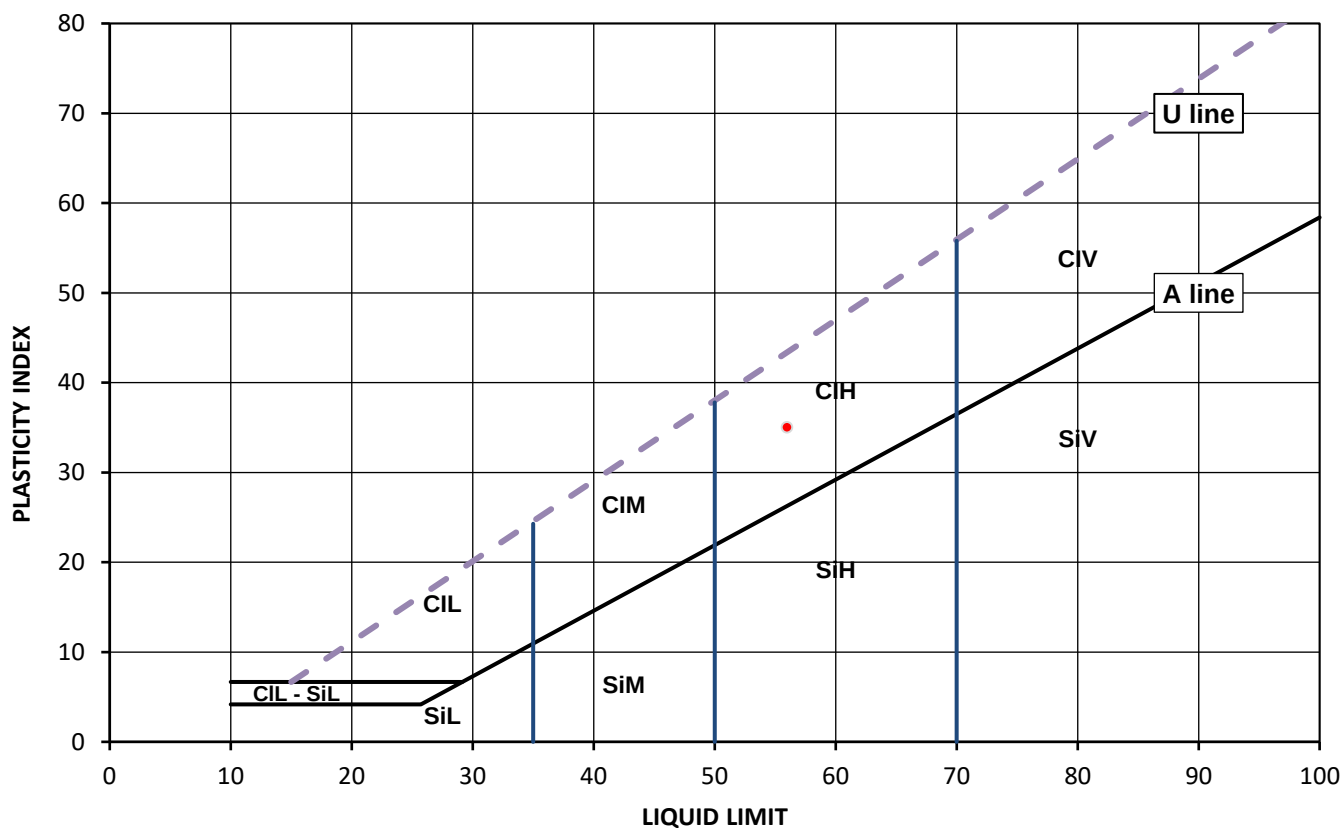
Test Results:

Laboratory Reference: 1566660
Hole No.: TP37
Sample Reference: Not Given
Soil Description: Orangish brown to grey slightly sandy CLAY

Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
38	56	21	35	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

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



4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 09/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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

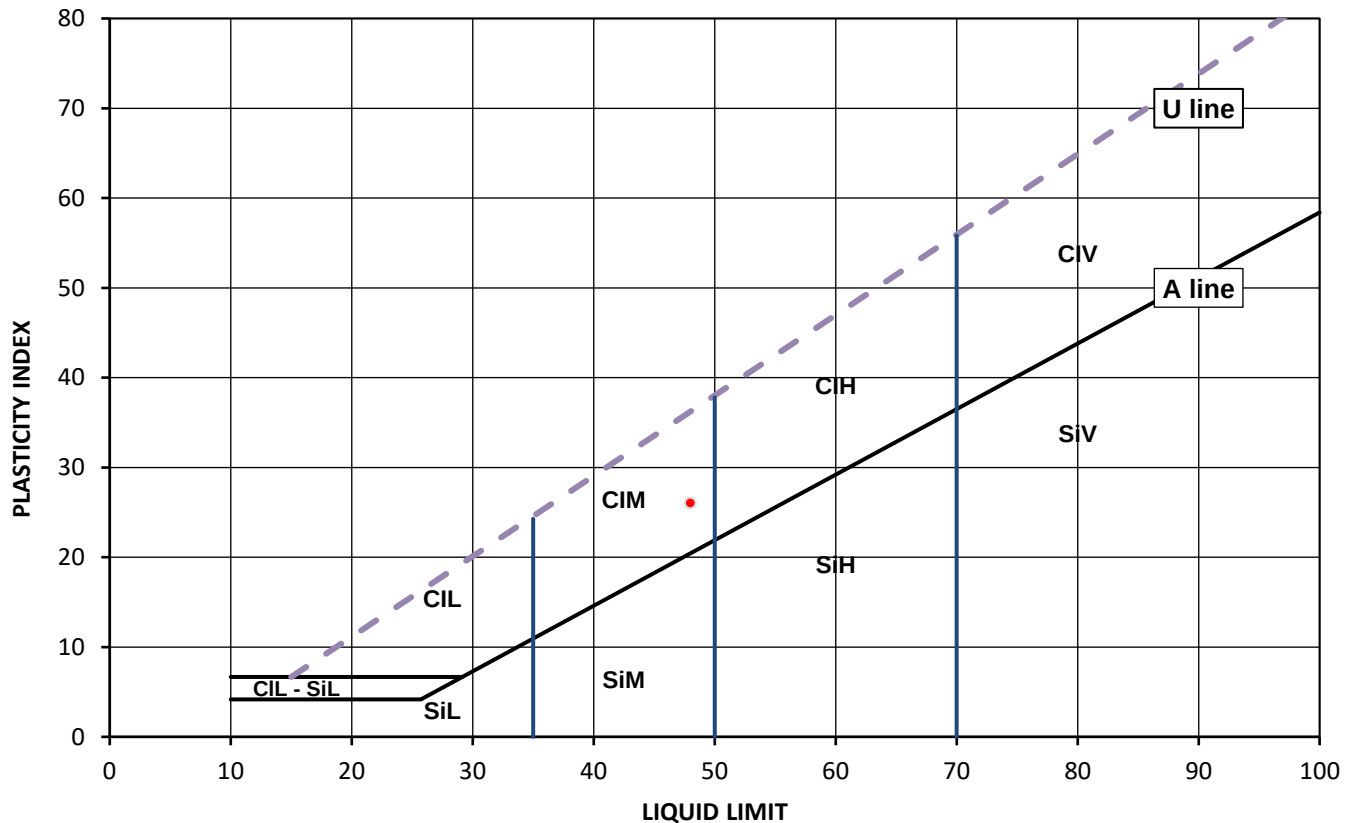
Test Results:

Laboratory Reference: 1566661
Hole No.: TP39
Sample Reference: Not Given
Soil Description: Mottled brown slightly sandy CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
22	48	22	26	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

Liquid and Plastic Limits

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



Environmental Science

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 09/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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

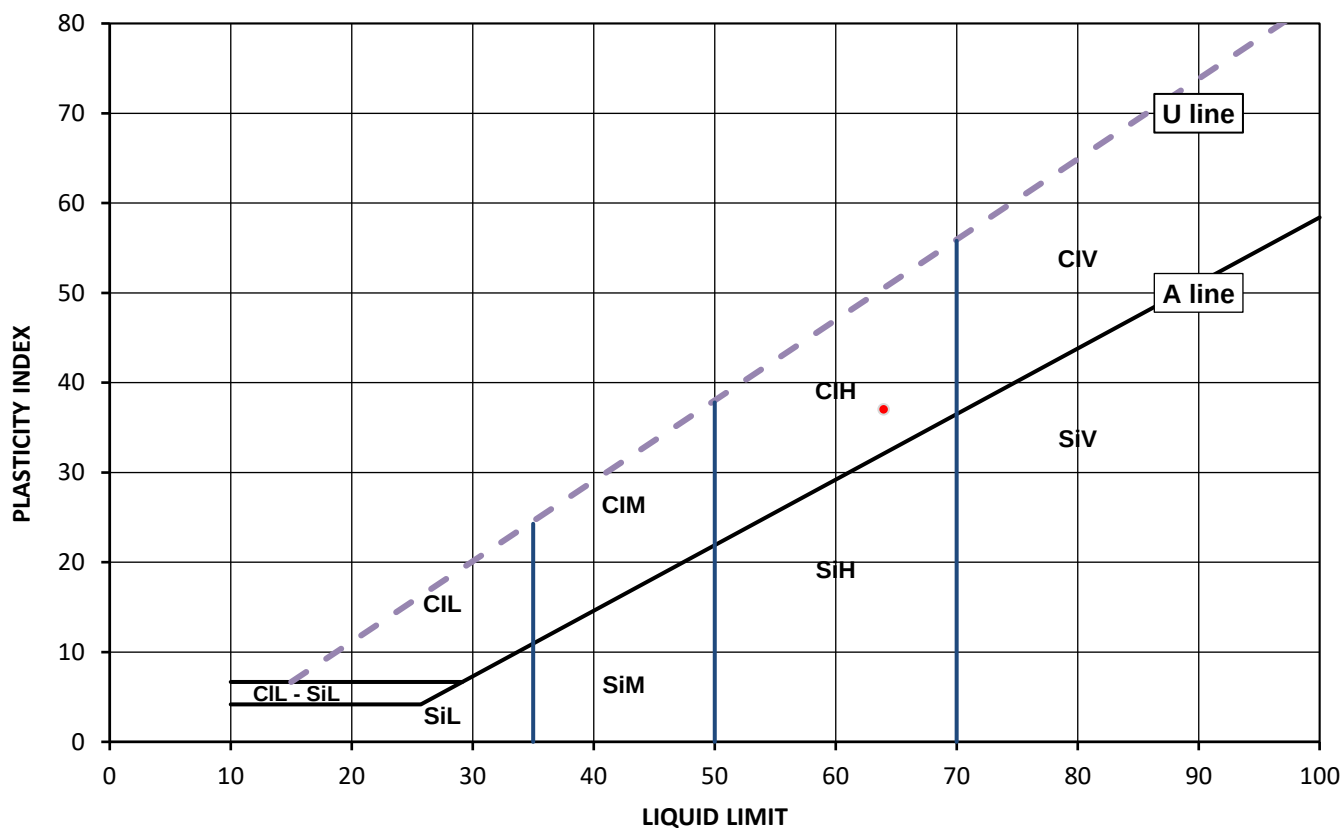
Test Results:

Laboratory Reference: 1566662
Hole No.: TP39
Sample Reference: Not Given
Soil Description: Orangish brown to grey CLAY

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested in natural condition

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
33	64	27	37	100



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

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

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

Remarks:

Signed:

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PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

Summary of Classification Test Results

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



Tested in Accordance with:

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

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

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07 - 08/07/2020
Date Received: 08/07/2020
Date Tested: 27/07 - 29/07/2020
Sampled By: Not Given

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

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1566645	TP11	Not Given	0.50	Not Given	D	Orangish brown to grey CLAY	Atterberg 1 Point	38		100	85	35	50						
1566646	TP11	Not Given	1.00	Not Given	D	Mottled brown CLAY	Atterberg 1 Point	33		100	72	34	38						
1566647	TP12	Not Given	0.50	Not Given	D	Brown sandy CLAY	Atterberg 1 Point	22		100	38	20	18						
1566648	TP13	Not Given	1.00	Not Given	D	Orangish brown to grey sandy CLAY	Atterberg 1 Point	35		100	50	30	20						
1566634	TP15	Not Given	0.60	Not Given	B	Brownish grey slightly sandy CLAY	Atterberg 1 Point	20		100	53	29	24						
1566649	TP16	Not Given	1.50	Not Given	D	Orangish brown to grey slightly sandy CLAY	Atterberg 1 Point	35		100	58	20	38						
1566629	TP17	Not Given	0.60	Not Given	B	Multicolour silty CLAY	Atterberg 1 Point	32		100	67	32	35						
1566650	TP19	Not Given	0.50	Not Given	D	Brown slightly gravelly sandy CLAY	Atterberg 1 Point	18		99	44	24	20						
1566651	TP19	Not Given	1.50	Not Given	D	Orangish brown slightly sandy CLAY	Atterberg 1 Point	34		100	53	30	23						
1566652	TP20	Not Given	0.50	Not Given	D	Orangish brown to grey slightly sandy CLAY	Atterberg 1 Point	32		100	50	25	25						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:



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PL Technical Reviewer
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SUMMARY REPORT

Summary of Classification Test Results

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



Tested in Accordance with:

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

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

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07 - 10/07/2020
Date Received: 08/07/2020
Date Tested: 27/07 - 29/07/2020
Sampled By: Not Given

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

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1566653	TP20	Not Given	1.00	Not Given	D	Mottled brown slightly gravelly CLAY	Atterberg 1 Point	21		99	67	29	38						
1566635	TP21	Not Given	0.60	Not Given	B	Yellowish brown mottled grey slightly sandy CLAY	Atterberg 1 Point	32		100	55	25	30						
1566654	TP23	Not Given	2.00	Not Given	D	Orangish brown to grey slightly sandy CLAY	Atterberg 1 Point	38		100	59	26	33						
1566630	TP24	Not Given	0.60	Not Given	B	Brownish grey slightly sandy CLAY	Atterberg 1 Point	32		100	55	31	24						
1566633	TP25	Not Given	0.60	Not Given	B	Brownish grey CLAY	Atterberg 1 Point	32		100	72	29	43						
1566655	TP26	Not Given	1.00	Not Given	D	Mottled brown CLAY	Atterberg 1 Point	37		100	60	27	33						
1566632	TP28	Not Given	0.60	Not Given	B	Yellowish brown slightly gravelly sandy CLAY	Atterberg 1 Point	21		97	61	25	36						
1566657	TP32	Not Given	1.50	Not Given	D	Reddish brown to grey CLAY	Atterberg 1 Point	33		100	76	33	43						
1566658	TP34	Not Given	0.50	Not Given	D	Light brown to reddish brown CLAY	Atterberg 1 Point	28		100	73	28	45						
1566631	TP34	Not Given	0.60	Not Given	B	Light grey mottled red CLAY	Atterberg 1 Point	27		100	79	29	50						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:



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PL Technical Reviewer
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SUMMARY REPORT

Summary of Classification Test Results

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



Tested in Accordance with:

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

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

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07 - 10/07/2020
Date Received: 08/07/2020
Date Tested: 29/07/2020
Sampled By: Not Given

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

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
1566659	TP34	Not Given	2.00	Not Given	D	Mottled brown CLAY	Atterberg 1 Point	36		100	62	30	32						
1566660	TP37	Not Given	1.00	Not Given	D	Orangish brown to grey slightly sandy CLAY	Atterberg 1 Point	38		100	56	21	35						
1566661	TP39	Not Given	0.50	Not Given	D	Mottled brown slightly sandy CLAY	Atterberg 1 Point	22		100	48	22	26						
1566662	TP39	Not Given	1.50	Not Given	D	Orangish brown to grey CLAY	Atterberg 1 Point	33		100	64	27	37						
1566642	WS10	Not Given	1.00	Not Given	D	Orangish brown to light grey slightly sandy CLAY	Atterberg 1 Point	27		100	57	27	30						
1566643	WS12	Not Given	1.50	Not Given	D	Light grey to orangish brown CLAY	Atterberg 1 Point	26		100	71	31	40						
1566644	WS15	Not Given	0.50	Not Given	D	Orangish brown to grey CLAY	Atterberg 1 Point	34		100	72	28	44						
1566656	WS7	Not Given	0.50	Not Given	D	Orangish brown very sandy CLAY	Atterberg 1 Point	15		94	33	19	14						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:



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TEST CERTIFICATE

Particle Size Distribution

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



Tested in Accordance with: BS 1377-2: 1990

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
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BN6 9GL
Contact: Fiona Goode
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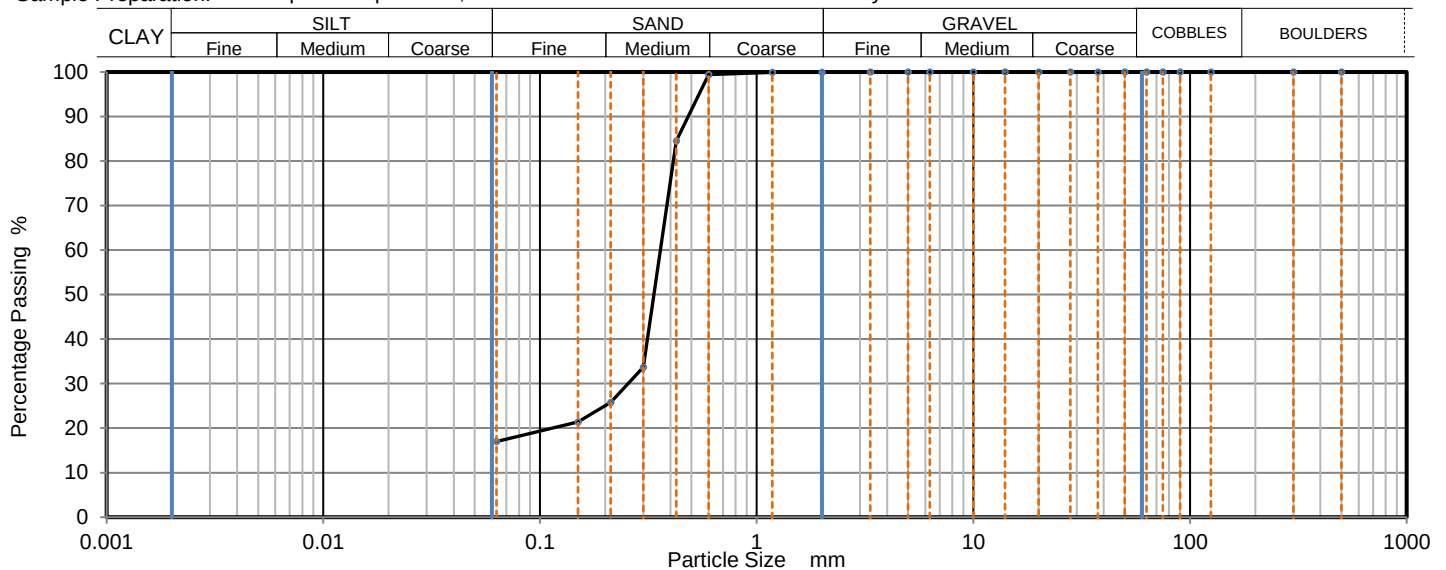
Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 28/07/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566639
Hole No.: WS16
Sample Reference: Not Given
Sample Description: Brown clayey SAND
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: D



Sieving		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	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	99		
0.425	85		
0.3	34		
0.212	26		
0.15	21		
0.063	17		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.10
Sand	83.00
Fines <0.063mm	17.00

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	
Curvature Coefficient	

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

Remarks:

Signed:

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PL Technical Reviewer
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TEST CERTIFICATE

Particle Size Distribution

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



Tested in Accordance with: BS 1377-2: 1990

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

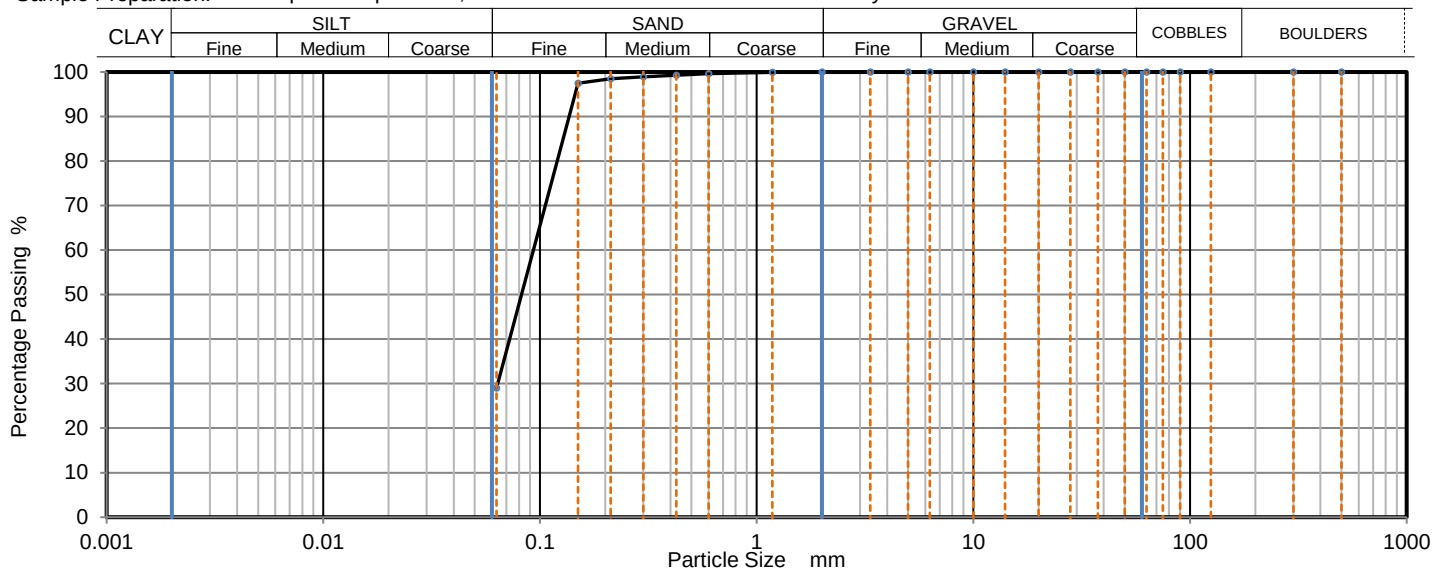
Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 28/07/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566640
Hole No.: WS07
Sample Reference: Not Given
Sample Description: Brown clayey SAND
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.

Depth Top [m]: 2.00
Depth Base [m]: Not Given
Sample Type: D



Sieving		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	100		
6.3	100		
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100		
0.425	99		
0.3	99		
0.212	99		
0.15	98		
0.063	29		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	70.80
Fines <0.063mm	29.20

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	
Curvature Coefficient	

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

Remarks:

Signed:

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PL Technical Reviewer
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TEST CERTIFICATE

Particle Size Distribution

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



Tested in Accordance with: BS 1377-2: 1990

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

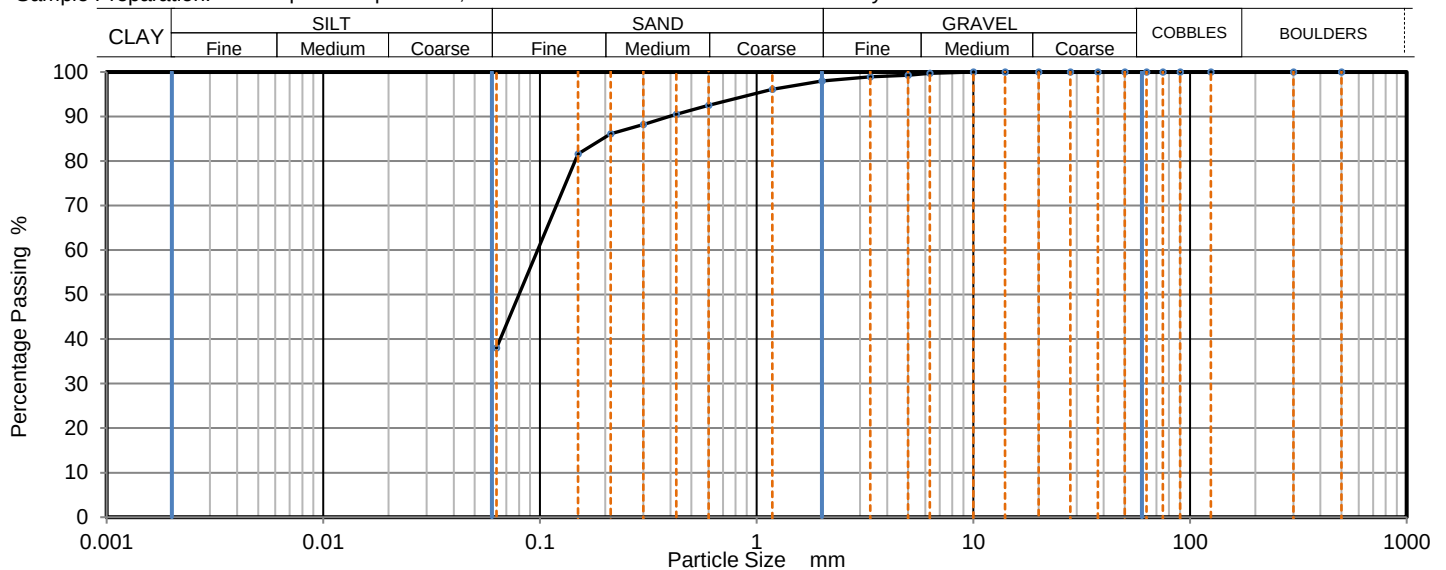
Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 28/07/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566641
Hole No.: TP30
Sample Reference: Not Given
Sample Description: Reddish brown very clayey SAND
Sample Preparation: Sample was quartered, oven dried at 106.1 °C and broken down by hand.

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: D



Sieving		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	100		
6.3	100		
5	99		
3.35	99		
2	98		
1.18	96		
0.6	93		
0.425	91		
0.3	88		
0.212	86		
0.15	82		
0.063	38		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	2.00
Sand	59.60
Fines <0.063mm	38.40

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	
Curvature Coefficient	

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

Remarks:

Signed:

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SUMMARY REPORT

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



Environmental Science

Summary of Moisture Condition Value Test Results

Tested in Accordance with: BS 1377-4: 1990: Clause 5.4

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 07/07 - 08/07/2020
Date Received: 08/07/2020
Date Tested: 01/08/2020
Sampled By: Not Given

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

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Retained on 20mm sieve %	Moisture Content <20mm %	Moisture Condition Value	Method of Interpretation						
		Reference	Depth Top m	Depth Base m	Type												
1566638	BH1	Not Given	0.50	Not Given	B	Yellowish brown slightly gravelly sandy CLAY with roots		1	27	9.7	Steepest straight line						
1566636	TP14	Not Given	0.50	Not Given	B	Yellowish brown slightly sandy CLAY		0	27	9.1	Steepest straight line						
1566637	TP21	Not Given	1.50	Not Given	B	Yellowish brown CLAY		0	32	5.4	Steepest straight line						

Comments:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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4041

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

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

TEST CERTIFICATE

Dry Density / Moisture Content

Relationship Light Compaction

Tested in Accordance with:
BS 1377-4: 1990

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



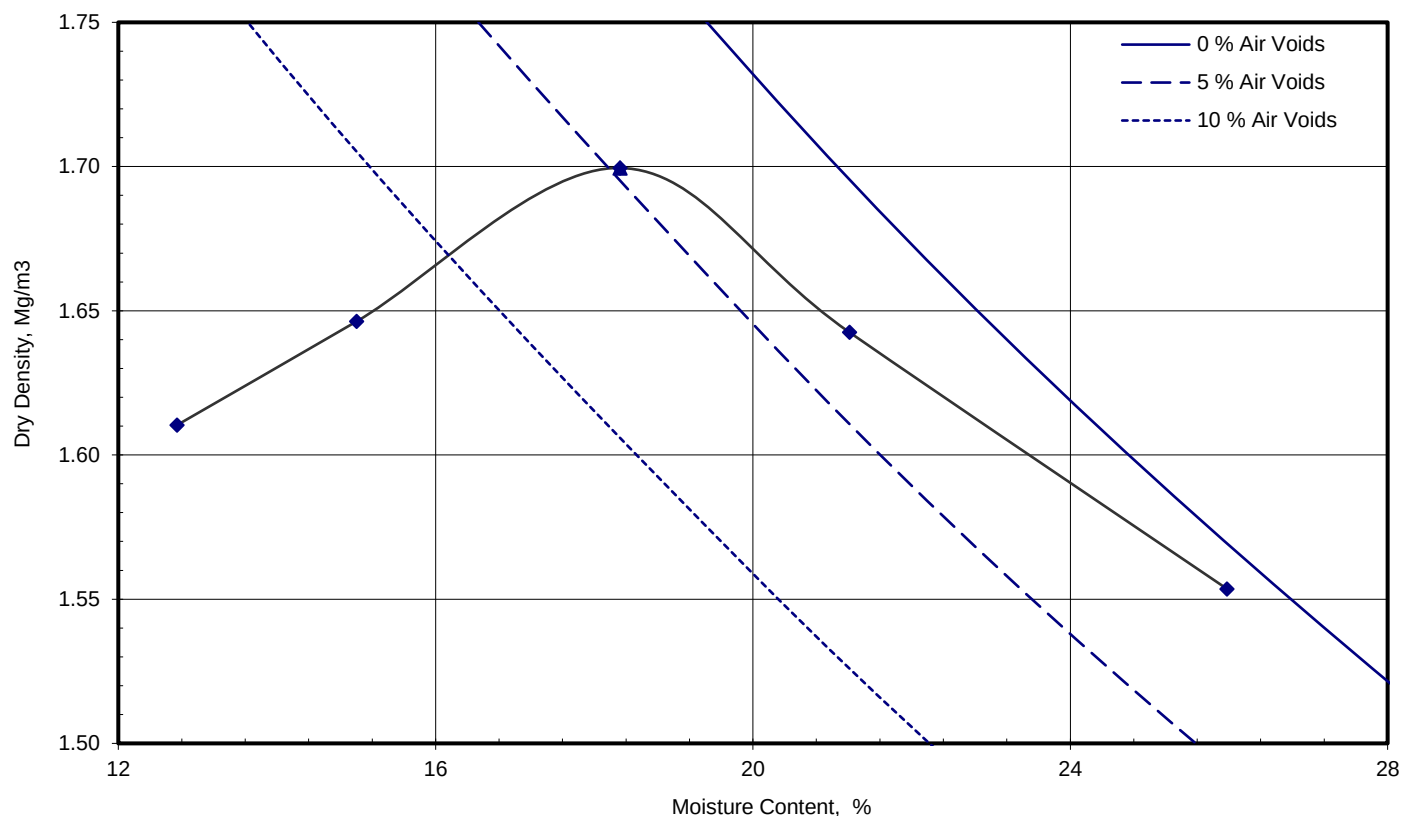
Environmental Science

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 01/08/2020
Sampled By: Not Given

Test Results:

Laboratory Reference: 1566636
Hole No.: TP14
Sample Reference: Not Given
Sample Description: Yellowish brown slightly sandy CLAY

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: B



Preparation		Material used was natural
Mould Type		1 Litre
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	26
Maximum Dry Density	Mg/m³	1.70
Optimum Moisture Content	%	18

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.3 using 2.5kg [light] Rammer

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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4041

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

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

TEST CERTIFICATE

Dry Density / Moisture Content

Relationship Light Compaction

Tested in Accordance with:
BS 1377-4: 1990

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



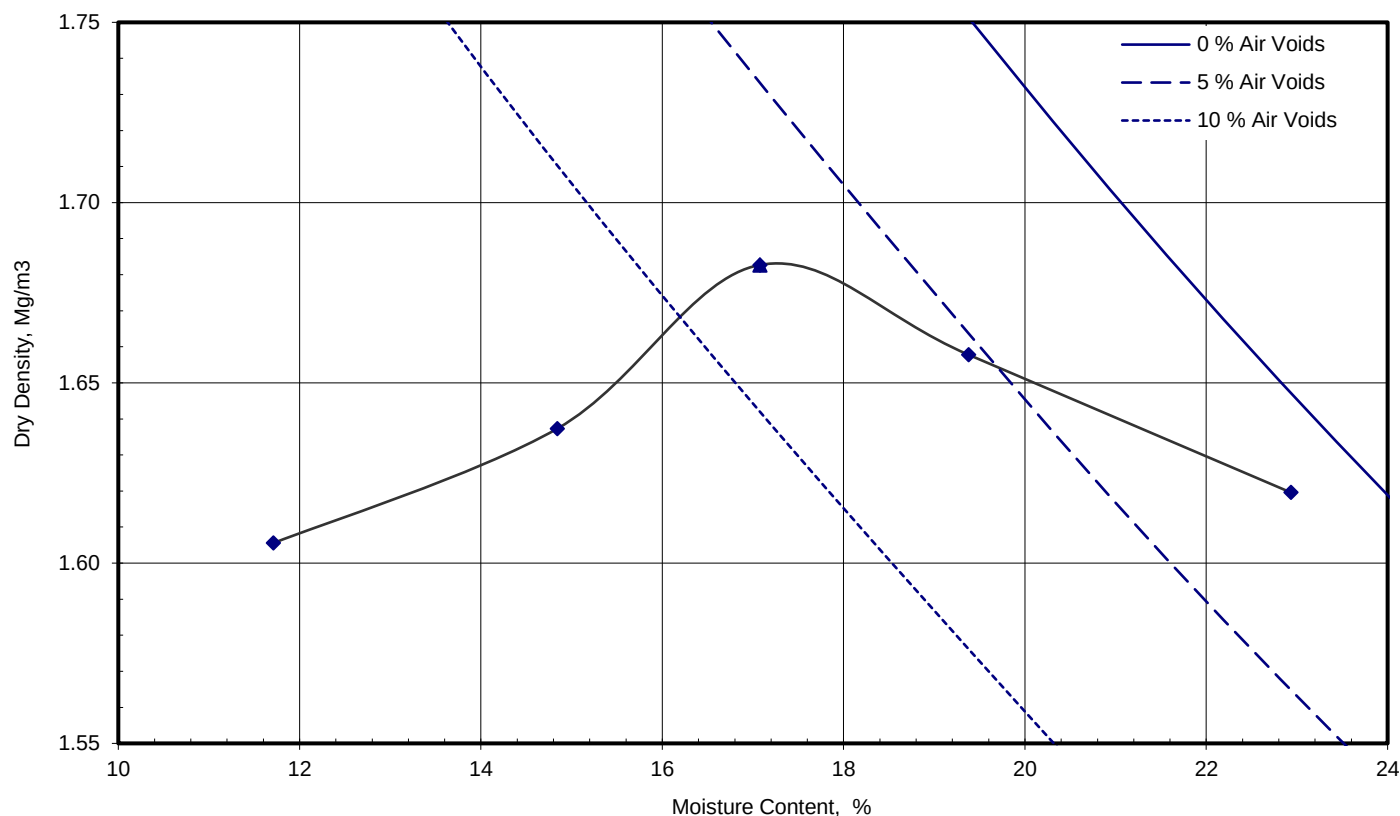
Environmental Science

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 07/07/2020
Date Received: 08/07/2020
Date Tested: 01/08/2020
Sampled By: Not Given

Test Results:

Laboratory Reference: 1566637
Hole No.: TP21
Sample Reference: Not Given
Sample Description: Yellowish brown CLAY

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: B



Preparation		Material used was natural
Mould Type		1 Litre
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	32
Maximum Dry Density	Mg/m³	1.68

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.3 using 2.5kg [light] Rammer

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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4041

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Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

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

TEST CERTIFICATE

Dry Density / Moisture Content

Relationship Light Compaction

Tested in Accordance with:
BS 1377-4: 1990

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



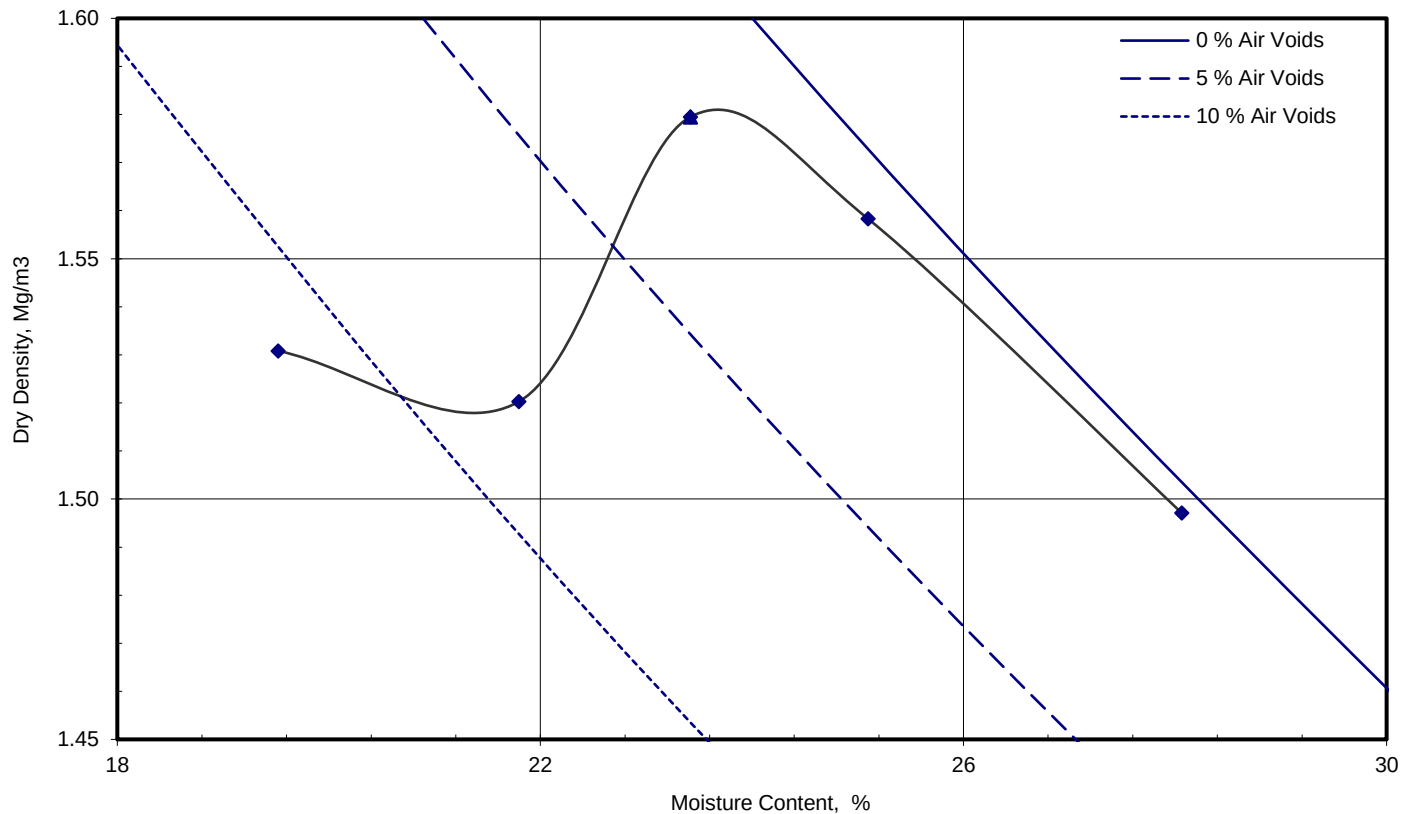
Environmental Science

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 01/08/2020
Sampled By: Not Given

Test Results:

Laboratory Reference: 1566638
Hole No.: BH1
Sample Reference: Not Given
Sample Description: Yellowish brown slightly gravelly sandy CLAY with roots

Depth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: B



Preparation		Material used was natural
Mould Type		CBR
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	1
Material Retained on 20.0 mm Sieve	%	1
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	28
Maximum Dry Density	Mg/m³	1.58

Optimum Moisture Content	%	23
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.4 using 2.5kg [light] Rammer

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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4041

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 Hurstpierpoint, West Sussex,
 BN6 9GL
 Contact: Fiona Goode
 Site Address: One Horton

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

TEST CERTIFICATE
Unconsolidated Undrained
Triaxial Compression
 Tested in Accordance with:
 BS 1377-7: 1990: Clause 8

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



Client Reference: GE18771
 Job Number: 20-20186
 Date Sampled: 08/07/2020
 Date Received: 08/07/2020
 Date Tested: 01/08/2020
 Sampled By: Not Given

Test Results:

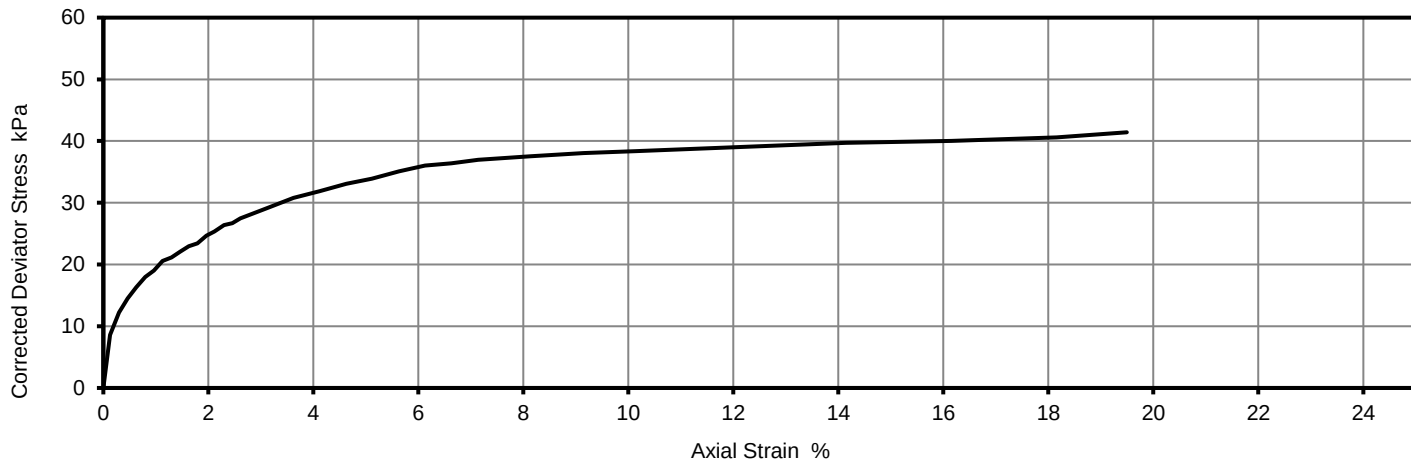
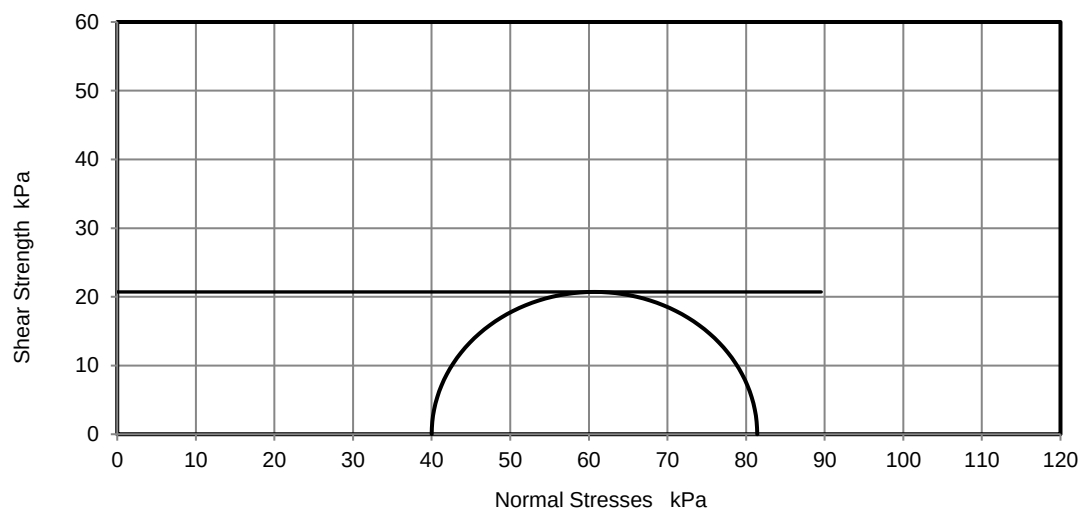
Laboratory Reference: 1566623
 Hole No.: BH1
 Sample Reference: Not Given
 Sample Description: Brown sandy CLAY

Depth Top [m]: 2.00
 Depth Base [m]: Not Given
 Sample Type: U

Test Number	1
Length	199.95 mm
Diameter	101.77 mm
Bulk Density	1.98 Mg/m ³
Moisture Content	27 %
Dry Density	1.55 Mg/m ³
Membrane Correction	1.04 kPa

Rate of Strain
 Cell Pressure
 Axial Strain at failure
 Deviator Stress, $(\sigma_1 - \sigma_3)_f$
 Undrained Shear Strength, c_u
 Mode of Failure
 Membrane thickness

2.00	%/min
40	kPa
19.5	%
41	kPa
21	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Compound	
0.28	mm

Deviator Stress v Axial Strain**Mohr Circles**

Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
 This is provided for information only.

Remarks:

Signed:

Aleksandra Jurochnik
 PL Technical Reviewer
 for and on behalf of i2 Analytical Ltd

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4041

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 Client Address: Unit 7, Danworth Farm, Cuckfield Road,
 Hurstpierpoint, West Sussex,
 BN6 9GL
 Contact: Fiona Goode
 Site Address: One Horton

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

TEST CERTIFICATE
Unconsolidated Undrained
Triaxial Compression
 Tested in Accordance with:
 BS 1377-7: 1990: Clause 8

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



Client Reference: GE18771
 Job Number: 20-20186
 Date Sampled: 08/07/2020
 Date Received: 08/07/2020
 Date Tested: 01/08/2020
 Sampled By: Not Given

Test Results:

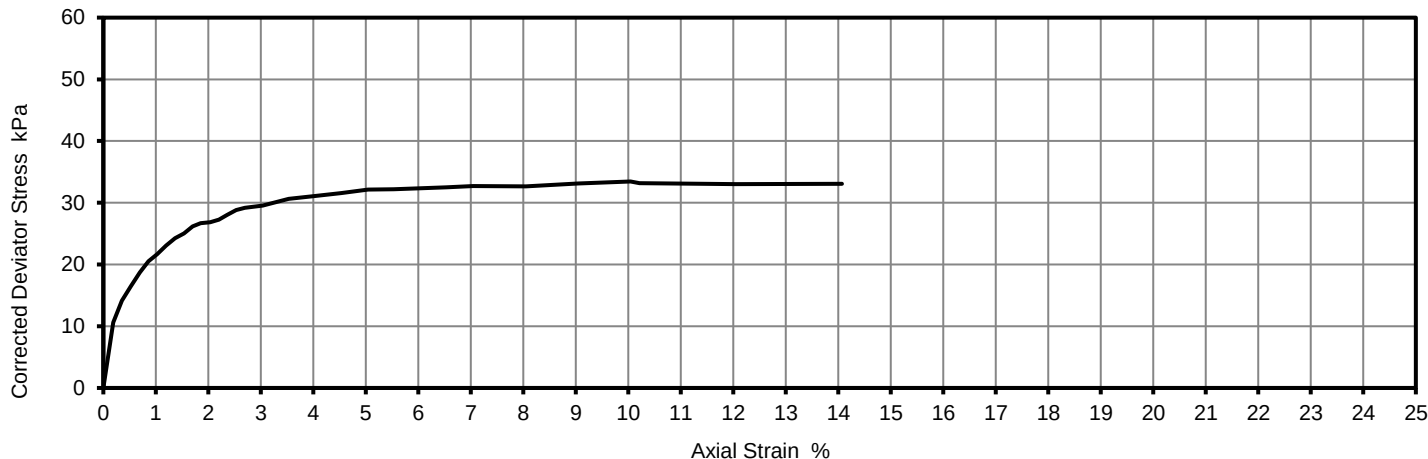
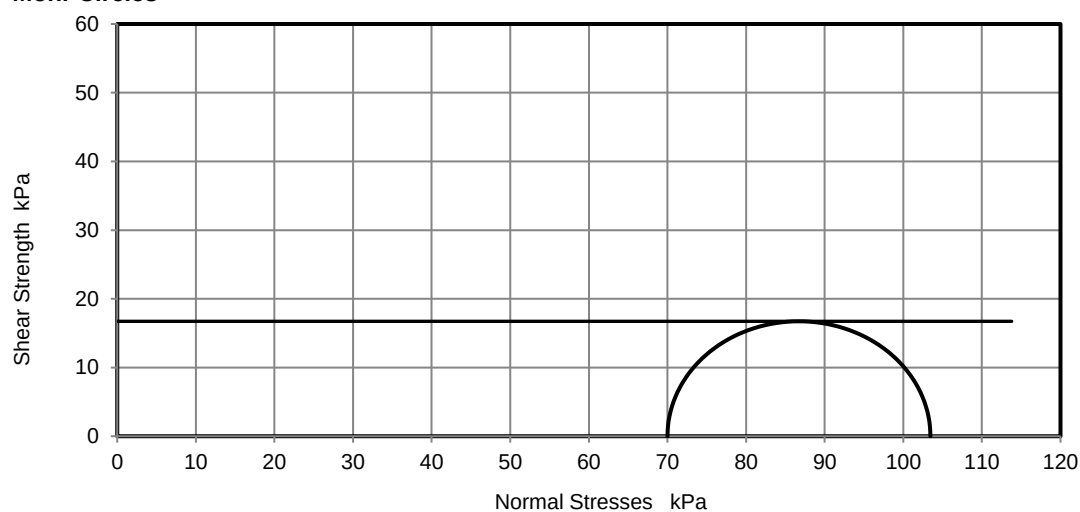
Laboratory Reference: 1566624
 Hole No.: BH1
 Sample Reference: Not Given
 Sample Description: Multicolour CLAY

Depth Top [m]: 4.00
 Depth Base [m]: Not Given
 Sample Type: U

Test Number	1
Length	193.62 mm
Diameter	103.25 mm
Bulk Density	1.76 Mg/m ³
Moisture Content	38 %
Dry Density	1.27 Mg/m ³
Membrane Correction	0.61 kPa

Rate of Strain
 Cell Pressure
 Axial Strain at failure
 Deviator Stress, ($\sigma_1 - \sigma_3$)_f
 Undrained Shear Strength, c_u
 Mode of Failure
 Membrane thickness

2.00	%/min
70	kPa
10.0	%
33	kPa
17	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Compound	
0.28	mm

Deviator Stress v Axial Strain**Mohr Circles**

Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
 This is provided for information only.

Remarks:

Signed:

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4041

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BN6 9GL
Contact: Fiona Goode
Site Address: One Horton

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

TEST CERTIFICATE
Unconsolidated Undrained
Triaxial Compression
Tested in Accordance with:
BS 1377-7: 1990: Clause 8

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



Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 01/08/2020
Sampled By: Not Given

Test Results:

Laboratory Reference: 1566625
Hole No.: BH1
Sample Reference: Not Given
Sample Description: Greyish brown slightly silty CLAY

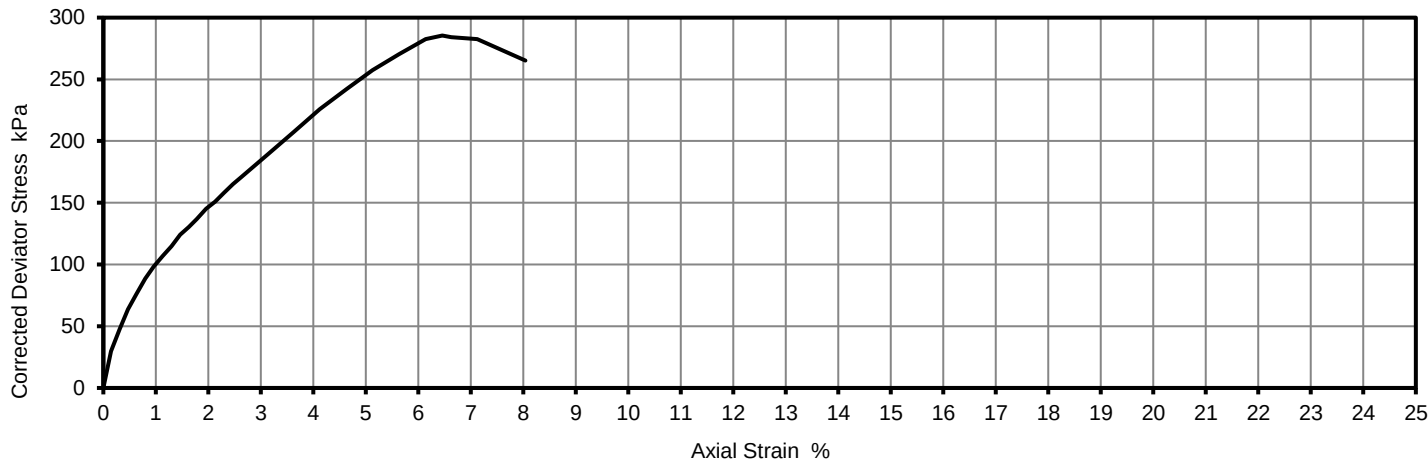
Depth Top [m]: 6.50
Depth Base [m]: Not Given
Sample Type: U

Test Number	1
Length	187.33 mm
Diameter	103.69 mm
Bulk Density	1.97 Mg/m ³
Moisture Content	25 %
Dry Density	1.58 Mg/m ³
Membrane Correction	0.45 kPa

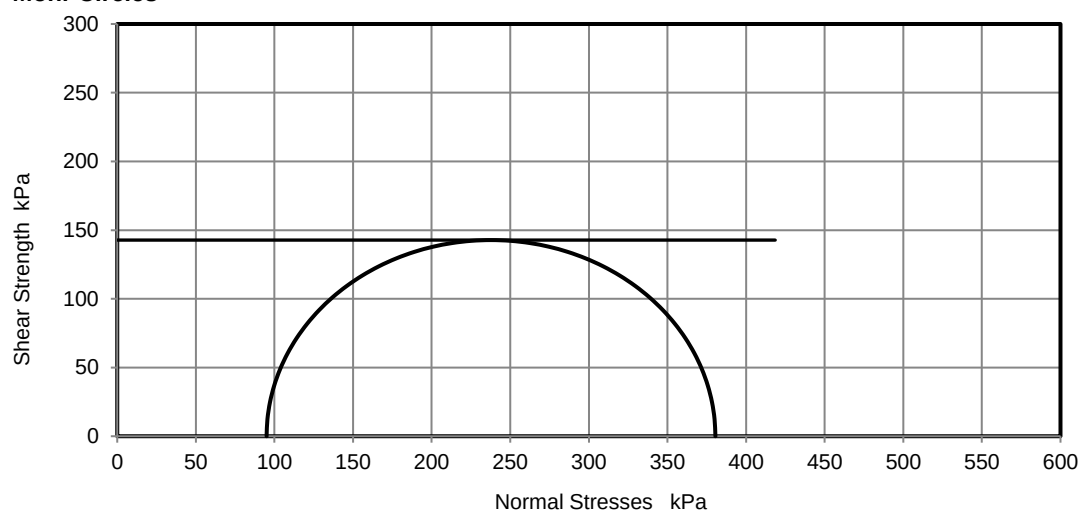
Rate of Strain
Cell Pressure
Axial Strain at failure
Deviator Stress, ($\sigma_1 - \sigma_3$)_f
Undrained Shear Strength, c_u
Mode of Failure
Membrane thickness

2.00	%/min
95	kPa
6.5	%
285	kPa
143	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Compound	
0.28	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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 Contact: Fiona Goode
 Site Address: One Horton

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

TEST CERTIFICATE
Unconsolidated Undrained
Triaxial Compression
 Tested in Accordance with:
 BS 1377-7: 1990: Clause 8

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



Client Reference: GE18771
 Job Number: 20-20186
 Date Sampled: 08/07/2020
 Date Received: 08/07/2020
 Date Tested: 01/08/2020
 Sampled By: Not Given

Test Results:

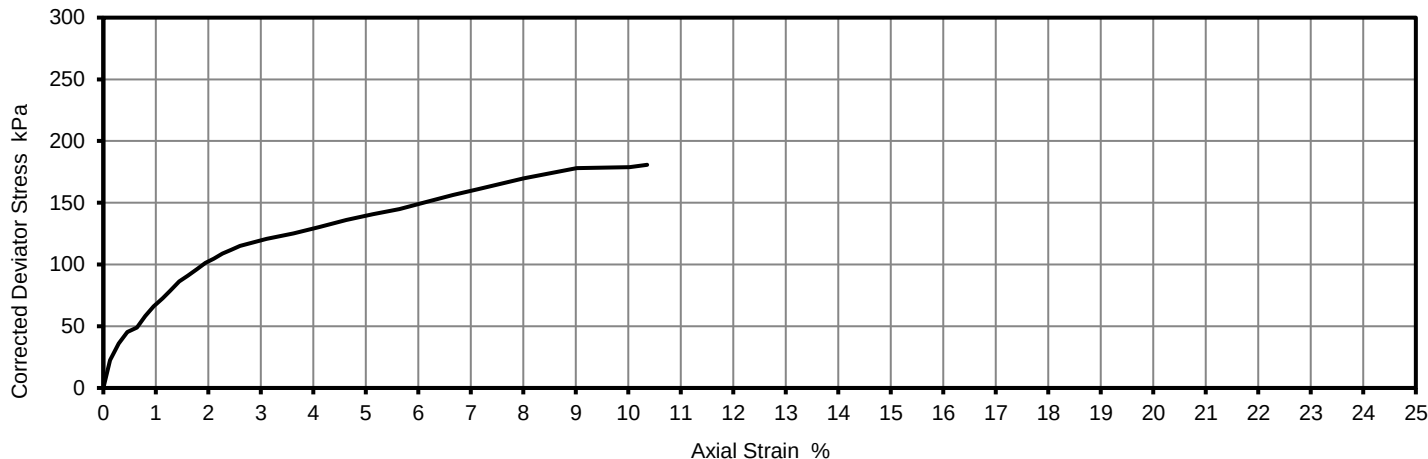
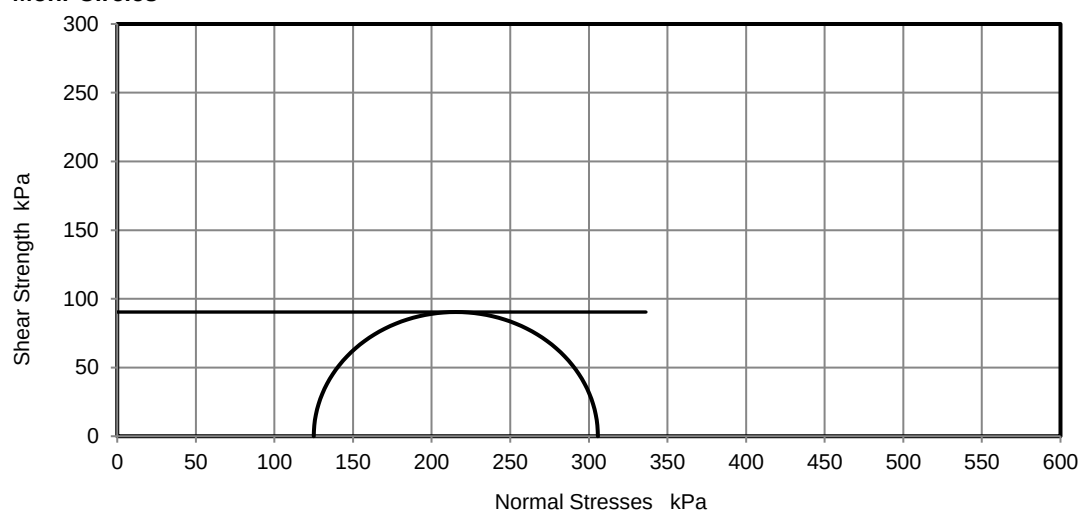
Laboratory Reference: 1566626
 Hole No.: BH1
 Sample Reference: Not Given
 Sample Description: Greyish brown CLAY

Depth Top [m]: 9.50
 Depth Base [m]: Not Given
 Sample Type: U

Test Number	1
Length	196.08 mm
Diameter	103.35 mm
Bulk Density	1.95 Mg/m ³
Moisture Content	25 %
Dry Density	1.55 Mg/m ³
Membrane Correction	0.49 kPa

Rate of Strain
 Cell Pressure
 Axial Strain at failure
 Deviator Stress, ($\sigma_1 - \sigma_3$)_f
 Undrained Shear Strength, c_u
 Mode of Failure
 Membrane thickness

1.99	%/min
125	kPa
10.4	%
181	kPa
90	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Compound	
0.22	mm

Deviator Stress v Axial Strain**Mohr Circles**

Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
 This is provided for information only.

Remarks:**Signed:**

Aleksandra Jurochnik
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 Client Address: Unit 7, Danworth Farm, Cuckfield Road,
 Hurstpierpoint, West Sussex,
 BN6 9GL
 Contact: Fiona Goode
 Site Address: One Horton

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

TEST CERTIFICATE
Unconsolidated Undrained
Triaxial Compression
 Tested in Accordance with:
 BS 1377-7: 1990: Clause 8

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



Client Reference: GE18771
 Job Number: 20-20186
 Date Sampled: 08/07/2020
 Date Received: 08/07/2020
 Date Tested: 04/08/2020
 Sampled By: Not Given

Test Results:

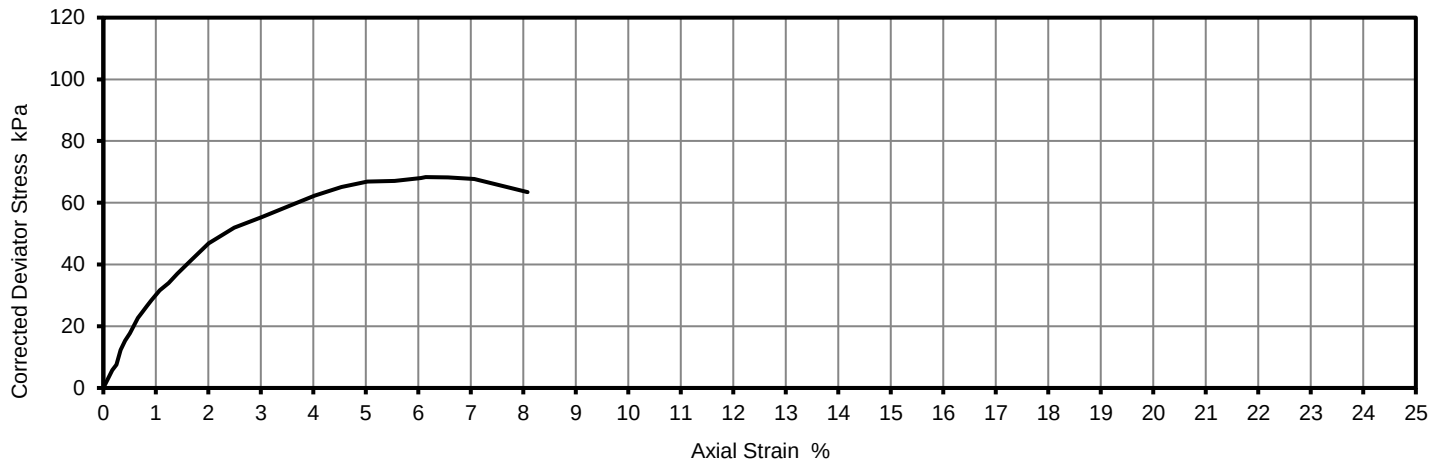
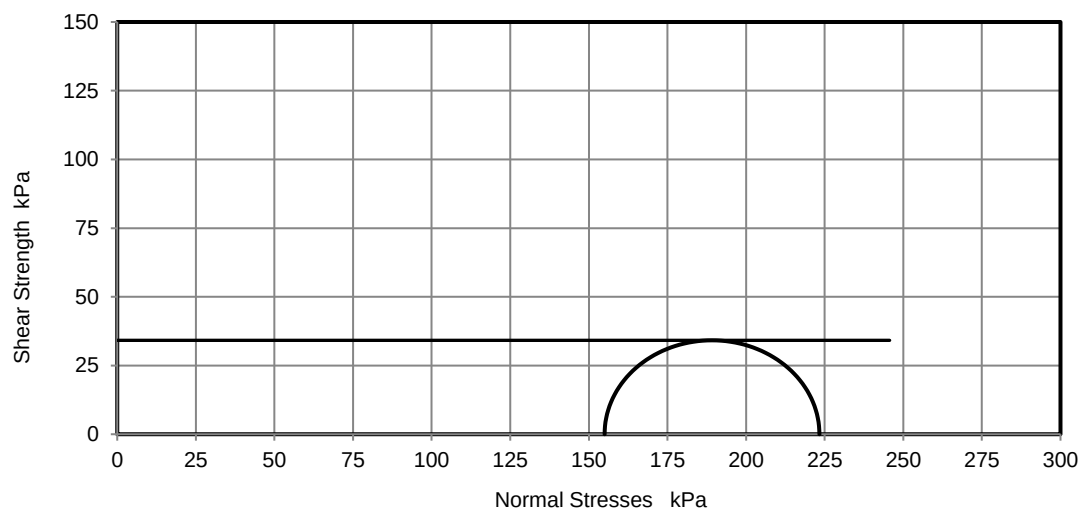
Laboratory Reference: 1566627
 Hole No.: BH1
 Sample Reference: Not Given
 Sample Description: Greyish brown CLAY

Depth Top [m]: 12.50
 Depth Base [m]: Not Given
 Sample Type: B

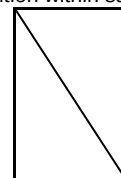
Test Number	1
Length	200.74 mm
Diameter	100.36 mm
Bulk Density	1.81 Mg/m ³
Moisture Content	28 %
Dry Density	1.41 Mg/m ³
Membrane Correction	0.37 kPa

Rate of Strain
 Cell Pressure
 Axial Strain at failure
 Deviator Stress, ($\sigma_1 - \sigma_3$)_f
 Undrained Shear Strength, c_u
 Mode of Failure
 Membrane thickness

1.00	%/min
155	kPa
6.1	%
68	kPa
34	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Compound	
0.23	mm

Deviator Stress v Axial Strain**Mohr Circles**

Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
 This is provided for information only.

Remarks: Recompacted at NMC using 2.5kg (light) rammer

Signed:

Aleksandra Jurochnik
 PL Technical Reviewer
 for and on behalf of i2 Analytical Ltd

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4041

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 BN6 9GL
 Contact: Fiona Goode
 Site Address: One Horton

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

TEST CERTIFICATE
Unconsolidated Undrained
Triaxial Compression
 Tested in Accordance with:
 BS 1377-7: 1990: Clause 8

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



Client Reference: GE18771
 Job Number: 20-20186
 Date Sampled: 08/07/2020
 Date Received: 08/07/2020
 Date Tested: 01/08/2020
 Sampled By: Not Given

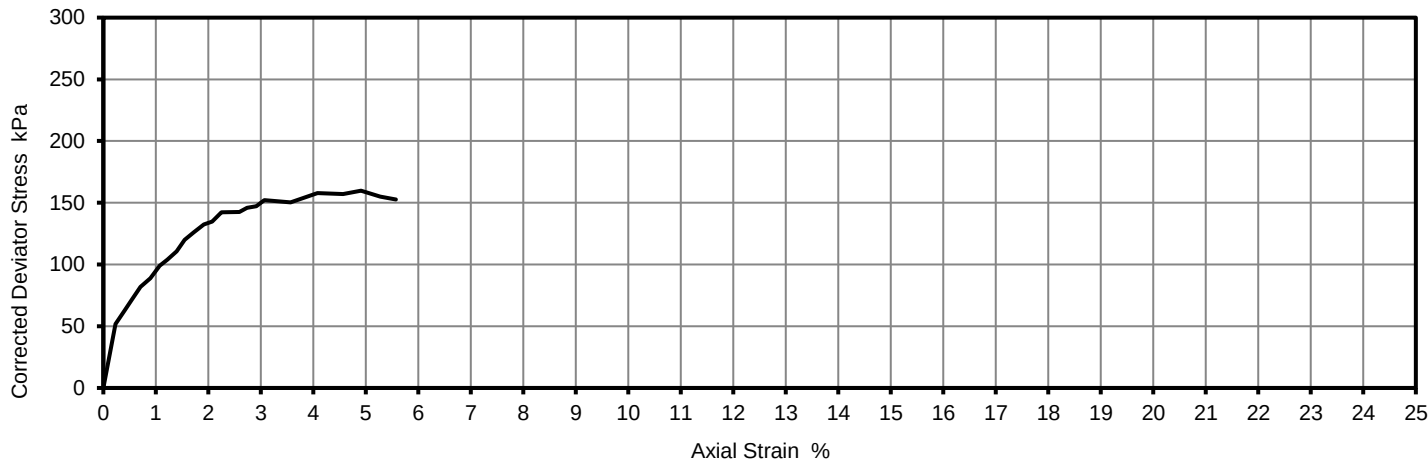
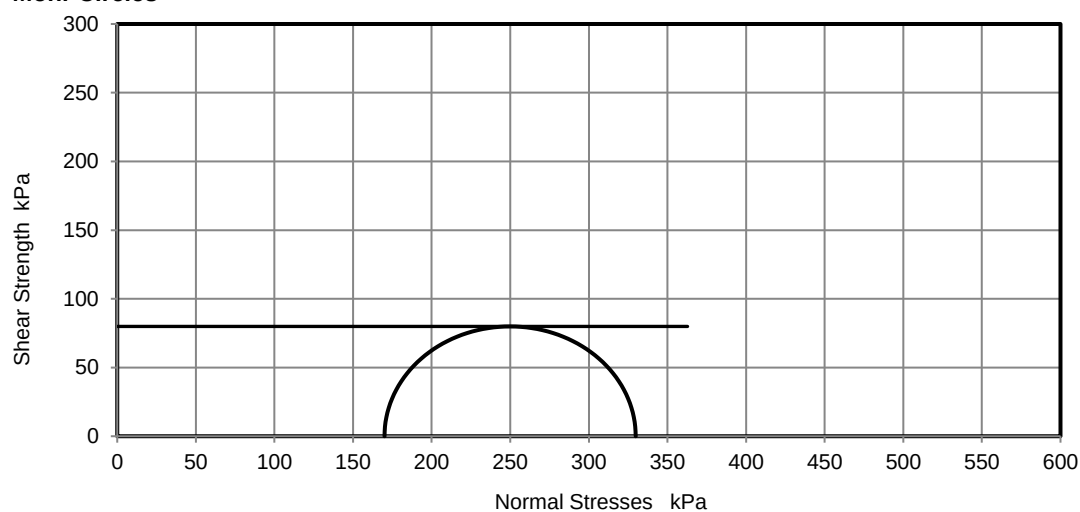
Test Results:

Laboratory Reference: 1566628
 Hole No.: BH1
 Sample Reference: Not Given
 Sample Description: Greyish brown slightly silty CLAY

Depth Top [m]: 14.00
 Depth Base [m]: Not Given
 Sample Type: U

Test Number	1
Length	73.76 mm
Diameter	38.05 mm
Bulk Density	1.91 Mg/m ³
Moisture Content	32 %
Dry Density	1.45 Mg/m ³
Membrane Correction	0.74 kPa

Rate of Strain	2.00 %/min
Cell Pressure	170 kPa
Axial Strain at failure	4.9 %
Deviator Stress, ($\sigma_1 - \sigma_3$) _f	160 kPa
Undrained Shear Strength, c_u	80 kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Mode of Failure	Brittle
Membrane thickness	0.21 mm

Deviator Stress v Axial Strain**Mohr Circles**

Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
 This is provided for information only.

Remarks:**Signed:**

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TEST CERTIFICATE

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



4041

Tested in Accordance with: BS 1377-4: 1990: Clause 7

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566629
Hole No.: TP17
Sample Reference: Not Given
Sample Description: Multicolour silty CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition: Remoulded
Details: Recompacted with specified standard effort using 2.5kg rammer

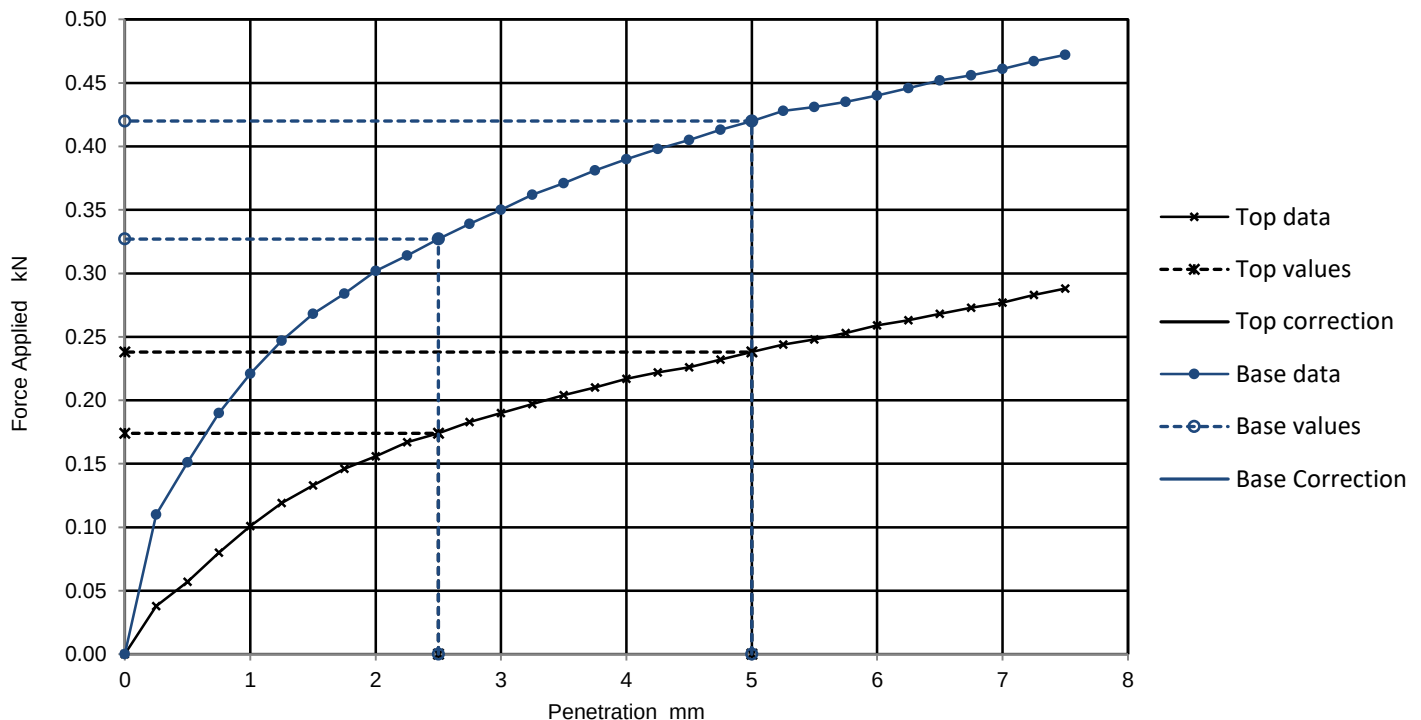
Soaking details
Period of soaking: 12 days
Time to surface: 2 days
Amount of swell recorded: 0.65 mm
Dry density after soaking: 1.36 Mg/m3

Material retained on 20mm sieve removed: 0 %

Initial Specimen details
Bulk density: 1.84 Mg/m3
Dry density: 1.36 Mg/m3
Moisture content: 35 %

Surcharge applied: 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	1.3	1.2	1.3	
No	2.5	2.1	2.5	

Moisture Content %
39
36

Remarks:

Test/ Specimen
specific remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

California Bearing Ratio Soaked

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



Environmental Science

4041

Tested in Accordance with: BS 1377-4: 1990: Clause 7

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

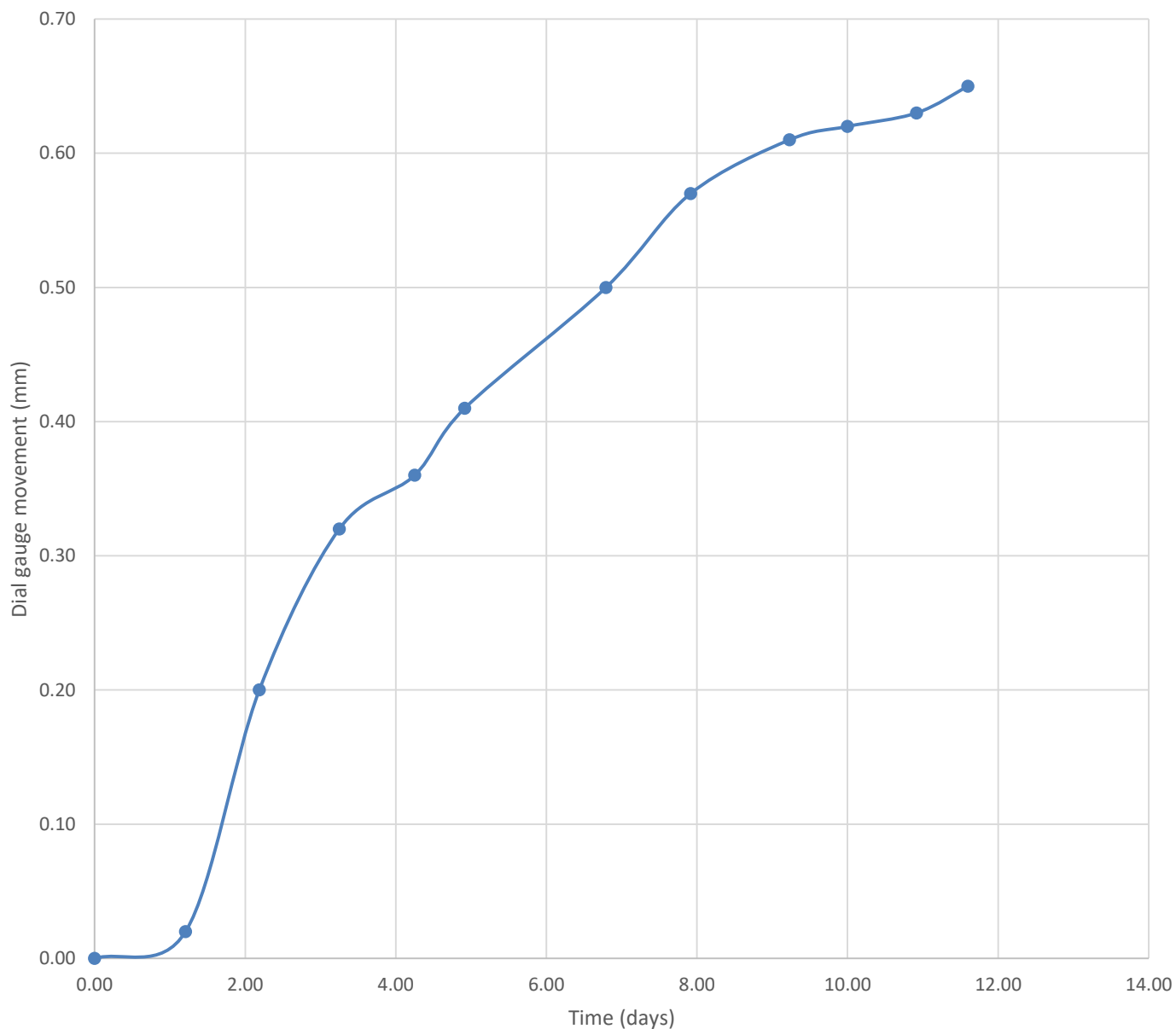
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1566629
Hole No.: TP17
Sample Reference: Not Given
Sample Description: Multicolour silty CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

CBR Soaked Graph



Remarks:

Test/ Specimen
specific remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

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



Environmental Science

4041

Tested in Accordance with: BS 1377-4: 1990: Clause 7

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566630
Hole No.: TP24
Sample Reference: Not Given
Sample Description: Brownish grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

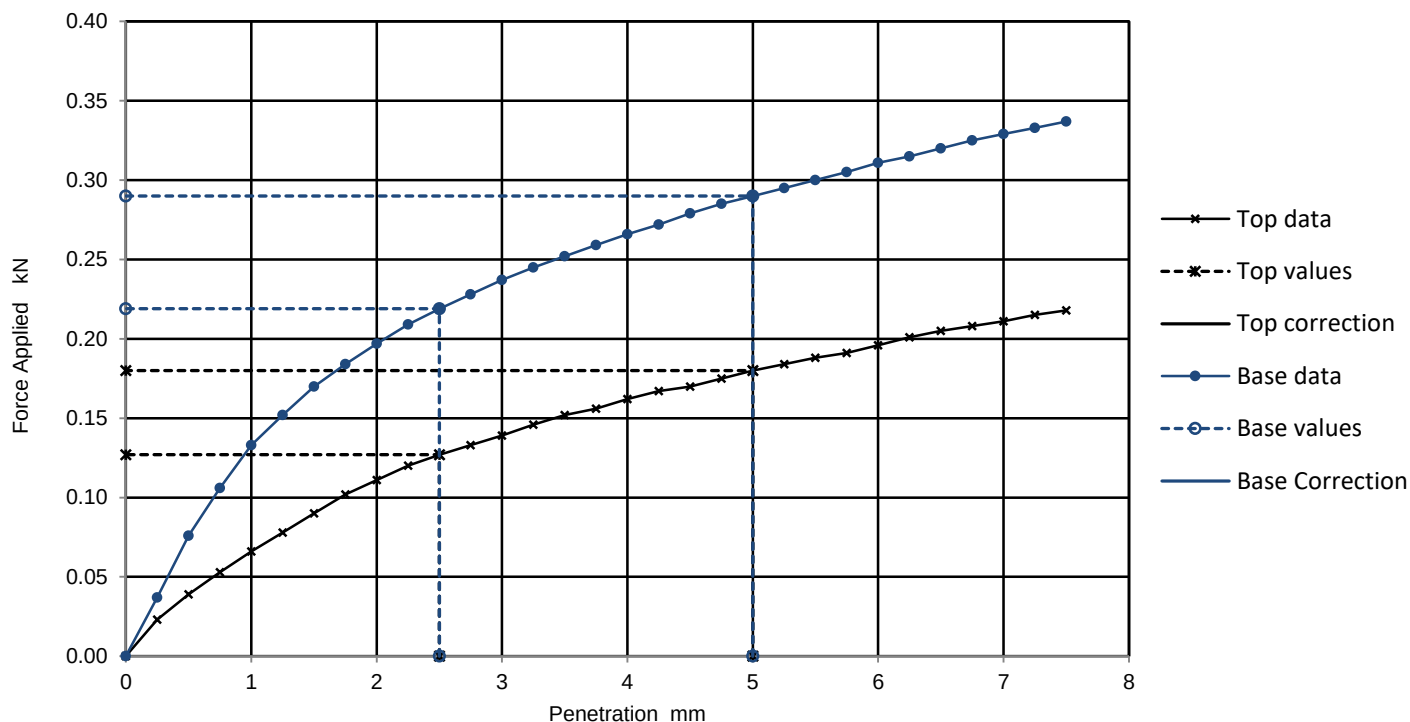
Soaking details
Period of soaking 12 days
Time to surface 4 days
Amount of swell recorded 0.74 mm
Dry density after soaking 1.39 Mg/m³

Material retained on 20mm sieve removed 0 %

Initial Specimen details
Bulk density 1.86 Mg/m³
Dry density 1.40 Mg/m³
Moisture content 33 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	1.0	0.9	1.0	
No	1.7	1.5	1.7	

Moisture Content %
36
36

Remarks:

Test/ Specimen
specific remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

California Bearing Ratio Soaked

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



4041

Tested in Accordance with: BS 1377-4: 1990: Clause 7

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 06/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

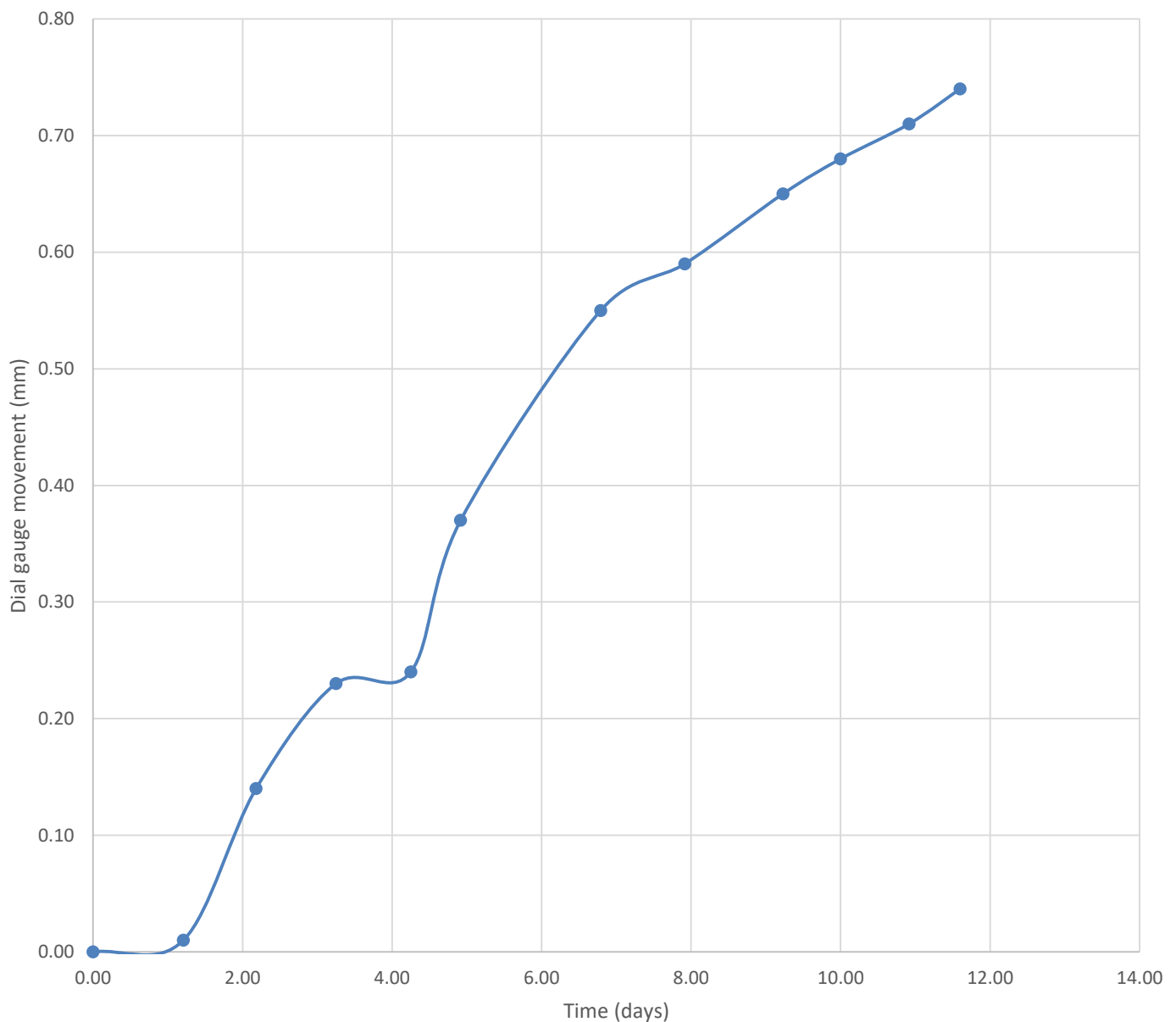
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1566630
Hole No.: TP24
Sample Reference: Not Given
Sample Description: Brownish grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

CBR Soaked Graph



Remarks:

Test/ Specimen
specific remarks:

Signed:

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PL Technical Reviewer
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Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Tested in Accordance with: BS 1377-4: 1990: Clause 7

Client: Geo-Environmental Services Ltd
Client Address: Unit 7, Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566631
Hole No.: TP34
Sample Reference: Not Given
Sample Description: Light grey mottled red CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

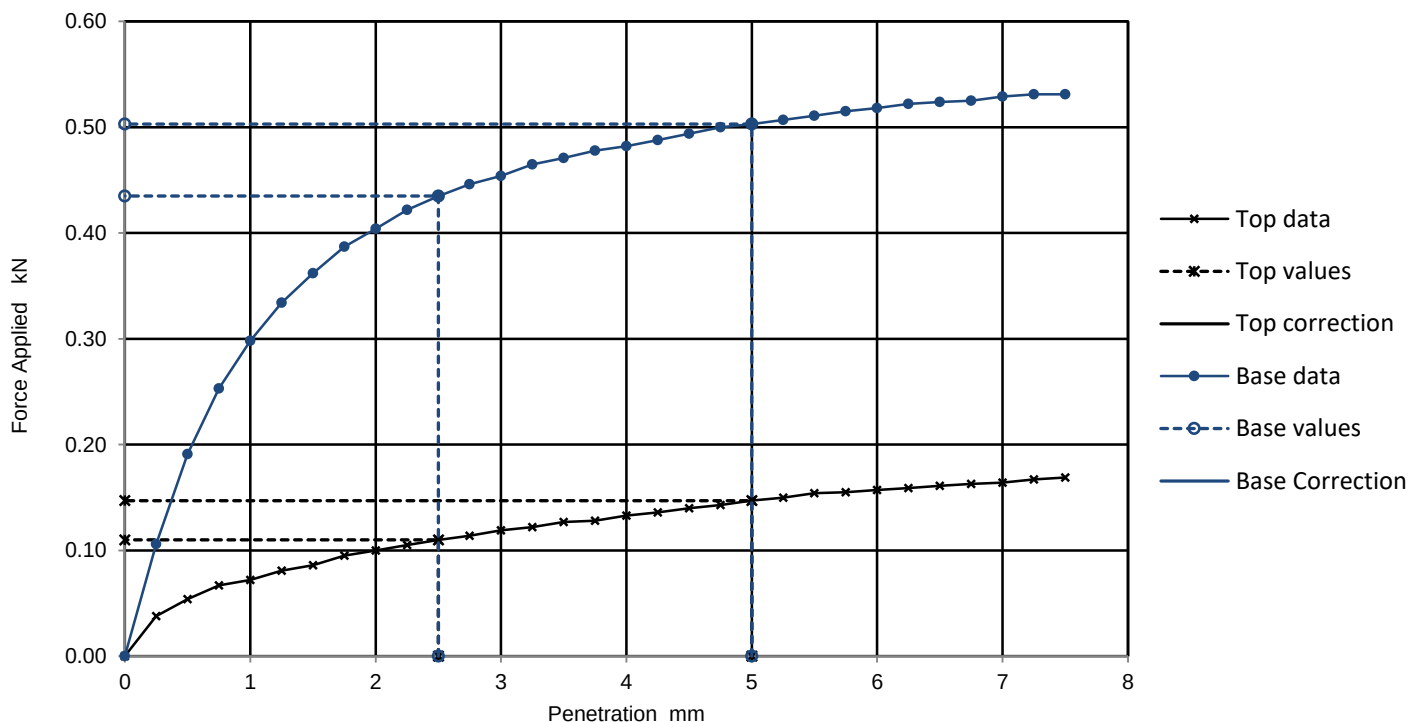
Condition: Remoulded
Details: Recompacted with specified standard effort using 2.5kg rammer

Soaking details
Period of soaking: 12 days
Time to surface: 5 days
Amount of swell recorded: 7.86 mm
Dry density after soaking: 1.40 Mg/m3

Material retained on 20mm sieve removed: 0 %

Initial Specimen details
Bulk density: 1.88 Mg/m3
Dry density: 1.49 Mg/m3
Moisture content: 27 %
Surcharge applied: 8 kg
4.8 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.8	0.7	0.8	
No	3.3	2.5	3.3	

Moisture Content %
38
33

Remarks:

Test/ Specimen
specific remarks:

Signed:

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Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

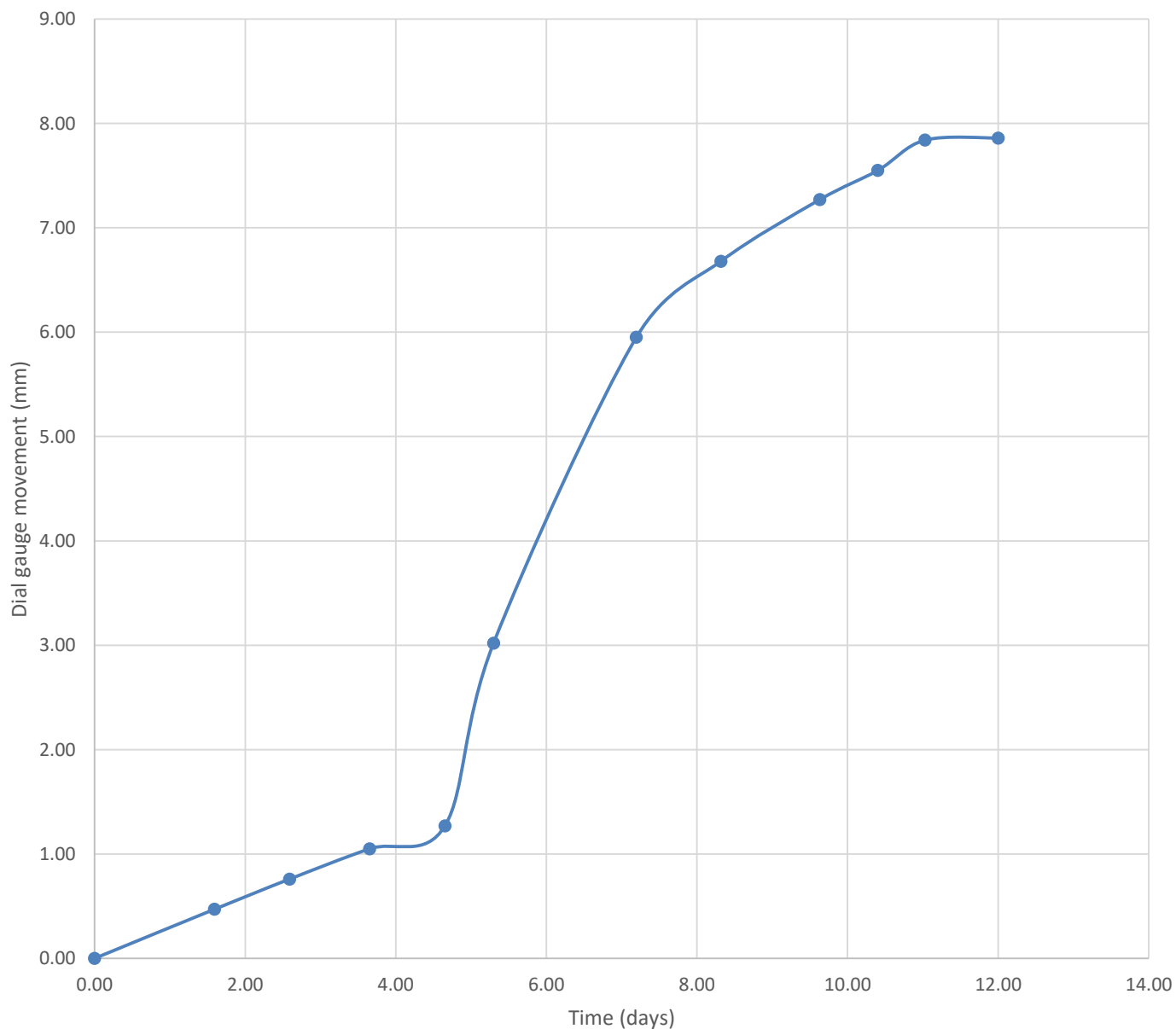
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1566631
Hole No.: TP34
Sample Reference: Not Given
Sample Description: Light grey mottled red CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

CBR Soaked Graph



Remarks:

Test/ Specimen
specific remarks:

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Environmental Science

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Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566632
Hole No.: TP28
Sample Reference: Not Given
Sample Description: Yellowish brown slightly gravelly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

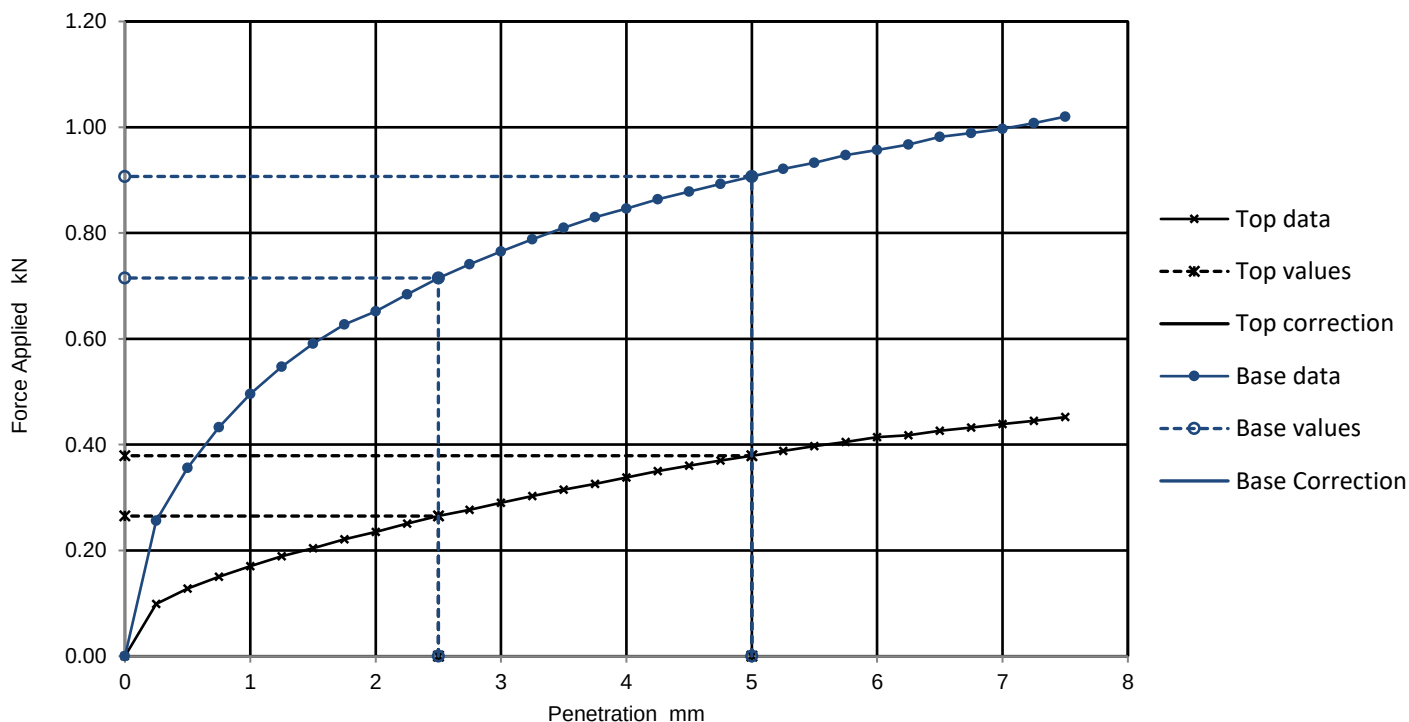
Condition: Remoulded
Details: Recompacted with specified standard effort using 2.5kg rammer

Soaking details
Period of soaking: 12 days
Time to surface: 4 days
Amount of swell recorded: 2.85 mm
Dry density after soaking: 1.50 Mg/m³

Material retained on 20mm sieve removed: 0 %

Initial Specimen details
Bulk density: 1.93 Mg/m³
Dry density: 1.54 Mg/m³
Moisture content: 26 %
Surcharge applied: 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	2.0	1.9	2.0	
No	5.4	4.5	5.4	

Moisture Content %
29
29

Remarks:

Test/ Specimen
specific remarks:

Signed:

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PL Technical Reviewer
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BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

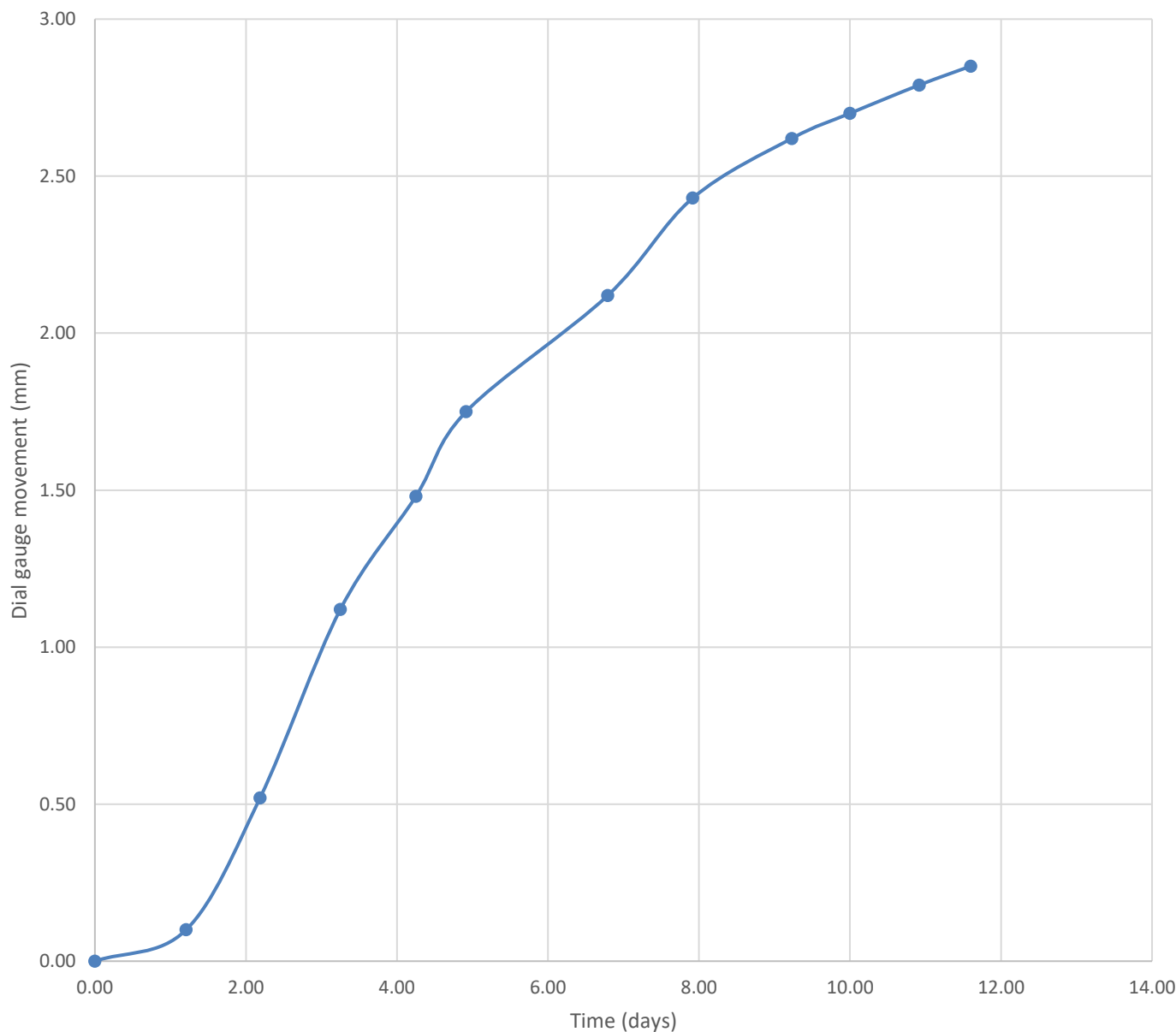
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1566632
Hole No.: TP28
Sample Reference: Not Given
Sample Description: Yellowish brown slightly gravelly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

CBR Soaked Graph



Remarks:

Test/ Specimen
specific remarks:

Signed:

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PL Technical Reviewer
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BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566633
Hole No.: TP25
Sample Reference: Not Given
Sample Description: Brownish grey CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition: Remoulded
Details: Recompacted with specified standard effort using 2.5kg rammer

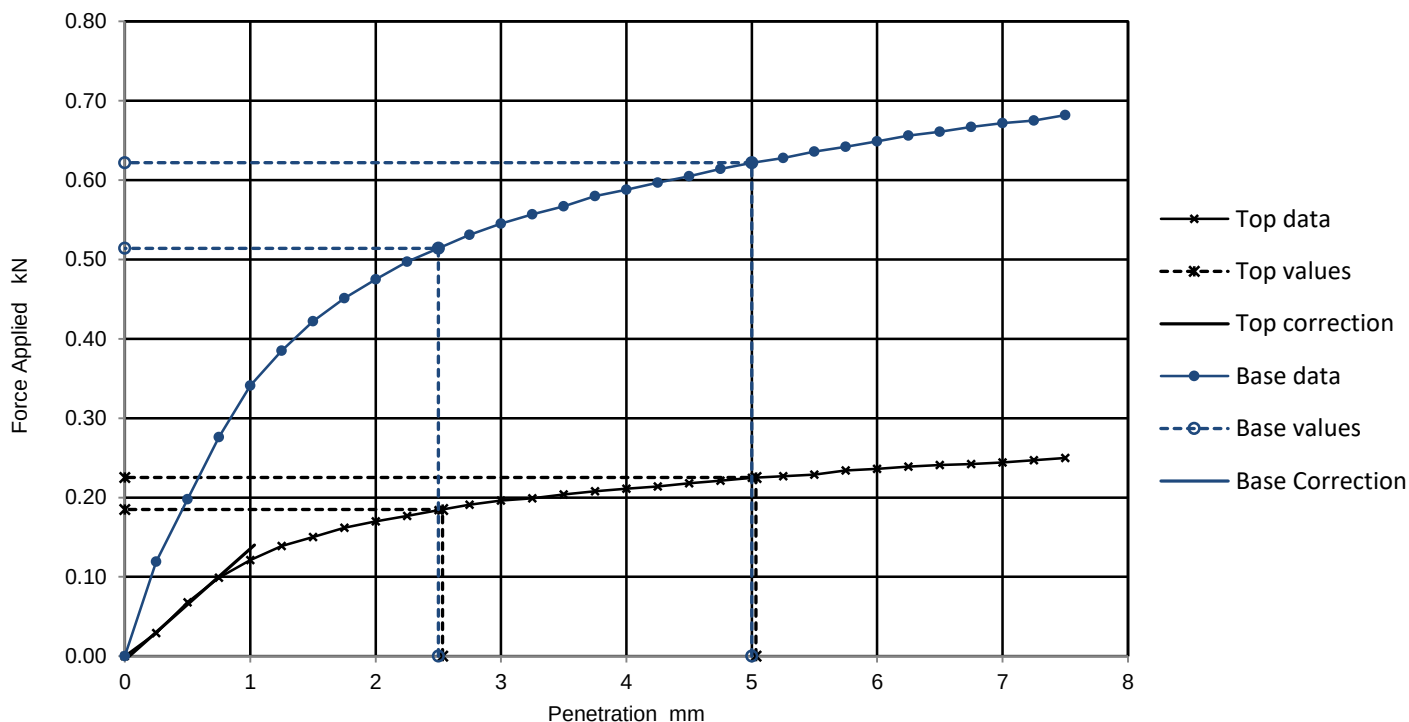
Soaking details
Period of soaking: 12 days
Time to surface: 4 days
Amount of swell recorded: 7.93 mm
Dry density after soaking: 1.34 Mg/m³

Material retained on 20mm sieve removed: 0 %

Initial Specimen details
Bulk density: 1.86 Mg/m³
Dry density: 1.43 Mg/m³
Moisture content: 30 %

Surcharge applied: 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	1.4	1.1	1.4	
No	3.9	3.1	3.9	

Moisture Content %
42
37

Remarks:

Test/ Specimen
specific remarks:

Signed:

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BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 10/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

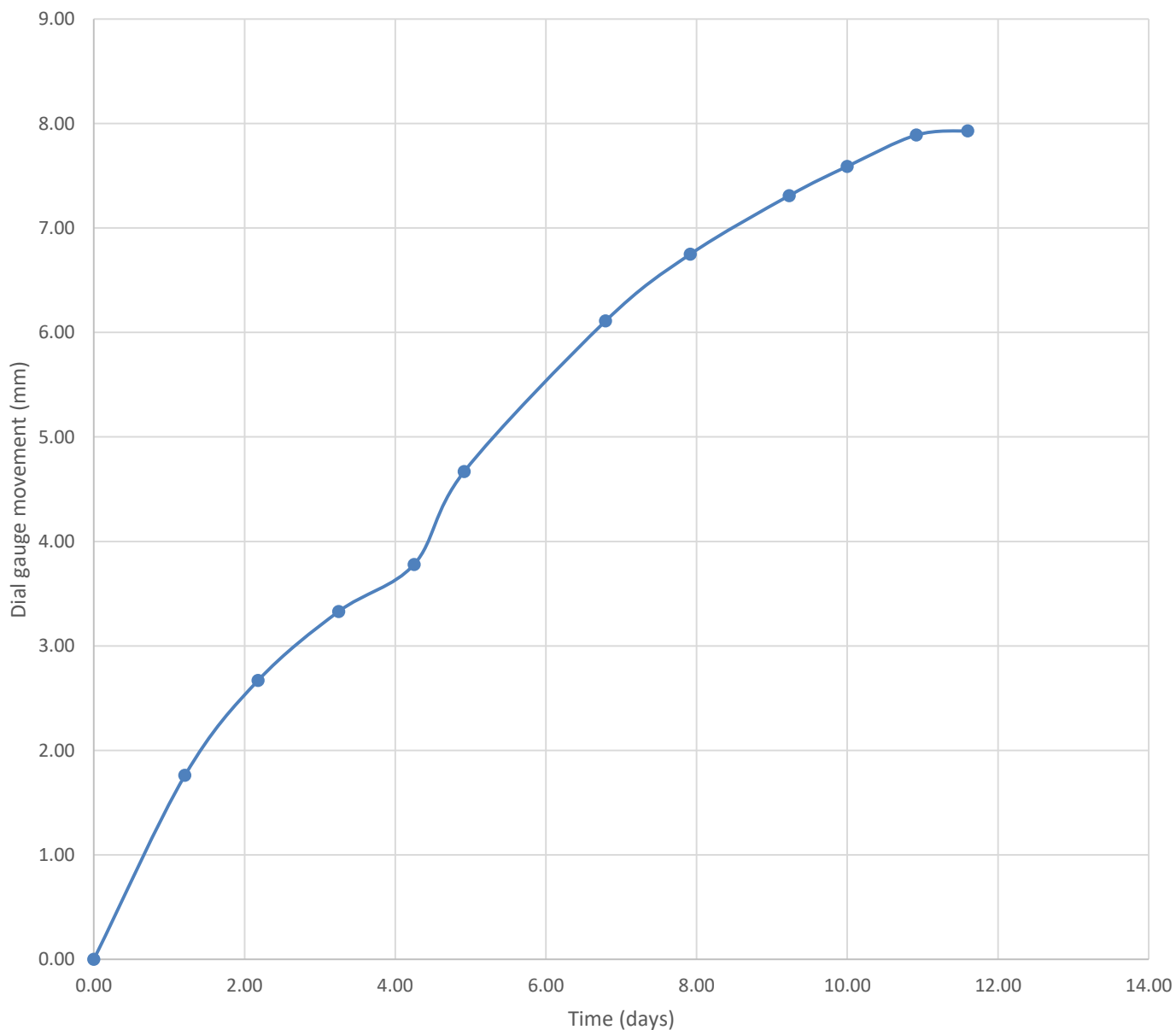
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1566633
Hole No.: TP25
Sample Reference: Not Given
Sample Description: Brownish grey CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

CBR Soaked Graph



Remarks:

Test/ Specimen
specific remarks:

Signed:

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BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566634
Hole No.: TP15
Sample Reference: Not Given
Sample Description: Brownish grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

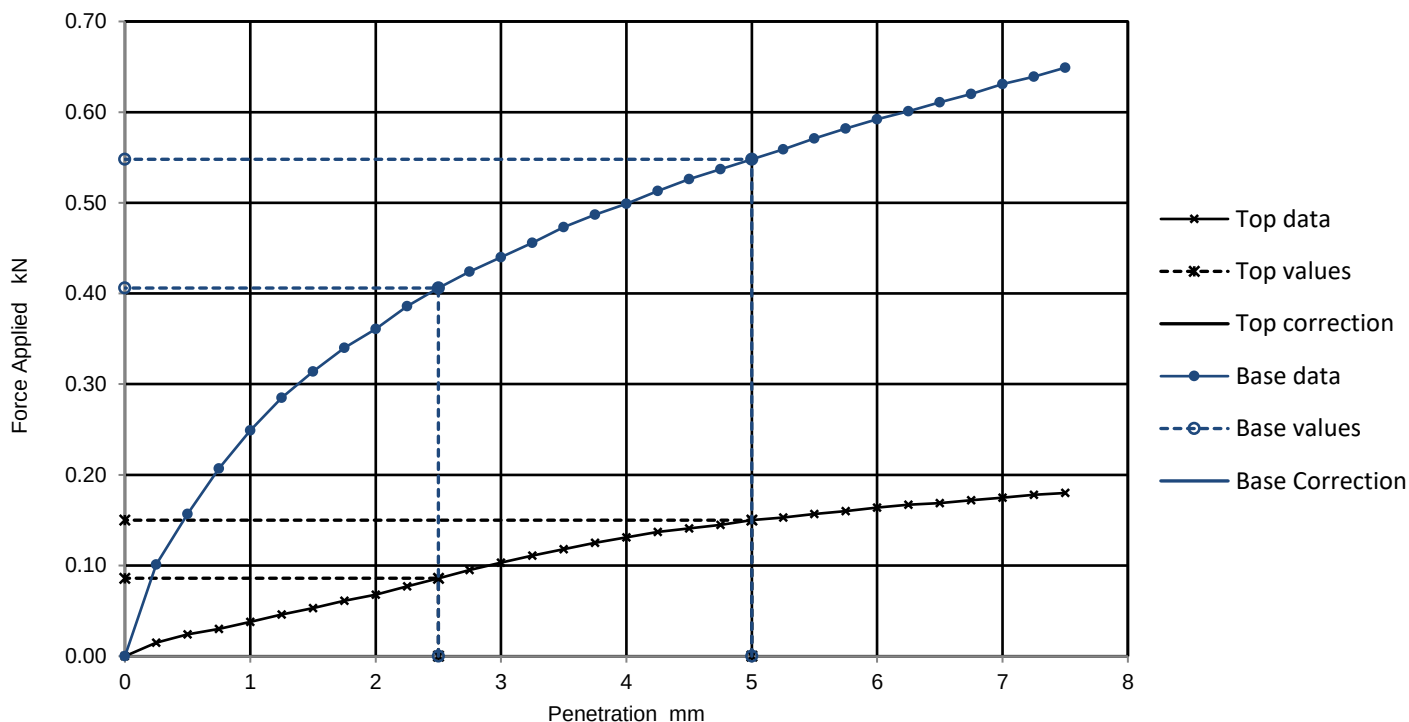
Soaking details
Period of soaking 12 days
Time to surface 4 days
Amount of swell recorded 7.06 mm
Dry density after soaking 1.50 Mg/m³

Material retained on 20mm sieve removed 0 %

Initial Specimen details Bulk density 1.88 Mg/m³
Dry density 1.58 Mg/m³
Moisture content 19 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.7	0.8	0.8	
No	3.1	2.7	3.1	

Moisture Content %
33
29

Remarks:

Test/ Specimen
specific remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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Hurstpierpoint, West Sussex,
BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

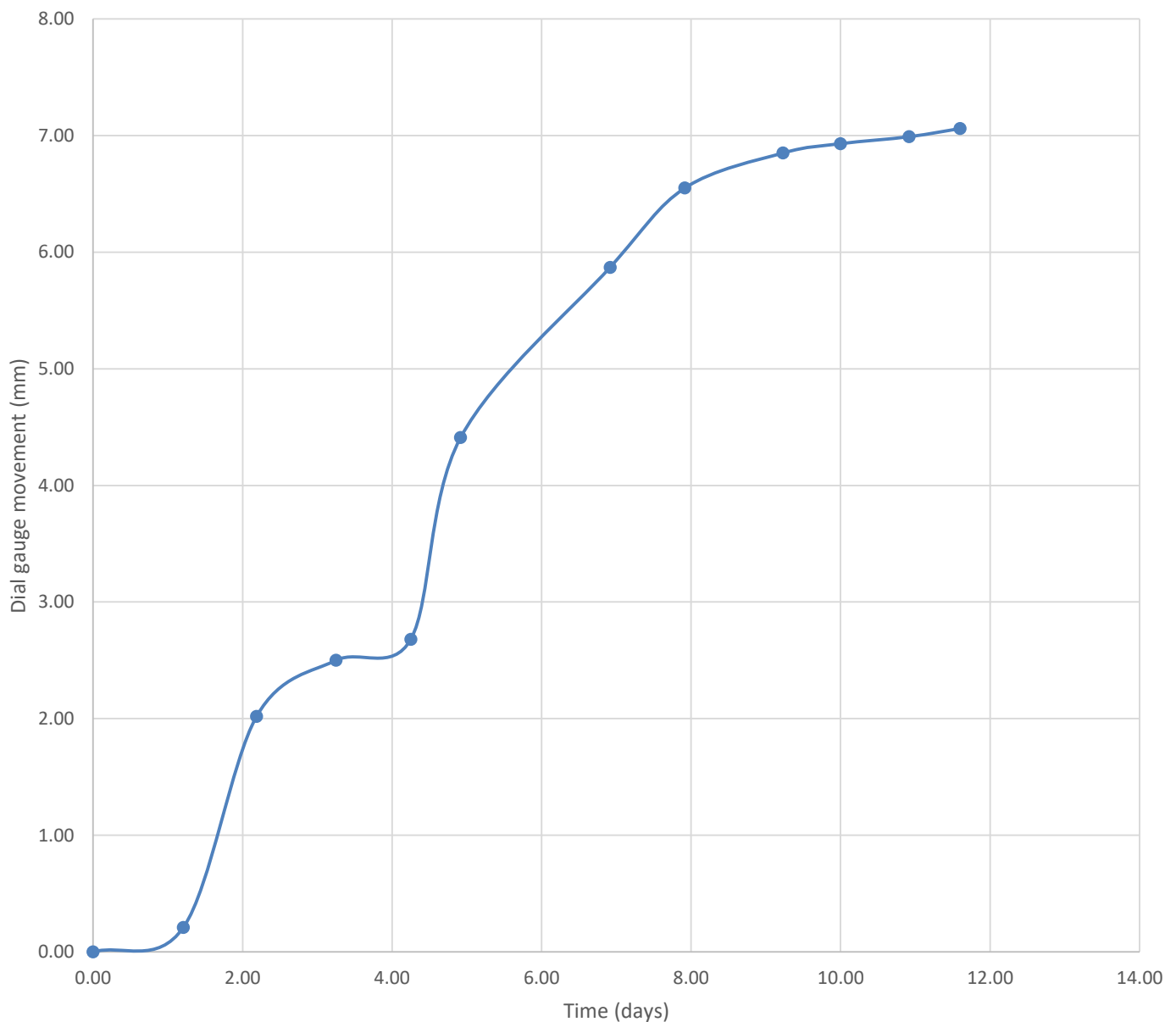
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1566634
Hole No.: TP15
Sample Reference: Not Given
Sample Description: Brownish grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

CBR Soaked Graph



Remarks:

Test/ Specimen
specific remarks:

Signed:

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PL Technical Reviewer
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BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

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

Test Results:

Laboratory Reference: 1566635
Hole No.: TP21
Sample Reference: Not Given
Sample Description: Yellowish brown mottled grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

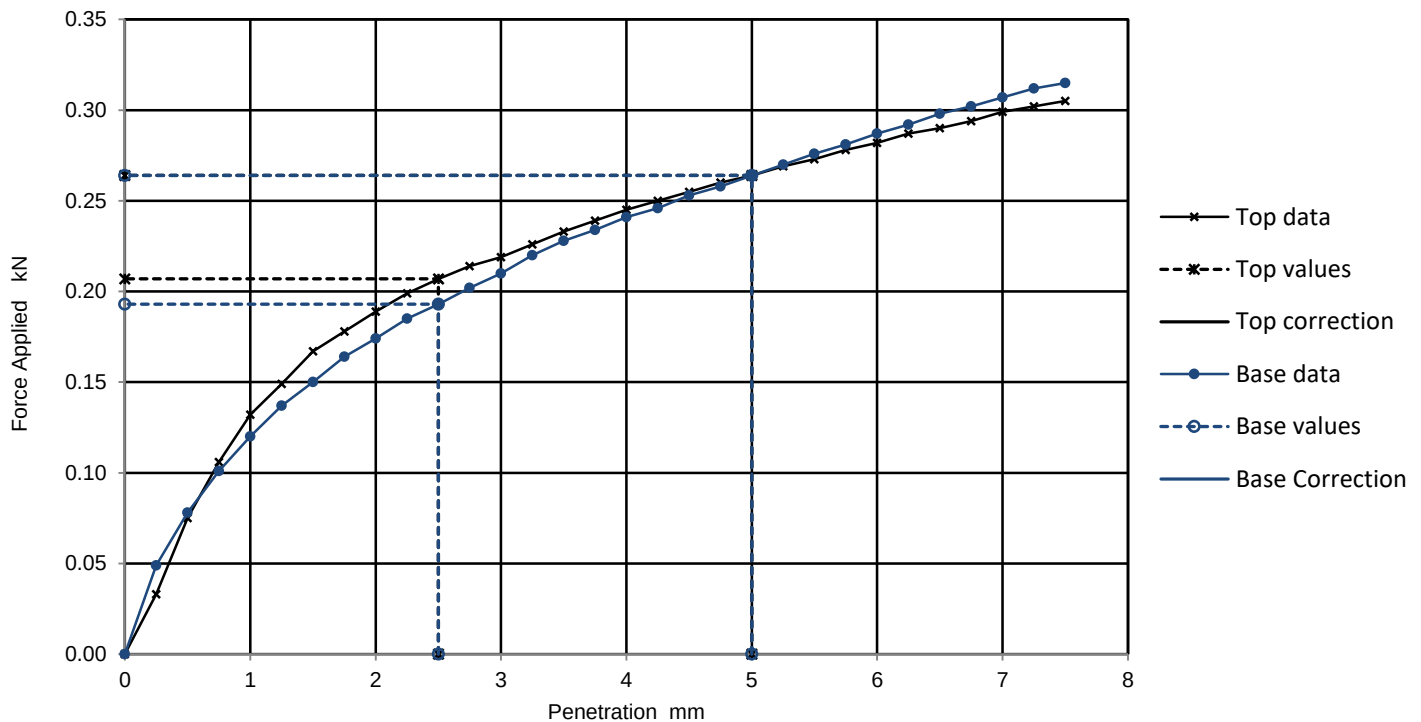
Soaking details
Period of soaking 10 days
Time to surface 4 days
Amount of swell recorded 0.09 mm
Dry density after soaking 1.49 Mg/m3

Material retained on 20mm sieve removed 0 %

Initial Specimen details
Bulk density 1.91 Mg/m3
Dry density 1.49 Mg/m3
Moisture content 28 %

Surcharge applied 8 kg
4.8 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	1.6	1.3	1.6	1.5
No	1.5	1.3	1.5	

Moisture Content %
30
30

Remarks:

Test/ Specimen
specific remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

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Environmental Science

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BN6 9GL

Contact: Fiona Goode
Site Address: One Horton

Client Reference: GE18771
Job Number: 20-20186
Date Sampled: 08/07/2020
Date Received: 08/07/2020
Date Tested: 03/08/2020
Sampled By: Not Given

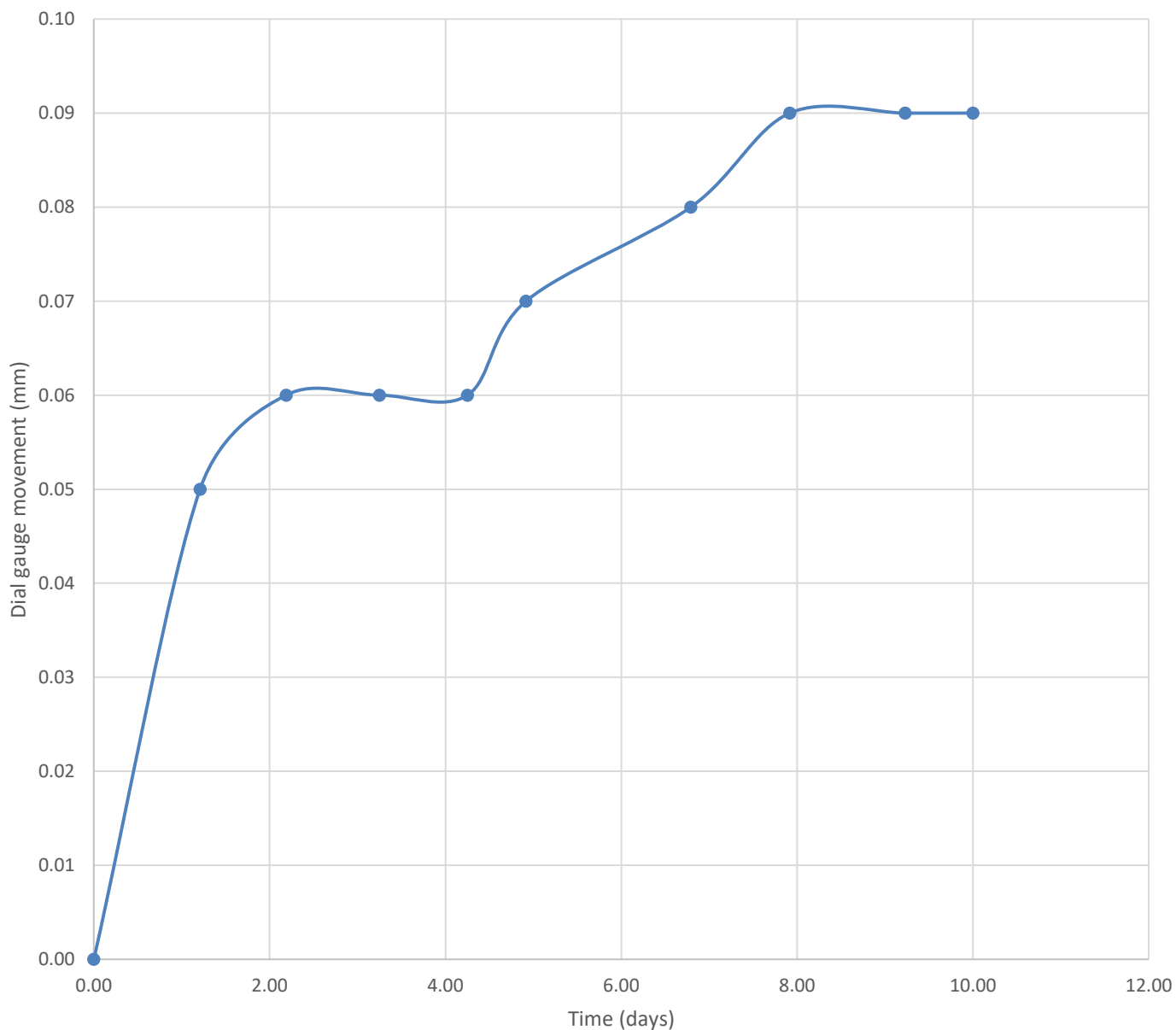
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 1566635
Hole No.: TP21
Sample Reference: Not Given
Sample Description: Yellowish brown mottled grey slightly sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

CBR Soaked Graph



Remarks:

Test/ Specimen
specific remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
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APPENDIX D

Geochemical Laboratory Results



**Fiona Goode**

Geo-Environmental Services Ltd
Unit 7, Danworth Farm
Cuckfield Road
Hurstpierpoint
West Sussex
BN6 9GL

t: 01273 832972

e: fiona.goode@gesl.net

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 : 20-19015

Project / Site name:	One Horton	Samples received on:	10/07/2020
Your job number:	GE18771	Sample instructed/ Analysis started on:	10/07/2020
Your order number:	PO-2829	Analysis completed by:	20/07/2020
Report Issue Number:	1	Report issued on:	20/07/2020
Samples Analysed:	55 soil samples		

Signed: 

Karolina Marek
PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

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.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

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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.

Iss No 20-19015-1 One Horton GE18771

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Page 1 of 49

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559985	1559986	1559987	1559988	1559989
Sample Reference				TP1	TP2	TP3	TP4	TP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.40	0.10
Date Sampled				08/07/2020	08/07/2020	08/07/2020	08/07/2020	08/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
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	-	12	8.8	12	8.5
Total mass of sample received	kg	0.001	NONE	-	0.80	0.80	0.80	0.80

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	6.0	5.4	6.3	5.4
Total Cyanide	mg/kg	1	MCERTS	-	< 1	< 1	< 1	< 1
Total Sulphate as SO ₄	%	0.005	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	33	33	10	30
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.016	0.017	0.0051	0.015
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	16.4	16.7	5.1	15.2
Sulphide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	10	4.1	5.0	33
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	-
Elemental Sulphur	mg/kg	5	MCERTS	-	< 5.0	< 5.0	< 5.0	< 5.0
Total Sulphur	%	0.005	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	0.9	2.9	0.5	3.9
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	---	-------	-------	-------	-------

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
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number	1559985	1559986	1559987	1559988	1559989
Sample Reference	TP1	TP2	TP3	TP4	TP5
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.40	0.10	0.40	0.10
Date Sampled	08/07/2020	08/07/2020	08/07/2020	08/07/2020	08/07/2020
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	5.2	6.0	9.4	7.8
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.31	0.28	0.40	0.23
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.4	0.6	0.4	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	13	16	23	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	8.5	12	9.3	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	38	40	12	39
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	0.5	< 0.3	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	3.4	4.5	3.2	3.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	23	26	35	27
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	19	38	19	37

Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10

TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559985	1559986	1559987	1559988	1559989
Sample Reference				TP1	TP2	TP3	TP4	TP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.40	0.10
Date Sampled				08/07/2020	08/07/2020	08/07/2020	08/07/2020	08/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559985	1559986	1559987	1559988	1559989
Sample Reference				TP1	TP2	TP3	TP4	TP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.40	0.10
Date Sampled				08/07/2020	08/07/2020	08/07/2020	08/07/2020	08/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559990	1559991	1559992	1559993	1559994
Sample Reference				TP6	TP7	TP8	TP10	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.40	0.10	0.40
Date Sampled				08/07/2020	08/07/2020	08/07/2020	08/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	11	9.3	15	29	18
Total mass of sample received	kg	0.001	NONE	0.80	0.80	0.80	0.80	0.80

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	5.8	6.5	4.9	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	-	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	18	31	39	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0090	0.016	0.019	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.0	15.6	19.3	-	-
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	3.2	31	2.4	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	-	-
Total Sulphur	%	0.005	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.7	3.9	0.4	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	-	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559990	1559991	1559992	1559993	1559994
Sample Reference				TP6	TP7	TP8	TP10	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.40	0.10	0.40
Date Sampled				08/07/2020	08/07/2020	08/07/2020	08/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	5.5	12	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.38	0.29	0.43	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.6	0.2	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	18	24	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.4	13	9.5	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	37	46	8.5	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	0.5	< 0.3	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5.2	3.9	4.8	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	32	38	37	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	33	36	23	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	-
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	-	-
TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	< 10	< 10
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	< 10	< 10

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559990	1559991	1559992	1559993	1559994
Sample Reference				TP6	TP7	TP8	TP10	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.40	0.10	0.40
Date Sampled				08/07/2020	08/07/2020	08/07/2020	08/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559990	1559991	1559992	1559993	1559994
Sample Reference				TP6	TP7	TP8	TP10	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.40	0.10	0.40
Date Sampled				08/07/2020	08/07/2020	08/07/2020	08/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559995	1559996	1559997	1559998	1559999
Sample Reference				TP11	TP12	TP12	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.10	0.80	0.10	0.70
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	18	10	8.7	11	14
Total mass of sample received	kg	0.001	NONE	0.60	0.80	0.60	1.0	0.70

Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	-	6.8	6.2	5.4
Total Cyanide	mg/kg	1	MCERTS	-	-	-	< 1	-
Total Sulphate as SO ₄	%	0.005	MCERTS	0.025	-	0.026	-	0.064
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	31	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.010	-	0.0084	0.016	0.0049
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	10.3	-	8.4	15.7	4.9
Sulphide	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	-	-	9.2	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	2.6	-	4.1	-	3.8
Elemental Sulphur	mg/kg	5	MCERTS	-	-	-	< 5.0	-
Total Sulphur	%	0.005	MCERTS	0.021	-	0.021	-	0.052
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	-	-	3.9	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	-	2.6	-	< 2.0

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
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Speciated PAHs

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	-	-	-	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Benzo(a)anthracene	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

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	< 0.80	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559995	1559996	1559997	1559998	1559999
Sample Reference				TP11	TP12	TP12	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.10	0.80	0.10	0.70
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	6.6	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	0.30	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	0.6	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	20	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	15	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	49	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	0.7	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	4.3	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	40	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	40	-
Magnesium (water soluble)	mg/kg	5	NONE	5.0	-	< 5.0	-	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	2.5	-	< 2.5	-	< 2.5
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH (C10 - C25)	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	< 10	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559995	1559996	1559997	1559998	1559999
Sample Reference				TP11	TP12	TP12	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.10	0.80	0.10	0.70
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1559995	1559996	1559997	1559998	1559999
Sample Reference				TP11	TP12	TP12	TP14	TP14
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.10	0.80	0.10	0.70
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560000	1560001	1560002	1560003	1560004
Sample Reference				TP15	TP15	TP16	TP16	TP17
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	0.10	0.90	0.40
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	24	9.0	11	22
Total mass of sample received	kg	0.001	NONE	0.90	0.60	0.80	0.60	1.2

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	-	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.7	4.3	5.4	6.8	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	< 1	-	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.037	-	0.018	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	110	-	25	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.054	0.029	0.013	0.0041	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	53.5	28.9	12.6	4.1	-
Sulphide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	120	-	3.9	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	28	-	3.9	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
Total Sulphur	%	0.005	MCERTS	-	0.031	-	0.020	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.4	-	2.7	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-	< 2.0	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
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	MCERTS	< 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	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	< 0.80	-	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number	1560000	1560001	1560002	1560003	1560004
Sample Reference	TP15	TP15	TP16	TP16	TP17
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.40	1.00	0.10	0.90	0.40
Date Sampled	07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	-	10	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.45	-	0.40	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	-	0.4	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	-	20	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.2	-	21	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	-	64	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	0.6	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	3.8	-	5.7	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	37	-	38	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	38	-	40	-	-

Magnesium (water soluble)	mg/kg	5	NONE	-	8.2	-	< 5.0	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	4.1	-	< 2.5	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560000	1560001	1560002	1560003	1560004
Sample Reference				TP15	TP15	TP16	TP16	TP17
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	0.10	0.90	0.40
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Benzo(a)anthracene	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



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560000	1560001	1560002	1560003	1560004
Sample Reference				TP15	TP15	TP16	TP16	TP17
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	0.10	0.90	0.40
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	Tridecane
SVOC % Match	%	N/A	NONE	-	-	-	-	97
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	
SVOC % Match	%	N/A	NONE	-	-	-	-	

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560005	1560006	1560007	1560008	1560009
Sample Reference				TP18	TP18	TP19	TP19	TP20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.20	0.10	0.80	0.40
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	8.6	20	11	12	22
Total mass of sample received	kg	0.001	NONE	1.0	0.60	0.80	0.60	0.80

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	-	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	5.7	4.4	5.9	6.1	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	< 1	-	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.035	-	0.048	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	42	-	57	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.021	0.014	0.029	0.015	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	21.2	14.1	28.7	14.6	-
Sulphide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	4.2	-	12	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	8.5	-	3.8	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
Total Sulphur	%	0.005	MCERTS	-	0.026	-	0.045	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	2.8	-	3.6	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-	< 2.0	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
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	MCERTS	< 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	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	< 0.80	-	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560005	1560006	1560007	1560008	1560009
Sample Reference				TP18	TP18	TP19	TP19	TP20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.20	0.10	0.80	0.40
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.4	-	8.2	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.29	-	0.40	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	-	0.9	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	-	19	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	-	21	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	51	-	54	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	-	0.5	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	3.9	-	6.7	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	29	-	34	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	30	-	53	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	< 5.0	-	< 5.0	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	< 2.5	-	< 2.5	-
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	< 10
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	< 10

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560005	1560006	1560007	1560008	1560009
Sample Reference				TP18	TP18	TP19	TP19	TP20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.20	0.10	0.80	0.40
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560005	1560006	1560007	1560008	1560009
Sample Reference				TP18	TP18	TP19	TP19	TP20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.20	0.10	0.80	0.40
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560010	1560011	1560012	1560013	1560014
Sample Reference				TP21	TP22	TP22	TP23	TP23
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.10	0.70	0.40	1.00
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	6.6	9.3	22	8.7	19
Total mass of sample received	kg	0.001	NONE	1.2	1.0	0.60	1.0	0.80

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	5.5	4.1	5.3	5.3
Total Cyanide	mg/kg	1	MCERTS	-	< 1	-	< 1	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	-	0.085	-	0.031
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	27	-	25	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.013	0.031	0.012	0.015
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	13.3	31.2	12.3	14.7
Sulphide	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	5.4	-	5.6	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	4.0	-	4.1
Elemental Sulphur	mg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Total Sulphur	%	0.005	MCERTS	-	-	0.065	-	0.034
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	3.2	-	1.5	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	< 2.0	-	< 2.0

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	-
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	MCERTS	-	< 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	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	< 0.80	-	< 0.80	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560010	1560011	1560012	1560013	1560014
Sample Reference				TP21	TP22	TP22	TP23	TP23
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.10	0.70	0.40	1.00
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	8.3	-	8.9	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.36	-	0.34	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.7	-	0.3	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	24	-	18	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	21	-	11	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	61	-	32	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.5	-	0.4	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	7.7	-	5.5	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	33	-	31	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	45	-	26	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	< 5.0	-	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	< 2.5	-	< 2.5
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560010	1560011	1560012	1560013	1560014
Sample Reference				TP21	TP22	TP22	TP23	TP23
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.10	0.70	0.40	1.00
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Benzo(a)anthracene	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	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560010	1560011	1560012	1560013	1560014
Sample Reference				TP21	TP22	TP22	TP23	TP23
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.10	0.70	0.40	1.00
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

SVOCs TICs Compound Name		N/A	NONE	Tridecane	-	-	-	-
SVOC % Match	%	N/A	NONE	97	-	-	-	-
SVOCs TICs Compound Name		N/A	NONE	Bicyclo[10.8.0]eicosane, (E)-	-	-	-	-
SVOC % Match	%	N/A	NONE	95	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560015	1560016	1560017	1560018	1560019
Sample Reference				TP24	WS1	WS2	WS3	WS3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.20	0.60	0.40	0.70
Date Sampled				06/07/2020	08/07/2020	08/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	22	9.5	19	9.2	12
Total mass of sample received	kg	0.001	NONE	1.0	1.0	0.60	0.80	0.60

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	6.2	6.5	6.6	6.6
Total Cyanide	mg/kg	1	MCERTS	-	< 1	< 1	< 1	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	-	-	-	0.022
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	12	33	12	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.0059	0.017	0.0061	0.0044
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	5.9	16.7	6.1	4.4
Sulphide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	2.5	8.4	3.9	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	2.1
Elemental Sulphur	mg/kg	5	MCERTS	-	< 5.0	< 5.0	< 5.0	-
Total Sulphur	%	0.005	MCERTS	-	-	-	-	0.023
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	1.6	0.3	0.8	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	< 2.0

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	< 0.80	< 0.80	< 0.80	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560015	1560016	1560017	1560018	1560019
Sample Reference				TP24	WS1	WS2	WS3	WS3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.20	0.60	0.40	0.70
Date Sampled				06/07/2020	08/07/2020	08/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	9.6	12	5.6	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.46	0.32	0.23	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	1.2	0.4	0.7	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	< 4.0	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	20	16	14	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	17	3.9	5.8	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	68	11	14	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.5	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	6.4	2.6	3.4	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	32	34	24	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	40	11	18	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	< 2.5
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	-
TPH (C10 - C25)	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	< 10	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560015	1560016	1560017	1560018	1560019
Sample Reference				TP24	WS1	WS2	WS3	WS3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.20	0.60	0.40	0.70
Date Sampled				06/07/2020	08/07/2020	08/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560015	1560016	1560017	1560018	1560019
Sample Reference				TP24	WS1	WS2	WS3	WS3
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.20	0.60	0.40	0.70
Date Sampled				06/07/2020	08/07/2020	08/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560020	1560021	1560022	1560023	1560024
Sample Reference				WS4	WS4	WS5	WS5	WS6
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.90	0.40	1.00	0.30
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	08/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	8.8	14	15	22	9.8
Total mass of sample received	kg	0.001	NONE	0.90	0.60	1.0	0.60	0.60

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	-	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	5.7	5.3	5.8	4.8	6.5
Total Cyanide	mg/kg	1	MCERTS	< 1	-	< 1	-	< 1
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.035	-	0.056	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	20	-	110	-	21
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.010	0.022	0.053	0.032	0.010
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	10.0	21.9	53.2	31.5	10.3
Sulphide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	4.7	-	58	-	3.8
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	8.0	-	15	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	-	< 5.0	-	< 5.0
Total Sulphur	%	0.005	MCERTS	-	0.024	-	0.033	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.9	-	0.4	-	1.7
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-	< 2.0	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	< 0.80	-	< 0.80
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number	1560020	1560021	1560022	1560023	1560024
Sample Reference	WS4	WS4	WS5	WS5	WS6
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.90	0.40	1.00	0.30
Date Sampled	06/07/2020	06/07/2020	06/07/2020	06/07/2020	08/07/2020
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.2	-	16	-	10
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.36	-	0.37	-	0.34
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	-	0.7	-	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	-	29	-	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	-	11	-	8.6
Lead (aqua regia extractable)	mg/kg	1	MCERTS	45	-	16	-	58
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	-	< 0.3	-	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	6.6	-	4.9	-	5.7
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35	-	43	-	38
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	42	-	30	-	32

Magnesium (water soluble)	mg/kg	5	NONE	-	6.1	-	7.6	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	3.0	-	3.8	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10

TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560020	1560021	1560022	1560023	1560024
Sample Reference				WS4	WS4	WS5	WS5	WS6
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.90	0.40	1.00	0.30
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	08/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560020	1560021	1560022	1560023	1560024
Sample Reference				WS4	WS4	WS5	WS5	WS6
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.90	0.40	1.00	0.30
Date Sampled				06/07/2020	06/07/2020	06/07/2020	06/07/2020	08/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560025	1560026	1560027	1560028	1560029
Sample Reference				WS7	WS7	WS8	WS9	WS9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.80	0.70	0.20	1.20
Date Sampled				08/07/2020	08/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	9.1	22	14	9.8	21
Total mass of sample received	kg	0.001	NONE	1.0	0.60	1.0	1.0	0.60

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.4	7.6	6.9	6.5	4.7
Total Cyanide	mg/kg	1	MCERTS	< 1	-	< 1	< 1	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.015	-	-	0.070
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	15	-	12	20	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0077	0.0085	0.0058	0.0098	0.039
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	7.7	8.5	5.8	9.8	38.5
Sulphide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	8.9	-	8.6	7.5	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	20	-	-	18
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	-	< 5.0	< 5.0	-
Total Sulphur	%	0.005	MCERTS	-	0.011	-	-	0.037
Total Organic Carbon (TOC)	%	0.1	MCERTS	2.4	-	0.3	2.0	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-	-	< 2.0

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	1.3	-	< 0.05	0.29	-
Pyrene	mg/kg	0.05	MCERTS	1.2	-	< 0.05	0.30	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.73	-	< 0.05	0.27	-
Chrysene	mg/kg	0.05	MCERTS	0.84	-	< 0.05	0.25	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	1.2	-	< 0.05	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.39	-	< 0.05	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.56	-	< 0.05	0.21	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.41	-	< 0.05	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.54	-	< 0.05	< 0.05	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	7.13	-	< 0.80	1.32	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560025	1560026	1560027	1560028	1560029
Sample Reference				WS7	WS7	WS8	WS9	WS9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.80	0.70	0.20	1.20
Date Sampled				08/07/2020	08/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.4	-	9.0	9.0	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.28	-	0.38	0.36	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	-	0.4	0.8	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	-	21	20	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	8.8	-	9.1	13	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	-	11	46	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	-	< 0.3	0.4	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	4.1	-	3.4	6.6	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	24	-	23	35	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	34	-	14	40	-
Magnesium (water soluble)	mg/kg	5	NONE	-	< 5.0	-	-	9.2
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	< 2.5	-	-	4.6
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560025	1560026	1560027	1560028	1560029
Sample Reference				WS7	WS7	WS8	WS9	WS9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.80	0.70	0.20	1.20
Date Sampled				08/07/2020	08/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560025	1560026	1560027	1560028	1560029
Sample Reference				WS7	WS7	WS8	WS9	WS9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.80	0.70	0.20	1.20
Date Sampled				08/07/2020	08/07/2020	06/07/2020	06/07/2020	06/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560030	1560031	1560032	1560033	1560034
Sample Reference				WS10	WS10	WS11	WS12	WS13
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.70	0.15	0.30	0.60
Date Sampled				07/07/2020	07/07/2020	06/07/2020	06/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	14	12	18	7.9
Total mass of sample received	kg	0.001	NONE	1.0	0.60	1.0	1.0	1.0

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.1	7.4	6.5	5.9	5.9
Total Cyanide	mg/kg	1	MCERTS	< 1	-	< 1	< 1	< 1
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.025	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	24	-	34	8.6	9.5
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.012	0.0074	0.017	0.0043	0.0047
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	11.9	7.4	16.8	4.3	4.7
Sulphide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	20	-	4.8	4.8	7.3
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	9.1	-	-	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	-	< 5.0	< 5.0	< 5.0
Total Sulphur	%	0.005	MCERTS	-	0.012	-	-	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.3	-	3.0	0.4	0.6
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
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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
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Environmental Science

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number	1560030	1560031	1560032	1560033	1560034
Sample Reference	WS10	WS10	WS11	WS12	WS13
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.60	0.70	0.15	0.30	0.60
Date Sampled	07/07/2020	07/07/2020	06/07/2020	06/07/2020	07/07/2020
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	-	4.2	6.2	8.4
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.47	-	0.34	0.15	0.47
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	-	0.8	0.8	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	41	-	36	9.5	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	-	23	3.4	7.8
Lead (aqua regia extractable)	mg/kg	1	MCERTS	14	-	18	9.8	29
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	8.0	-	3.3	2.2	5.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	53	-	43	21	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	37	-	14	11	41

Magnesium (water soluble)	mg/kg	5	NONE	-	< 5.0	-	-	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	< 2.5	-	-	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10

TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560030	1560031	1560032	1560033	1560034
Sample Reference				WS10	WS10	WS11	WS12	WS13
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.70	0.15	0.30	0.60
Date Sampled				07/07/2020	07/07/2020	06/07/2020	06/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560030	1560031	1560032	1560033	1560034
Sample Reference				WS10	WS10	WS11	WS12	WS13
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.70	0.15	0.30	0.60
Date Sampled				07/07/2020	07/07/2020	06/07/2020	06/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560035	1560036	1560037	1560038	1560039
Sample Reference				WS14	WS14	WS15	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.80	0.15	0.90	0.30
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	8.9	17	15	20	12
Total mass of sample received	kg	0.001	NONE	1.0	0.60	1.0	0.60	0.60

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	-	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.5	6.5	5.7	6.4	-
Total Cyanide	mg/kg	1	MCERTS	< 1	-	< 1	-	-
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.022	-	0.022	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	9.9	-	26	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0049	0.0041	0.013	0.015	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	4.9	4.1	13.1	15.1	-
Sulphide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	3.2	-	6.1	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	1.0	-	7.7	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
Total Sulphur	%	0.005	MCERTS	-	0.008	-	0.008	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.5	-	3.3	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	< 2.0	-	< 2.0	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	-
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	MCERTS	< 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	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	< 0.80	-	-
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Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number	1560035	1560036	1560037	1560038	1560039
Sample Reference	WS14	WS14	WS15	WS15	WS16
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	0.80	0.15	0.90	0.30
Date Sampled	07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.2	-	13	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.52	-	0.80	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	-	1.7	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	-	29	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.0	-	9.4	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	30	-	35	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	6.1	-	6.5	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	37	-	45	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	44	-	41	-	-

Magnesium (water soluble)	mg/kg	5	NONE	-	9.0	-	18	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	4.5	-	8.9	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560035	1560036	1560037	1560038	1560039
Sample Reference				WS14	WS14	WS15	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.80	0.15	0.90	0.30
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Benzo(a)anthracene	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



Analytical Report Number: 20-19015

Project / Site name: One Horton

Your Order No: PO-2829

Lab Sample Number				1560035	1560036	1560037	1560038	1560039
Sample Reference				WS14	WS14	WS15	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.80	0.15	0.90	0.30
Date Sampled				07/07/2020	07/07/2020	07/07/2020	07/07/2020	07/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	9H-Fluorene, 3-methyl-
SVOC % Match	%	N/A	NONE	-	-	-	-	93
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	
SVOC % Match	%	N/A	NONE	-	-	-	-	

**Analytical Report Number : 20-19015****Project / Site name: One Horton**

* 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 *
1559985	TP1	None Supplied	0.10	-
1559986	TP2	None Supplied	0.40	Brown clay.
1559987	TP3	None Supplied	0.10	Brown loam and clay with vegetation.
1559988	TP4	None Supplied	0.40	Brown clay.
1559989	TP5	None Supplied	0.10	Brown loam with vegetation.
1559990	TP6	None Supplied	0.10	Brown clay and loam with vegetation.
1559991	TP7	None Supplied	0.40	Brown loam and clay with vegetation.
1559992	TP8	None Supplied	0.40	Light brown clay.
1559993	TP10	None Supplied	0.10	Brown loam and clay with vegetation.
1559994	TP11	None Supplied	0.40	Light brown clay.
1559995	TP11	None Supplied	1.20	Light brown clay.
1559996	TP12	None Supplied	0.10	Light brown clay and sand.
1559997	TP12	None Supplied	0.80	Light brown sandy clay with gravel.
1559998	TP14	None Supplied	0.10	Brown loam and clay with vegetation and gravel
1559999	TP14	None Supplied	0.70	Light brown clay and sand with vegetation and gravel.
1560000	TP15	None Supplied	0.40	Light brown clay and sand with vegetation and gravel.
1560001	TP15	None Supplied	1.00	Brown clay with gravel.
1560002	TP16	None Supplied	0.10	Brown loam and clay with vegetation and gravel
1560003	TP16	None Supplied	0.90	Light brown sandy clay with vegetation and gravel.
1560004	TP17	None Supplied	0.40	Brown sandy clay.
1560005	TP18	None Supplied	0.10	Brown loam and clay with vegetation and gravel
1560006	TP18	None Supplied	1.20	Light brown sandy clay.
1560007	TP19	None Supplied	0.10	Brown loam and clay with vegetation and gravel
1560008	TP19	None Supplied	0.80	Brown loam and clay with vegetation and gravel
1560009	TP20	None Supplied	0.40	Brown clay and sand.
1560010	TP21	None Supplied	0.40	Brown loam and clay with vegetation and gravel
1560011	TP22	None Supplied	0.10	Brown loam and clay with vegetation and gravel
1560012	TP22	None Supplied	0.70	Light brown clay with vegetation and gravel.
1560013	TP23	None Supplied	0.40	Brown loam and clay with vegetation and gravel
1560014	TP23	None Supplied	1.00	Light brown clay with vegetation and gravel.
1560015	TP24	None Supplied	0.40	Light brown sandy clay with vegetation.
1560016	WS1	None Supplied	0.20	Brown loam and clay with vegetation and gravel
1560017	WS2	None Supplied	0.60	Light brown sandy clay with vegetation.
1560018	WS3	None Supplied	0.40	Brown sandy clay with vegetation.
1560019	WS3	None Supplied	0.70	Brown clay with gravel and vegetation.
1560020	WS4	None Supplied	0.10	Brown sandy clay with vegetation and gravel
1560021	WS4	None Supplied	0.90	Light grey sandy clay.
1560022	WS5	None Supplied	0.40	Light brown clay with vegetation and gravel.
1560023	WS5	None Supplied	1.00	Light brown clay with vegetation.
1560024	WS6	None Supplied	0.30	Brown loam and clay with vegetation and gravel
1560025	WS7	None Supplied	0.15	Brown sandy clay with vegetation and gravel
1560026	WS7	None Supplied	0.80	Light brown clay and sand with vegetation.
1560027	WS8	None Supplied	0.70	Light brown sandy clay.
1560028	WS9	None Supplied	0.20	Brown sandy clay with vegetation and gravel
1560029	WS9	None Supplied	1.20	Light brown clay with vegetation and gravel.
1560030	WS10	None Supplied	0.60	Brown clay with vegetation and gravel
1560031	WS10	None Supplied	0.70	Brown clay with gravel and vegetation.
1560032	WS11	None Supplied	0.15	Brown loam and clay with vegetation and gravel
1560033	WS12	None Supplied	0.30	Light brown clay with vegetation and gravel.
1560034	WS13	None Supplied	0.60	Brown loam and sand with vegetation and gravel.
1560035	WS14	None Supplied	0.30	Brown loam and clay with vegetation and gravel
1560036	WS14	None Supplied	0.80	Light brown sandy clay with vegetation.
1560037	WS15	None Supplied	0.15	Brown loam and clay with vegetation and gravel
1560038	WS15	None Supplied	0.90	Light brown clay with vegetation and gravel.
1560039	WS16	None Supplied	0.30	Brown clay and sand with vegetation and gravel

Analytical Report Number : 20-19015

Project / Site name: One Horton

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Elemental sulphur in soil	Determination of elemental sulphur in soil by extraction in acetonitrile followed by HPLC.	In-house method based on Secondsite Property Holdings Guidance for Assessing and Managing Potential	L021-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	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
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	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
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
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
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
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

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 20-19015

Project / Site name: One Horton

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (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
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
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
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	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 Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE

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.

**Fiona Goode**

Geo-Environmental Services Ltd
Unit 7, Danworth Farm
Cuckfield Road
Hurstpierpoint
West Sussex
BN6 9GL

t: 01273 832972

e: fiona.goode@gesl.net

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 : 20-19261

Project / Site name:	One Horton	Samples received on:	10/07/2020
Your job number:	GE 18771	Sample instructed/ Analysis started on:	10/07/2020
Your order number:	PO-2832	Analysis completed by:	20/07/2020
Report Issue Number:	1	Report issued on:	20/07/2020
Samples Analysed:	24 soil samples		

Signed 

Karolina Marek
PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

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.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :	soils	- 4 weeks from reporting
	leachates	- 2 weeks from reporting
	waters	- 2 weeks from reporting
	asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

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.

Iss No 20-19261-1 One Horton GE 18771.XLS

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561528	1561529	1561530	1561531	1561532
Sample Reference				TP24	TP25	TP26	TP26	TP27
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.15	0.30	0.90	0.15
Date Sampled				10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	31	12	13	20	11
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	0.50	1.0

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	4.5	5.9	6.8	6.3	6.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	-	< 1
Total Sulphate as SO ₄	%	0.005	MCERTS	-	-	-	0.072	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	130	49	77	-	56
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.065	0.024	0.039	0.11	0.028
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	64.5	24.4	38.7	109	28.2
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	32	13	42	-	4.7
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	24	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	-	< 5.0
Total Sulphur	%	0.005	MCERTS	-	-	-	0.026	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.5	4.0	0.4	-	3.2
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	< 2.0	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
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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
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Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number	1561528	1561529	1561530	1561531	1561532
Sample Reference	TP24	TP25	TP26	TP26	TP27
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30	0.15	0.30	0.90	0.15
Date Sampled	10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	11	15	-	7.9
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.41	0.47	0.75	-	0.38
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1.7	0.3	-	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	21	26	-	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	6.1	13	< 1.0	-	8.2
Lead (aqua regia extractable)	mg/kg	1	MCERTS	9.8	37	18	-	28
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	-	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	4.8	8.2	8.7	-	5.3
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	2.8	< 1.0	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	44	33	48	-	29
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	27	65	31	-	44

Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	24	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	12	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
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TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	-	< 10

TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-

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Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561528	1561529	1561530	1561531	1561532
Sample Reference				TP24	TP25	TP26	TP26	TP27
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.15	0.30	0.90	0.15
Date Sampled				10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



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Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561528	1561529	1561530	1561531	1561532
Sample Reference				TP24	TP25	TP26	TP26	TP27
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.15	0.30	0.90	0.15
Date Sampled				10/07/2020	10/07/2020	10/07/2020	10/07/2020	10/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

*U/S - Unsuitable for analysis due to high colour intensity.

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Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561533	1561534	1561535	1561536	1561537
Sample Reference				TP27	TP28	TP28	TP30	TP31
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.15	0.80	0.30	0.30
Date Sampled				10/07/2020	10/07/2020	10/07/2020	10/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	28	12	19	20	15
Total mass of sample received	kg	0.001	NONE	0.60	1.0	0.50	1.0	0.60

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	5.6	5.8	6.4	-	6.8
Total Cyanide	mg/kg	1	MCERTS	-	< 1	-	-	< 1
Total Sulphate as SO ₄	%	0.005	MCERTS	0.100	-	0.051	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	73	-	-	43
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.047	0.036	0.061	-	0.022
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	47.3	36.4	61.2	-	21.6
Sulphide	mg/kg	1	MCERTS	-	2.5	-	-	< 1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	20	-	-	16
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	17	-	9.2	-	-
Elemental Sulphur	mg/kg	5	MCERTS	-	< 5.0	-	-	< 5.0
Total Sulphur	%	0.005	MCERTS	0.037	-	0.020	-	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	3.8	-	-	1.3
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	-	< 2.0	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
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	MCERTS	-	< 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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	< 0.80	-	-	< 0.80
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Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561533	1561534	1561535	1561536	1561537
Sample Reference				TP27	TP28	TP28	TP30	TP31
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.15	0.80	0.30	0.30
Date Sampled				10/07/2020	10/07/2020	10/07/2020	10/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	10	-	-	8.1
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.42	-	-	0.37
Boron (water soluble)	mg/kg	0.2	MCERTS	-	1.9	-	-	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	21	-	-	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	12	-	-	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	30	-	-	25
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.4	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	7.0	-	-	4.5
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	2.4
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	33	-	-	35
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	52	-	-	18
Magnesium (water soluble)	mg/kg	5	NONE	6.9	-	6.9	-	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	3.5	-	3.4	-	-
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	-



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Environmental Science

Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561533	1561534	1561535	1561536	1561537
Sample Reference				TP27	TP28	TP28	TP30	TP31
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.15	0.80	0.30	0.30
Date Sampled				10/07/2020	10/07/2020	10/07/2020	10/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	< 0.1	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	< 0.2	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	< 0.2	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	< 0.1	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	< 0.1	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	< 0.1	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	< 0.1	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	< 0.3	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	< 0.3	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	< 0.3	-
Benzo(a)anthracene	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	-



Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561533	1561534	1561535	1561536	1561537
Sample Reference				TP27	TP28	TP28	TP30	TP31
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.15	0.80	0.30	0.30
Date Sampled				10/07/2020	10/07/2020	10/07/2020	10/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

SVOCs TICs Compound Name		N/A	NONE	-	-	-	ND	-
SVOC % Match	%	N/A	NONE	-	-	-	0	-

*U/S - Unsuitable for analysis due to high colour intensity.

Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561538	1561539	1561540	1561541	1561542
Sample Reference				TP31	TP32	TP33	TP34	TP34
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.40	0.30	0.15	1.00
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	17	15	16	12	17
Total mass of sample received	kg	0.001	NONE	0.50	0.60	1.0	1.0	0.60

Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	Not-detected	-
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.8	-	-	5.9	7.0
Total Cyanide	mg/kg	1	MCERTS	-	-	-	< 1	-
Total Sulphate as SO ₄	%	0.005	MCERTS	0.039	-	-	-	0.025
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	41	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.022	-	-	0.021	0.0037
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	22.3	-	-	20.6	3.7
Sulphide	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	-	-	8.2	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	15	-	-	-	11
Elemental Sulphur	mg/kg	5	MCERTS	-	-	-	< 5.0	-
Total Sulphur	%	0.005	MCERTS	0.016	-	-	-	0.010
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	-	-	2.6	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	-	-	-	< 2.0

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
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Speciated PAHs

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	-	-	-	< 0.05	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	-
Benzo(a)anthracene	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

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	< 0.80	-
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Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561538	1561539	1561540	1561541	1561542
Sample Reference				TP31	TP32	TP33	TP34	TP34
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.40	0.30	0.15	1.00
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	8.8	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	0.40	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	1.4	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	23	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	13	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	38	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	0.4	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	6.9	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	< 1.0	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	35	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	45	-
Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	-	-	-	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	-	-	-	< 2.5
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	< 1.0	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	< 10	-	-

Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561538	1561539	1561540	1561541	1561542
Sample Reference				TP31	TP32	TP33	TP34	TP34
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.40	0.30	0.15	1.00
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	-	-
Benzo(a)anthracene	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	-	-	-



Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561538	1561539	1561540	1561541	1561542
Sample Reference				TP31	TP32	TP33	TP34	TP34
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.40	0.30	0.15	1.00
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

SVOCs TICs Compound Name		N/A	NONE	-	ND	-	-	-
SVOC % Match	%	N/A	NONE	-	0	-	-	-

*U/S - Unsuitable for analysis due to high colour intensity.

Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561543	1561544	1561545	1561546	1561547
Sample Reference				TP35	TP36	TP37	TP37	TP38
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.15	0.30	00.90	0.60
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	16	6.3	14	21	15
Total mass of sample received	kg	0.001	NONE	0.60	1.0	1.0	0.60	1.0

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	Not-detected
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	6.0	-	6.7	6.6
Total Cyanide	mg/kg	1	MCERTS	-	< 1	-	-	< 1
Total Sulphate as SO ₄	%	0.005	MCERTS	-	-	-	0.024	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	25	-	-	34
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.013	-	0.0053	0.017
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	12.7	-	5.3	17.1
Sulphide	mg/kg	1	MCERTS	-	1.0	-	-	< 1.0
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	8.2	-	-	25
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	19	-
Elemental Sulphur	mg/kg	5	MCERTS	-	< 5.0	-	-	< 5.0
Total Sulphur	%	0.005	MCERTS	-	-	-	0.008	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	2.8	-	-	1.5
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	< 2.0	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	-	< 0.05
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	MCERTS	-	< 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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	< 0.80	-	-	< 0.80
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Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561543	1561544	1561545	1561546	1561547
Sample Reference				TP35	TP36	TP37	TP37	TP38
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.15	0.30	00.90	0.60
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	5.3	-	-	17
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.13	-	-	0.46
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.6	-	-	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	7.9	-	-	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	6.7	-	-	6.1
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	28	-	-	18
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.4	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	3.0	-	-	4.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	15	-	-	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	25	-	-	23
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	< 5.0	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	< 2.5	-
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH (C10 - C25)	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH (C25 - C40)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561543	1561544	1561545	1561546	1561547
Sample Reference				TP35	TP36	TP37	TP37	TP38
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.15	0.30	00.90	0.60
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561543	1561544	1561545	1561546	1561547
Sample Reference				TP35	TP36	TP37	TP37	TP38
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.15	0.30	00.90	0.60
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

*U/S - Unsuitable for analysis due to high colour intensity.

Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561548	1561549	1561550	1561551	
Sample Reference				TP38	TP39	TP40	TP40	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				1.20	0.15	0.10	0.80	
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
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	21	9.0	21	29	
Total mass of sample received	kg	0.001	NONE	0.60	1.0	1.0	0.60	

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	-	
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General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.5	5.9	5.2	5.3	
Total Cyanide	mg/kg	1	MCERTS	-	< 1	< 1	-	
Total Sulphate as SO ₄	%	0.005	MCERTS	0.045	-	-	0.049	
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	41	140	-	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0047	0.021	0.072	0.030	
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	4.7	20.5	72.0	29.8	
Sulphide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	-	7.5	24	-	
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	20	-	-	17	
Elemental Sulphur	mg/kg	5	MCERTS	-	< 5.0	< 5.0	-	
Total Sulphur	%	0.005	MCERTS	0.018	-	-	0.019	
Total Organic Carbon (TOC)	%	0.1	MCERTS	-	3.4	3.6	-	
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	U/S*	-	-	< 2.0	

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	
Phenanthrene	mg/kg	0.05	MCERTS	-	0.57	< 0.05	-	
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	
Fluoranthene	mg/kg	0.05	MCERTS	-	0.50	< 0.05	-	
Pyrene	mg/kg	0.05	MCERTS	-	0.41	< 0.05	-	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.27	< 0.05	-	
Chrysene	mg/kg	0.05	MCERTS	-	0.27	< 0.05	-	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	0.24	< 0.05	-	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.19	< 0.05	-	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 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	-	

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	2.45	< 0.80	-	
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Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561548	1561549	1561550	1561551	
Sample Reference				TP38	TP39	TP40	TP40	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				1.20	0.15	0.10	0.80	
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	7.5	10	-	
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	0.27	0.28	-	
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.8	2.3	-	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	< 4.0	-	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	13	13	-	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	7.9	5.4	-	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	34	39	-	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.5	0.6	-	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	4.3	4.1	-	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	25	23	-	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	31	34	-	
Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	-	-	6.1	
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	-	-	3.1	
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
o-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	-	
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	< 8.0	-	
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	< 8.0	-	
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	-	
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	-	
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	-	
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	< 10	-	
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	< 10	-	
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	-	
TPH (C10 - C25)	mg/kg	10	MCERTS	-	-	-	-	
TPH (C25 - C40)	mg/kg	10	MCERTS	-	-	-	-	

Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561548	1561549	1561550	1561551
Sample Reference				TP38	TP39	TP40	TP40
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.15	0.10	0.80
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
SVOCs							
Aniline	mg/kg	0.1	NONE	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-



Analytical Report Number: 20-19261

Project / Site name: One Horton

Your Order No: PO-2832

Lab Sample Number				1561548	1561549	1561550	1561551	
Sample Reference				TP38	TP39	TP40	TP40	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				1.20	0.15	0.10	0.80	
Date Sampled				09/07/2020	09/07/2020	09/07/2020	09/07/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

SVOCs TICs

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

*U/S - Unsuitable for analysis due to high colour intensity.

Analytical Report Number : 20-19261

Project / Site name: One Horton

* 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 *
1561528	TP24	None Supplied	0.30	Light brown clay with vegetation and gravel.
1561529	TP25	None Supplied	0.15	Brown loam and clay with vegetation and gravel
1561530	TP26	None Supplied	0.30	Brown clay and sand with vegetation and gravel
1561531	TP26	None Supplied	0.90	Light brown clay with vegetation and gravel.
1561532	TP27	None Supplied	0.15	Brown loam and sand with vegetation and gravel.
1561533	TP27	None Supplied	1.20	Light brown clay with vegetation and gravel.
1561534	TP28	None Supplied	0.15	Brown loam and sand with vegetation and gravel.
1561535	TP28	None Supplied	0.80	Brown clay with vegetation and gravel
1561536	TP30	None Supplied	0.30	Light brown clay with vegetation and gravel.
1561537	TP31	None Supplied	0.30	Brown clay and sand with vegetation.
1561538	TP31	None Supplied	0.70	Brown clay and sand with vegetation and gravel
1561539	TP32	None Supplied	0.40	Brown clay and sand with gravel and vegetation.
1561540	TP33	None Supplied	0.30	Brown clay and sand with vegetation.
1561541	TP34	None Supplied	0.15	Brown loam and clay with vegetation and gravel
1561542	TP34	None Supplied	1.00	Light grey clay with vegetation and gravel.
1561543	TP35	None Supplied	0.30	Brown clay and sand with vegetation and gravel
1561544	TP36	None Supplied	0.15	Brown sandy loam with vegetation and gravel
1561545	TP37	None Supplied	0.30	Brown clay and sand with vegetation and gravel
1561546	TP37	None Supplied	00.90	Light brown clay and sand with vegetation.
1561547	TP38	None Supplied	0.60	Brown clay and sand with vegetation and gravel
1561548	TP38	None Supplied	1.20	Brown clay and sand with vegetation and gravel
1561549	TP39	None Supplied	0.15	Brown loam and sand with vegetation and gravel.
1561550	TP40	None Supplied	0.10	Brown loam and sand with vegetation and gravel.
1561551	TP40	None Supplied	0.80	Brown clay and sand with vegetation.

Analytical Report Number : 20-19261

Project / Site name: One Horton

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Elemental sulphur in soil	Determination of elemental sulphur in soil by extraction in acetonitrile followed by HPLC.	In-house method based on Secondsite Property Holdings Guidance for Assessing and Managing Potential	L021-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	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
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	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
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
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
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
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

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 20-19261

Project / Site name: One Horton

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (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
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
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
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	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 Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE

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 E

Soakage Testing Results



 Geo-Environmental	Soakaway Test Results (after BRE Digest 365)	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : One Horton		Job No. : GE18771
Client : Eastleigh Borough Council		Date : 17/07/2020

Pit reference	TP2
Pit depth (m)	3.00
Pit width (m)	0.45
Pit length (m)	1.50
Depth to standing water (m)	1.74

Test 1

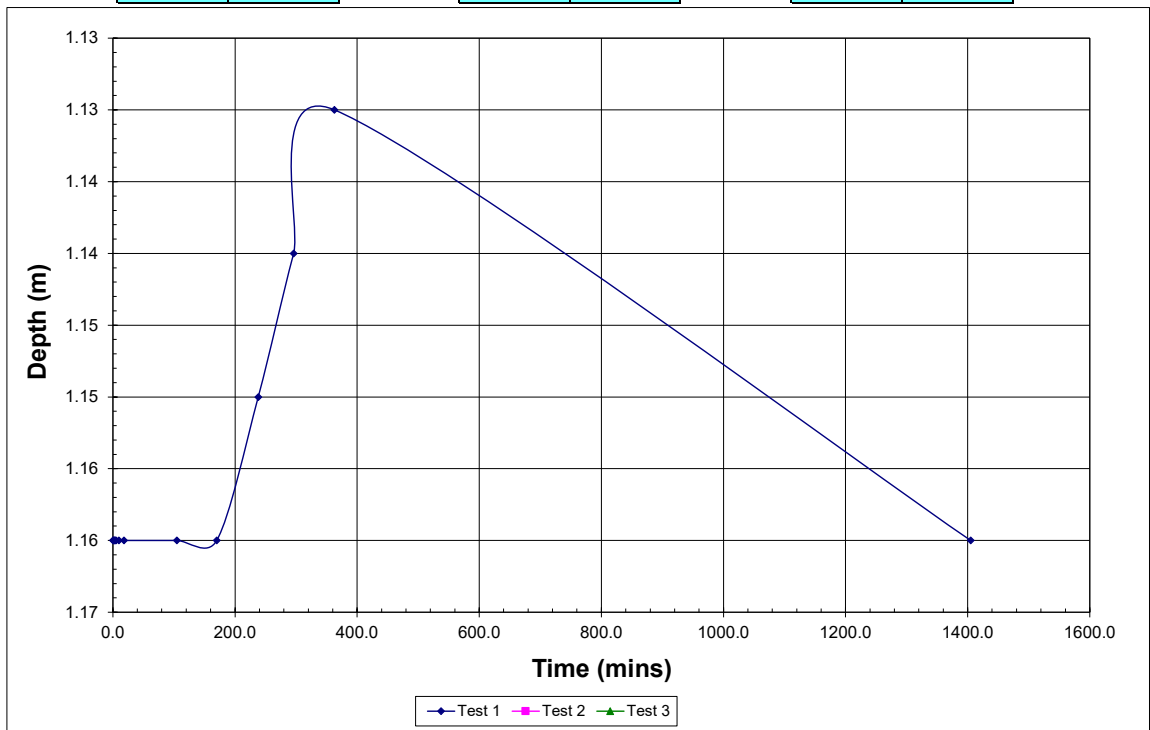
Time (min)	Depth (m)
0.0	1.16
1.0	1.16
2.0	1.16
3.0	1.16
4.0	1.16
5.0	1.16
10.0	1.16
18.0	1.16
105.0	1.16
170.0	1.16
238.0	1.15
296.0	1.14
363.0	1.13
1405.0	1.16

Test 2

Time (min)	Depth (m)

Test 3

Time (min)	Depth (m)



Max. depth (m)	3.00	3.00	3.00
Effective depth (m)	1.84	3.00	3.00
75% effective depth (m)	1.62	0.75	0.75
50% effective depth (m)	2.08	1.50	1.50
25% effective depth (m)	2.54	2.25	2.25
t75 (min)			
t50 (min)			
t25 (min)			
Vp 75-25	0.62	1.01	1.01
ap 50	4.263	6.525	6.525
tp 75-25	0.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	

 Geo-Environmental	Soakaway Test Results (after BRE Digest 365)	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : One Horton		Job No. : GE18771
Client : Eastleigh Borough Council		Date : 17/07/2020

Pit reference	TP3
Pit depth (m)	3.20
Pit width (m)	0.45
Pit length (m)	1.50
Depth to standing water (m)	1.92

Test 1

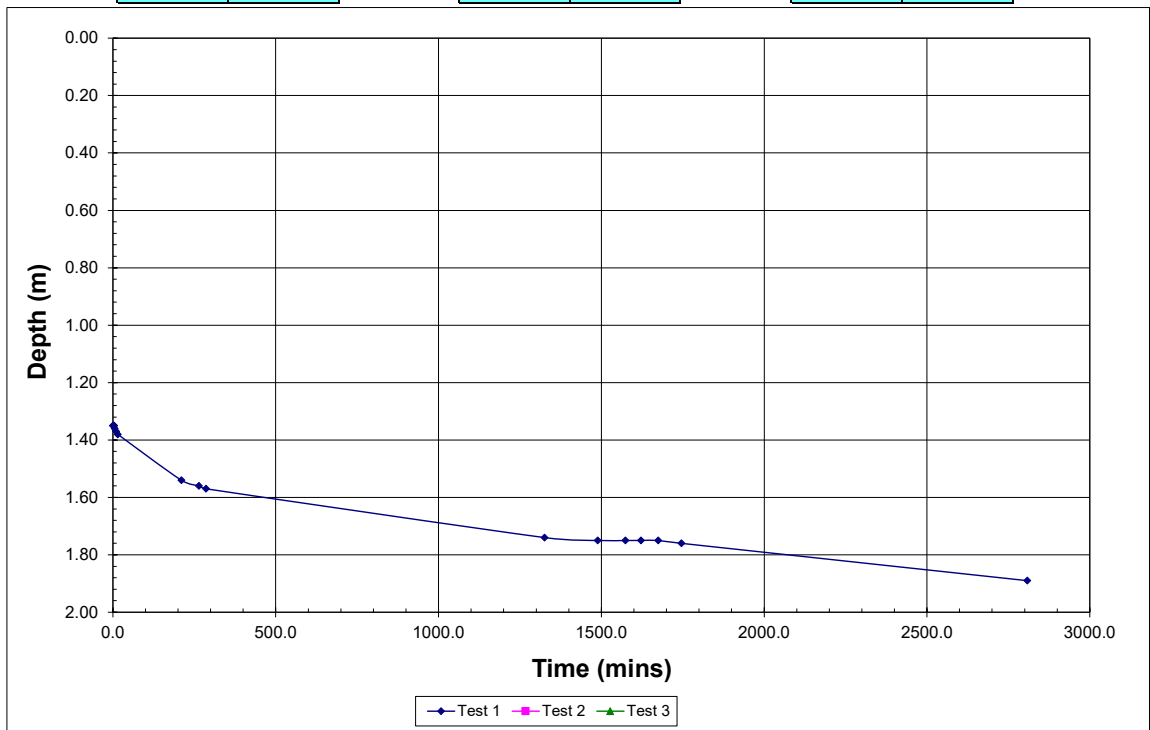
Time (min)	Depth (m)
0.0	1.35
1.0	1.35
2.0	1.35
3.0	1.35
4.0	1.35
5.0	1.36
10.0	1.37
15.0	1.38
210.0	1.54
264.0	1.56
286.0	1.57
1326.0	1.74
1489.0	1.75
1574.0	1.75
1622.0	1.75
1675.0	1.75
1746.0	1.76
2808.0	1.89

Test 2

Time (min)	Depth (m)

Test 3

Time (min)	Depth (m)



Max. depth (m)	3.20	3.20	3.20
Effective depth (m)	1.85	3.20	3.20
75% effective depth (m)	1.81	0.80	0.80
50% effective depth (m)	2.28	1.60	1.60
25% effective depth (m)	2.74	2.40	2.40
t75 (min)			
t50 (min)			
t25 (min)			
Vp 75-25	0.62	1.08	1.08
ap 50	4.2825	6.915	6.915
tp 75-25	0.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	

 Geo-Environmental	Soakaway Test Results (after BRE Digest 365)	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : One Horton		Job No. : GE18771
Client : Eastleigh Borough Council		Date : 17/07/2020

Pit reference	TP4
Pit depth (m)	3.00
Pit width (m)	0.45
Pit length (m)	1.50
Depth to standing water (m)	2.52

Test 1

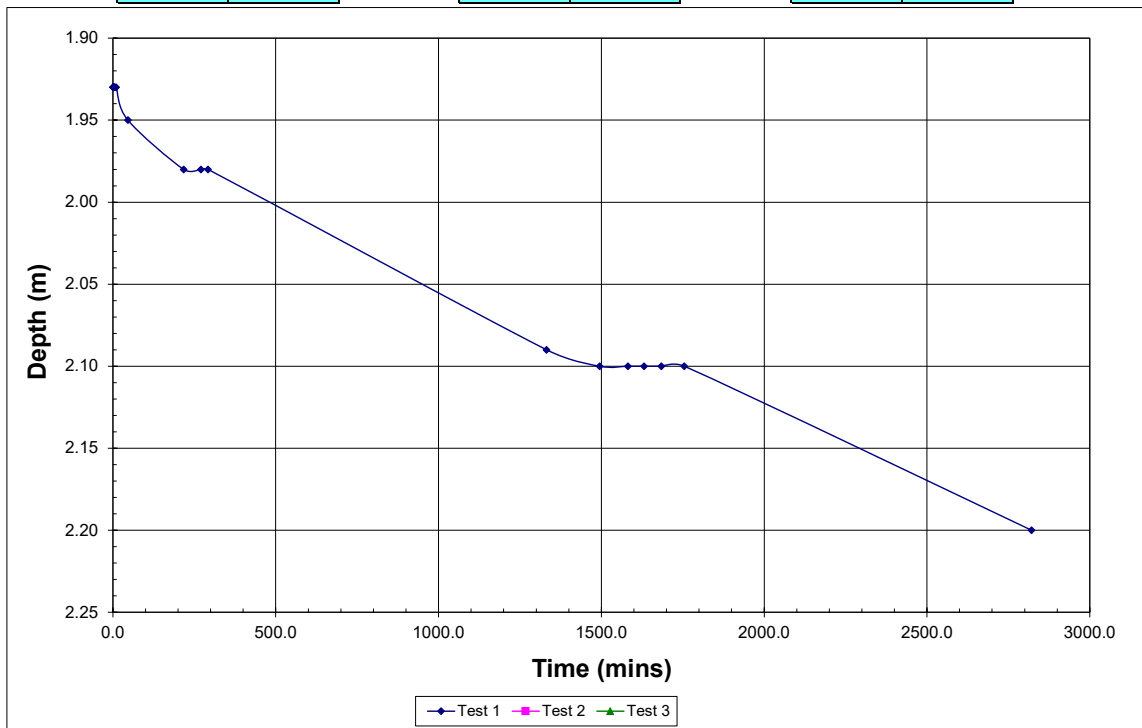
Time (min)	Depth (m)
0.0	1.93
1.0	1.93
2.0	1.93
3.0	1.93
4.0	1.93
5.0	1.93
10.0	1.93
46.0	1.95
217.0	1.98
270.0	1.98
292.0	1.98
1332.0	2.09
1495.0	2.10
1582.0	2.10
1631.0	2.10
1684.0	2.10
1755.0	2.10
2821.0	2.20

Test 2

Time (min)	Depth (m)

Test 3

Time (min)	Depth (m)



Max. depth (m)	3.00	3.00	3.00
Effective depth (m)	1.07	3.00	3.00
75% effective depth (m)	2.20	0.75	0.75
50% effective depth (m)	2.47	1.50	1.50
25% effective depth (m)	2.73	2.25	2.25
t75 (min)	2529.00		
t50 (min)			
t25 (min)			
Vp 75-25	0.36	1.01	1.01
ap 50	2.7615	6.525	6.525
tp 75-25	-2529.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	

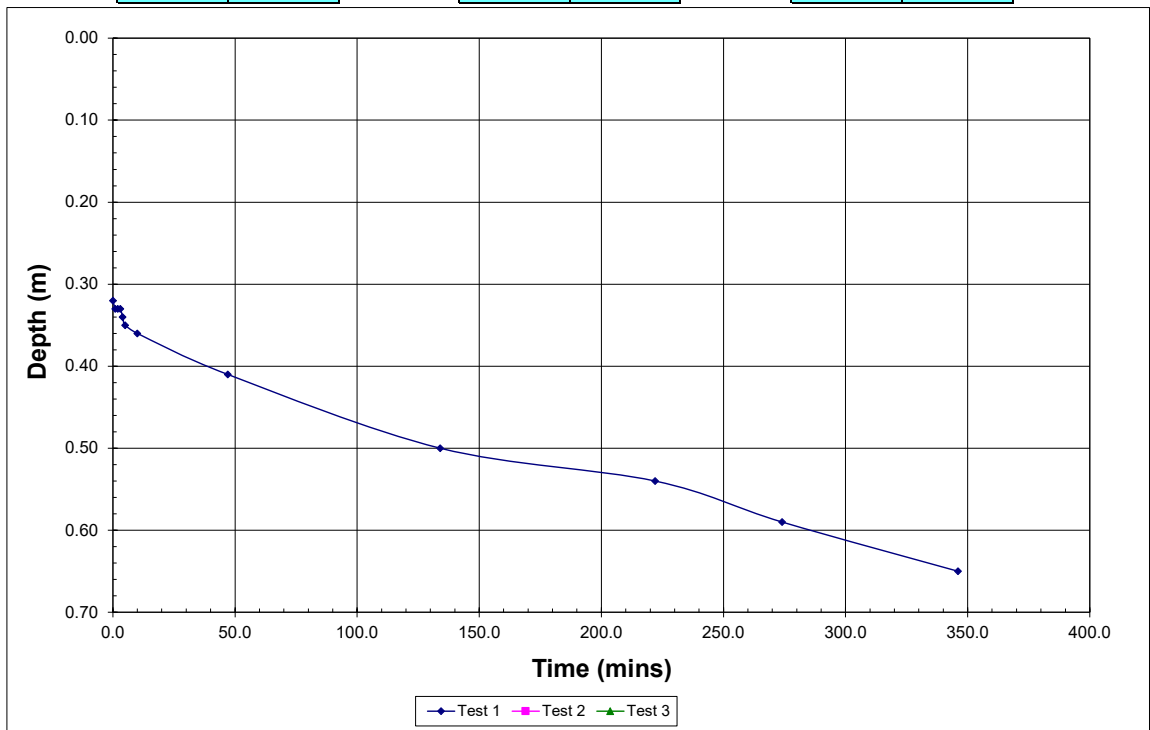
 Geo-Environmental	Soakaway Test Results (after BRE Digest 365)	Geo-EnvironmentalServices Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : One Horton		Job No. : GE18771
Client : Eastleigh Borough Council		Date : 17/07/2020

Pit reference	TP5 (Shallow)
Pit depth (m)	0.65
Pit width (m)	0.45
Pit length (m)	1.30
Depth to standing water (m)	

Test 1	
Time (min)	Depth (m)
0.0	0.32
1.0	0.33
2.0	0.33
3.0	0.33
4.0	0.34
5.0	0.35
10.0	0.36
47.0	0.41
134.0	0.50
222.0	0.54
274.0	0.59
346.0	0.65

Test 2	
Time (min)	Depth (m)

Test 3	
Time (min)	Depth (m)



Max. depth (m)	0.65	0.65	0.65
Effective depth (m)	0.33	0.65	0.65
75% effective depth (m)	0.40	0.16	0.16
50% effective depth (m)	0.49	0.33	0.33
25% effective depth (m)	0.57	0.49	0.49
t75 (min)	40.00		
t50 (min)	127.00		
t25 (min)	270.00		
Vp 75-25	0.10	0.19	0.19
ap 50	1.1625	1.7225	1.7225
tp 75-25	230.00	0.00	0.00

Soil infiltration rate (m/s)	6.0E-06		
Soil infiltration rate (mm/hr)	2.17E+01		



Soakaway Test Results (after BRE Digest 365)

Geo-EnvironmentalServices Limited

**Unit 7 Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex BN6 9GL
+44(0)1273 832972 www.gesl.net**

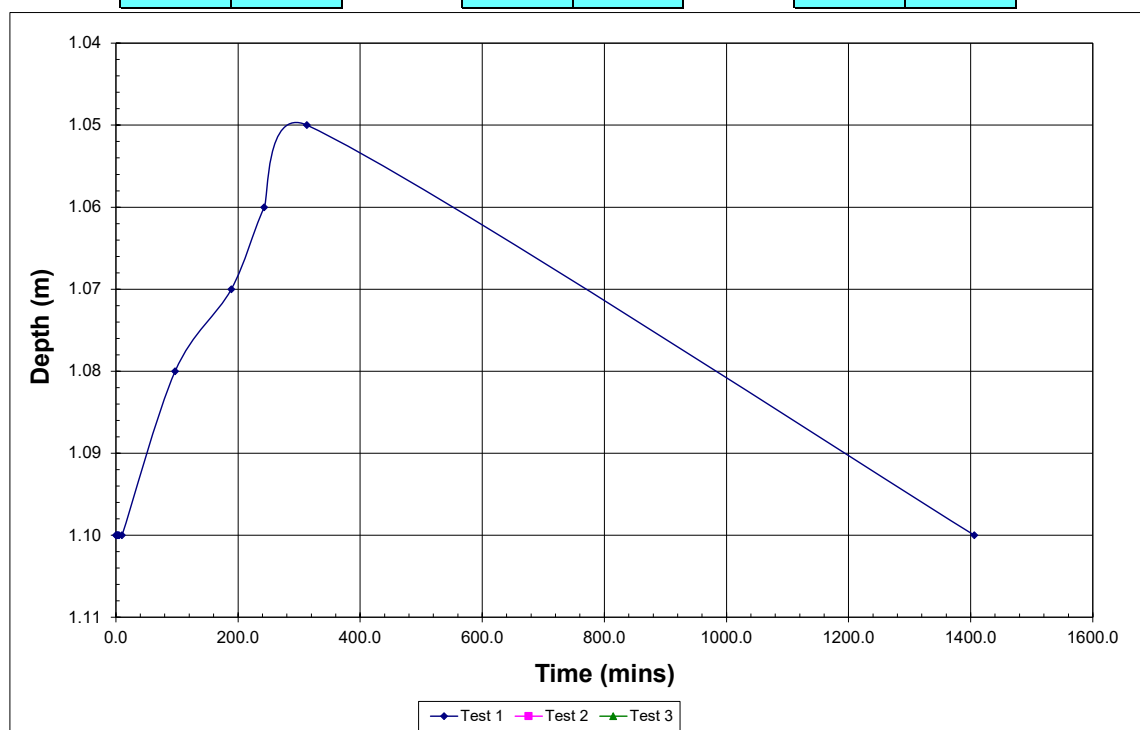
Project Name : One Horton

Client : Eastleigh Borough Council

Job No. : GE18771

Date : 17/07/2020

Pit reference	TP6
Pit depth (m)	3.10
Pit width (m)	0.45
Pit length (m)	1.50
Depth to standing water (m)	1.60

[illegible][illegible][illegible]

Max. depth (m)	3.10	3.10	3.10
Effective depth (m)	2.00	3.10	3.10
75% effective depth (m)	1.60	0.78	0.78
50% effective depth (m)	2.10	1.55	1.55
25% effective depth (m)	2.60	2.33	2.33
t75 (min)			
t50 (min)			
t25 (min)			
Vp 75-25	0.68	1.05	1.05
ap 50	4.575	6.72	6.72
tp 75-25	0.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	



Soakaway Test Results (after BRE Digest 365)

Geo-EnvironmentalServices Limited

**Unit 7 Danworth Farm, Cuckfield Road,
Hurstpierpoint, West Sussex BN6 9GL
+44(0)1273 832972 www.gesl.net**

Project Name : One Horton

Job No. : GE18771

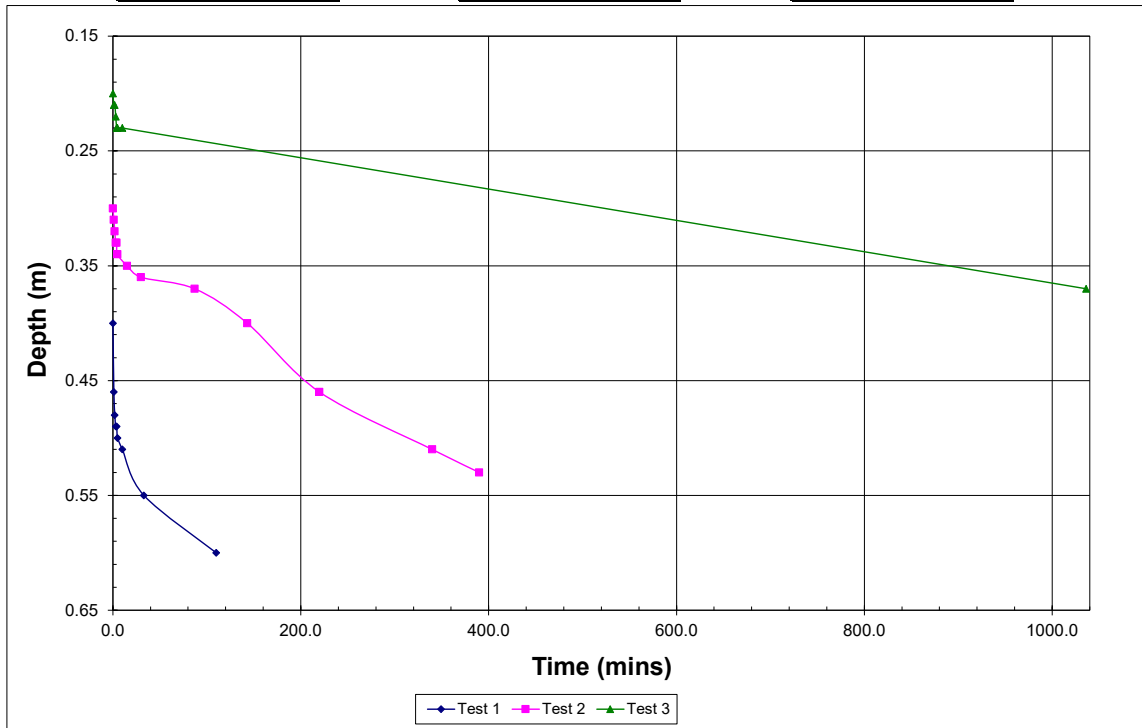
Client : Eastleigh Borough Council

Date : 17/07/2020

Pit reference	TP7 (Shallow)
Pit depth (m)	0.60
Pit width (m)	0.45
Pit length (m)	1.30
Depth to standing water (m)	

[illegible]

Time (min)	Depth (m)
0.0	0.30
1.0	0.31
2.0	0.32
3.0	0.33
4.0	0.33
5.0	0.34
15.0	0.35
30.0	0.36
87.0	0.37
143.0	0.40
220.0	0.46
340.0	0.51
390.0	0.53

[illegible]

Max. depth (m)	0.60	0.60	0.60
Effective depth (m)	0.20	0.30	0.40
75% effective depth (m)	0.45	0.38	0.30
50% effective depth (m)	0.50	0.45	0.40
25% effective depth (m)	0.55	0.53	0.50
t75 (min)	1.00	92.00	600.00
t50 (min)	5.00	210.00	
t25 (min)	33.00	390.00	
Vp 75-25	0.06	0.09	0.12
ap 50	0.935	1.11	1.285
tp 75-25	32.00	298.00	-600.00

Soil infiltration rate (m/s)	3.3E-05	4.4E-06	Insufficient fall in water to complete test
Soil infiltration rate (mm/hr)	1.17E+02	1.59E+01	Insufficient fall in water to complete test

 Geo-Environmental	Soakaway Test Results (after BRE Digest 365)	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : One Horton		Job No. : GE18771
Client : Eastleigh Borough Council		Date : 17/07/2020

Pit reference	TP8 (Shallow)
Pit depth (m)	0.62
Pit width (m)	0.45
Pit length (m)	1.30
Depth to standing water (m)	

Test 1

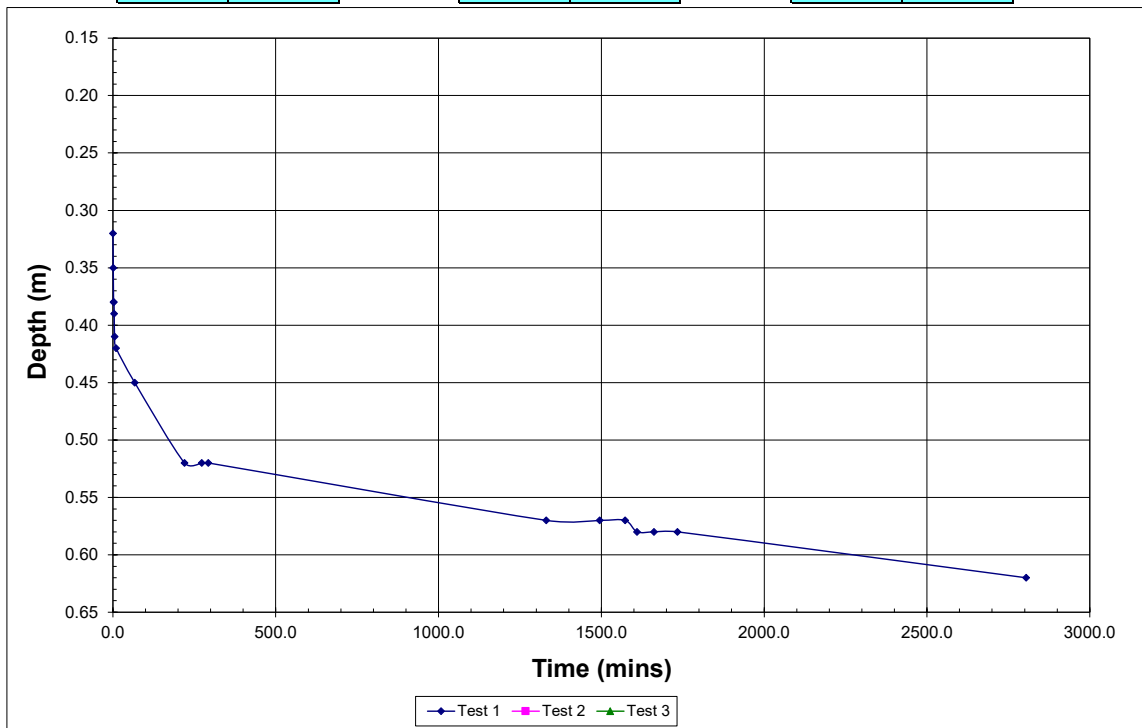
Time (min)	Depth (m)
0.0	0.32
1.0	0.35
2.0	0.38
3.0	0.38
4.0	0.39
5.0	0.41
10.0	0.42
67.0	0.45
220.0	0.52
273.0	0.52
293.0	0.52
1331.0	0.57
1495.0	0.57
1573.0	0.57
1610.0	0.58
1662.0	0.58
1734.0	0.58
2805.0	0.62

Test 2

Time (min)	Depth (m)

Test 3

Time (min)	Depth (m)



Max. depth (m)	0.62	0.62	0.62
Effective depth (m)	0.30	0.62	0.62
75% effective depth (m)	0.40	0.16	0.16
50% effective depth (m)	0.47	0.31	0.31
25% effective depth (m)	0.55	0.47	0.47
t75 (min)	4.75		
t50 (min)	95.00		
t25 (min)	880.00		
Vp 75-25	0.09	0.18	0.18
ap 50	1.11	1.67	1.67
tp 75-25	875.25	0.00	0.00

Soil infiltration rate (m/s)	1.5E-06		
Soil infiltration rate (mm/hr)	5.42E+00		

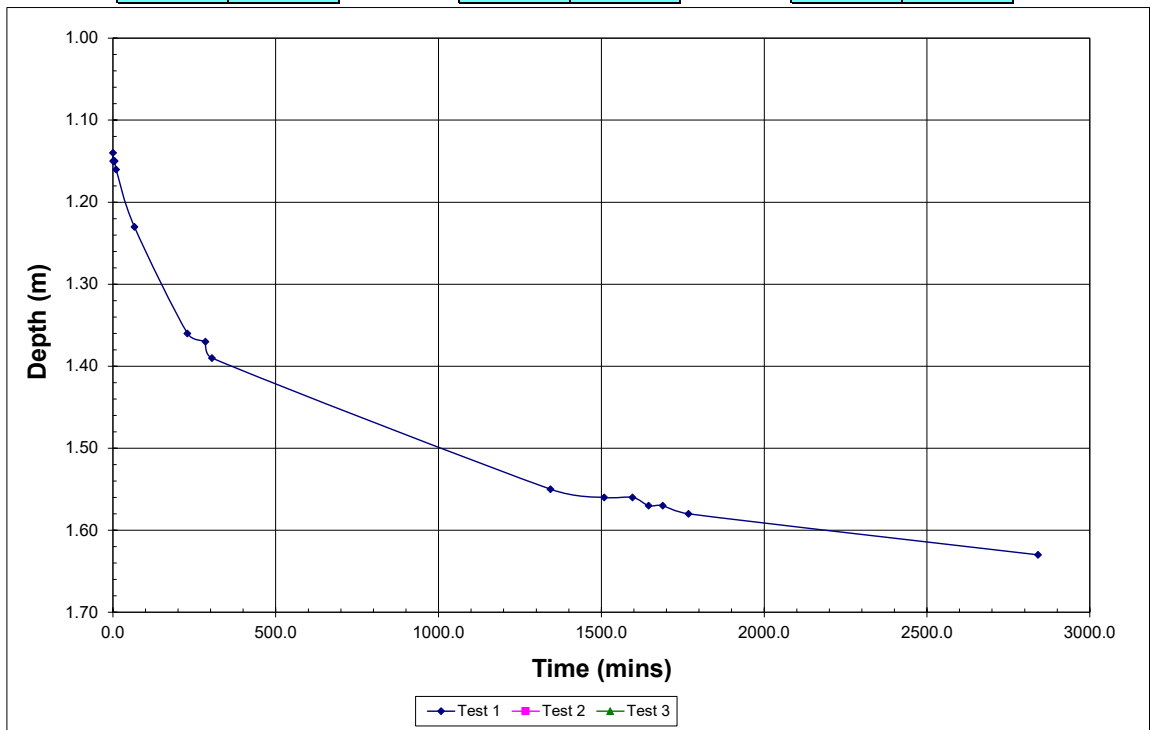
 Geo-Environmental	Soakaway Test Results (after BRE Digest 365)	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : One Horton		Job No. : GE18771
Client : Eastleigh Borough Council		Date : 17/07/2020

Pit reference	TP8 (Deep)
Pit depth (m)	3.00
Pit width (m)	0.45
Pit length (m)	1.50
Depth to standing water (m)	1.75

Test 1	
Time (min)	Depth (m)
0.0	1.14
1.0	1.15
2.0	1.15
3.0	1.15
4.0	1.15
5.0	1.15
10.0	1.16
66.0	1.23
229.0	1.36
284.0	1.37
304.0	1.39
1344.0	1.55
1509.0	1.56
1596.0	1.56
1645.0	1.57
1689.0	1.57
1768.0	1.58
2841.0	1.63

Test 2	
Time (min)	Depth (m)

Test 3	
Time (min)	Depth (m)



Max. depth (m)	3.00	3.00	3.00
Effective depth (m)	1.86	3.00	3.00
75% effective depth (m)	1.61	0.75	0.75
50% effective depth (m)	2.07	1.50	1.50
25% effective depth (m)	2.54	2.25	2.25
t75 (min)	2300.00		
t50 (min)			
t25 (min)			
Vp 75-25	0.63	1.01	1.01
ap 50	4.302	6.525	6.525
tp 75-25	-2300.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	

 Geo-Environmental	Soakaway Test Results (after BRE Digest 365)	Geo-Environmental Services Limited Unit 7 Danworth Farm, Cuckfield Road, Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net
Project Name : One Horton		Job No. : GE18771
Client : Eastleigh Borough Council		Date : 17/07/2020

Pit reference	TP9 (Deep)
Pit depth (m)	3.00
Pit width (m)	0.45
Pit length (m)	1.50
Depth to standing water (m)	2.03

Test 1

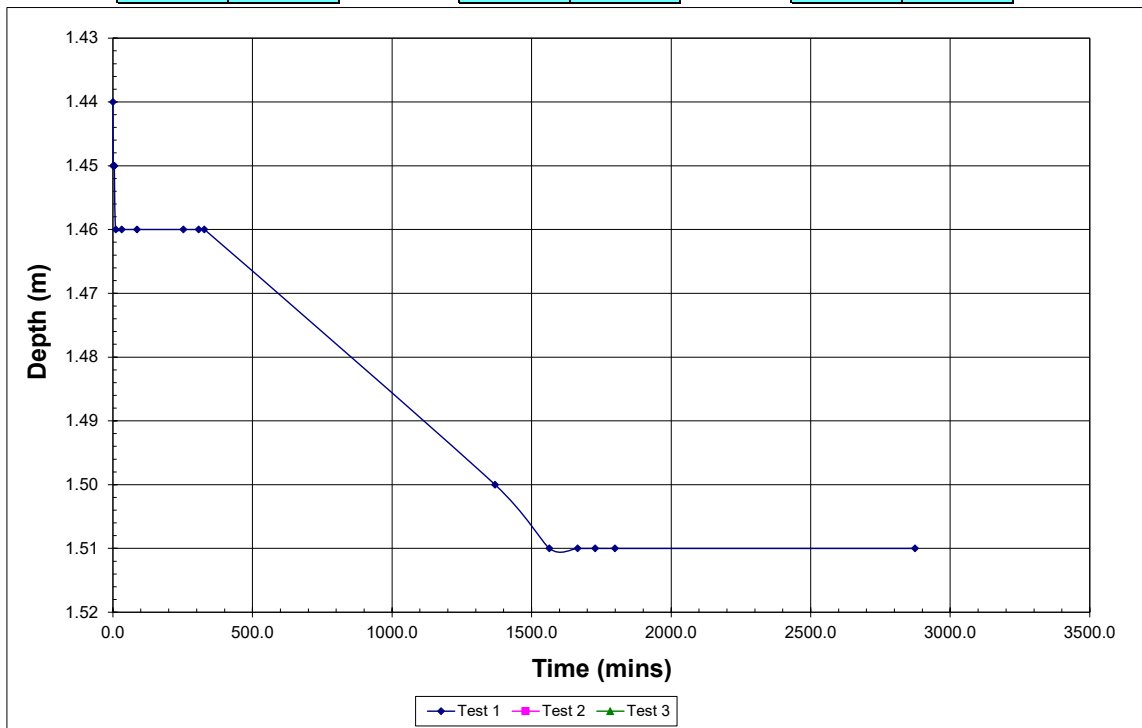
Time (min)	Depth (m)
0.0	1.44
1.0	1.45
2.0	1.45
3.0	1.45
4.0	1.45
5.0	1.45
10.0	1.46
32.0	1.46
86.0	1.46
253.0	1.46
307.0	1.46
328.0	1.46
1369.0	1.50
1564.0	1.51
1665.0	1.51
1728.0	1.51
1799.0	1.51
2874.0	1.51

Test 2

Time (min)	Depth (m)

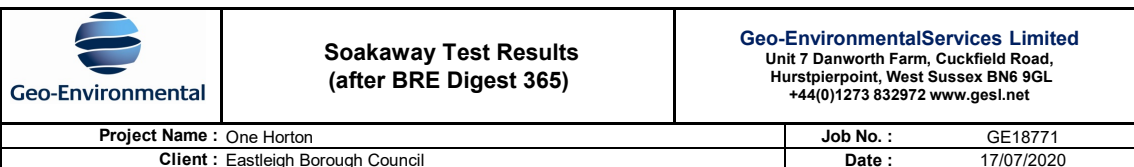
Test 3

Time (min)	Depth (m)



Max. depth (m)	3.00	3.00	3.00
Effective depth (m)	1.56	3.00	3.00
75% effective depth (m)	1.83	0.75	0.75
50% effective depth (m)	2.22	1.50	1.50
25% effective depth (m)	2.61	2.25	2.25
t75 (min)			
t50 (min)			
t25 (min)			
Vp 75-25	0.53	1.01	1.01
ap 50	3.717	6.525	6.525
tp 75-25	0.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	



Geo-Environmental Services Limited

Project Name : One Horton

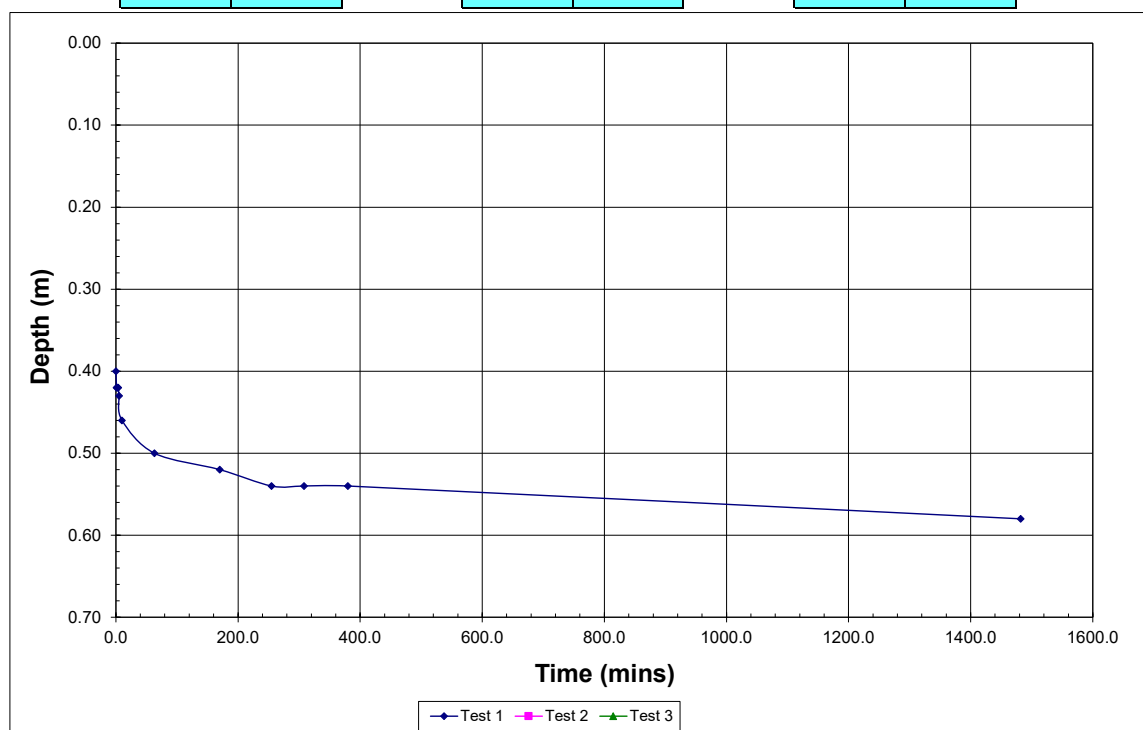
Job No. : GE18771

Client : Eastleigh Borough Council

Date : 17/07/2020

Pit reference	TP10
Pit depth (m)	0.70
Pit width (m)	0.45
Pit length (m)	1.30
Depth to standing water (m)	0.65

Test 1	
Time (min)	Depth (m)
0.0	0.40
1.0	0.42
2.0	0.42
3.0	0.42
4.0	0.42
5.0	0.43
10.0	0.46
63.0	0.50
170.0	0.52
255.0	0.54
308.0	0.54
380.0	0.54
1482.0	0.58

[illegible][illegible]

Max. depth (m)	0.70	0.70	0.70
Effective depth (m)	0.30	0.70	0.70
75% effective depth (m)	0.48	0.18	0.18
50% effective depth (m)	0.55	0.35	0.35
25% effective depth (m)	0.63	0.53	0.53
t75 (min)	45.00		
t50 (min)			
t25 (min)			
Vp 75-25	0.09	0.20	0.20
ap 50	1.11	1.81	1.81
tp 75-25	-45.00	0.00	0.00

Soil infiltration rate (m/s)	Insufficient fall in water to complete test	
Soil infiltration rate (mm/hr)	Insufficient fall in water to complete test	



APPENDIX F

Gas Assessment Sheet



Project: One Horton Heath
Ref: GE18771
Client: Eastleigh Borough Council



Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS2	21/07/20	0	0.0	1.0	19.9	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	21/07/20	10	0.0	0.6	19.7	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	21/07/20	20	0.0	0.5	20.5	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	21/07/20	30	0.0	0.6	20.5	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	21/07/20	60	0.0	0.6	20.5	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	21/07/20	90	0.0	0.6	20.5	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	21/07/20	120	0.0	0.6	20.5	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	21/07/20	180	0.0	0.6	20.5	0.0	0.6	1023	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	0	0.0	0.0	20.6	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	10	0.0	0.0	21.0	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	20	0.0	0.0	20.9	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	30	0.0	0.0	20.9	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	60	0.0	0.0	20.9	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	90	0.0	0.0	20.9	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	120	0.0	0.0	20.9	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	21/07/20	180	0.0	0.0	20.9	0.0	0.1	1023	2.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	0	0.0	0.2	20.0	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	10	0.0	0.6	20.6	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	20	0.0	0.7	20.4	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	30	0.0	0.9	20.2	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	60	0.0	1.0	20.1	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	90	0.0	1.0	20.0	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	120	0.0	1.0	20.0	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	21/07/20	180	0.0	1.0	20.0	0.0	0.4	1023	1.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	0	0.0	0.9	20.5	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	10	0.0	0.4	20.7	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	20	0.0	0.4	20.7	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	30	0.0	0.5	20.6	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	60	0.0	0.7	20.5	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	90	0.0	0.8	20.4	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	120	0.0	0.9	20.3	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	21/07/20	180	0.0	0.9	20.3	0.0	0.3	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	0	0.0	0.9	20.3	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	10	0.0	0.5	20.7	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	20	0.0	0.4	20.8	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	30	0.0	0.4	20.8	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	60	0.0	0.1	20.9	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	90	0.0	0.0	21.0	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	120	0.0	0.0	21.0	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	21/07/20	180	0.0	0.0	21.0	0.0	0.0	1022	0.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	21/07/20	0	0.0	0.3	20.7	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	21/07/20	10	0.0	0.5	20.7	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	21/07/20	20	0.0	0.5	20.6	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	21/07/20	30	0.0	0.5	20.6	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	21/07/20	60	0.0	0.6	20.5	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN

Project: One Horton Heath
Ref: GE18771
Client: Eastleigh Borough Council



Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS7	21/07/20	90	0.0	0.7	20.4	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	21/07/20	120	0.0	1.1	20.0	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	21/07/20	180	0.0	1.4	19.8	0.0	0.0	1022	1.40	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	0	0.0	0.0	20.7	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	10	0.0	0.3	21.0	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	20	0.0	0.3	20.7	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	30	0.0	0.4	20.7	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	60	0.0	0.5	20.5	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	90	0.0	0.6	20.4	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	120	0.0	0.7	20.3	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	04/08/20	180	0.0	0.7	20.3	0.0	0.3	1013	1.64	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	0	0.0	0.0	20.7	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	10	0.0	0.7	20.7	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	20	0.0	0.9	20.3	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	30	0.0	0.9	20.2	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	60	0.0	1.2	20.0	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	90	0.0	1.3	19.9	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	120	0.0	1.4	19.9	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	04/08/20	180	0.0	1.3	19.9	0.0	0.3	1012	2.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	0	0.0	0.0	20.7	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	10	0.0	0.4	20.9	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	20	0.0	0.7	20.6	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	30	0.0	0.7	20.6	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	60	0.0	0.8	20.5	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	90	0.0	0.8	20.5	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	120	0.0	0.8	20.5	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	04/08/20	180	0.0	0.7	20.5	0.0	0.0	1012	1.75	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	0	0.0	0.0	20.7	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	10	0.0	0.5	20.9	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	20	0.0	0.8	20.6	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	30	0.0	0.6	20.5	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	60	0.0	0.7	20.3	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	90	0.0	1.1	20.0	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	120	0.0	1.6	19.6	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	04/08/20	180	0.0	1.8	19.5	0.0	0.0	1012	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	0	0.0	0.0	20.7	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	10	0.0	0.0	21.0	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	20	0.0	0.0	20.9	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	30	0.0	0.0	20.9	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	60	0.0	0.0	20.9	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	90	0.0	0.0	20.9	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	120	0.0	0.0	20.9	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	04/08/20	180	0.0	0.0	20.9	0.0	0.0	1012	1.00	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	04/08/20	0	0.0	0.0	20.8	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	04/08/20	10	0.0	0.6	20.9	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN

Project: One Horton Heath
Ref: GE18771
Client: Eastleigh Borough Council



Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS5	04/08/20	20	0.0	0.8	20.4	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	04/08/20	30	0.0	0.9	20.3	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	04/08/20	60	0.0	0.9	20.2	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	04/08/20	90	0.0	0.9	20.2	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	04/08/20	120	0.0	0.9	20.2	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	04/08/20	180	0.0	0.9	20.2	0.0	0.0	1011	0.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	0	0.0	0.0	20.4	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	10	0.0	0.3	19.8	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	20	0.0	0.3	19.1	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	30	0.0	0.3	19.0	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	60	0.0	0.3	18.8	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	90	0.0	0.4	18.4	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	120	0.0	0.4	18.1	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	18/08/20	180	0.0	0.4	18.0	0.0	1.0	1007	1.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	0	0.0	0.0	20.6	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	10	0.0	0.7	20.6	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	20	0.0	0.8	20.0	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	30	0.0	0.9	19.9	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	60	0.0	0.9	19.8	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	90	0.0	0.9	19.8	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	120	0.0	0.9	19.8	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	18/08/20	180	0.0	0.9	19.8	0.0	0.0	1005	1.65	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	0	0.0	0.0	20.6	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	10	0.0	0.6	20.5	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	20	0.0	0.7	20.2	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	30	0.0	0.7	20.1	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	60	0.0	0.8	20.1	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	90	0.0	0.8	19.9	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	120	0.0	0.9	19.8	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	18/08/20	180	0.0	1.0	19.8	0.0	0.1	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	0	0.0	0.0	20.4	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	10	0.0	0.9	20.3	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	20	0.0	1.1	19.7	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	30	0.0	1.2	19.6	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	60	0.0	1.2	19.5	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	90	0.0	1.2	19.5	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	120	0.0	1.1	19.6	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	18/08/20	180	0.0	1.1	19.6	0.0	0.3	1005	2.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	18/08/20	0	0.0	0.0	20.7	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	18/08/20	10	0.0	0.4	20.8	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	18/08/20	20	0.0	0.6	20.4	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	18/08/20	30	0.0	0.7	20.2	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	18/08/20	60	0.0	0.8	20.0	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	18/08/20	90	0.0	0.8	19.9	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	18/08/20	120	0.0	0.8	19.9	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN

Project: One Horton Heath
Ref: GE18771
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Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS10	18/08/20	180	0.0	0.7	19.8	0.0	0.1	1005	1.35	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	0	0.0	0.0	20.5	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	10	0.0	0.0	20.9	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	20	0.0	0.0	20.8	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	30	0.0	0.0	20.7	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	60	0.0	0.0	20.7	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	90	0.0	0.0	20.6	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	120	0.0	0.1	20.6	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	18/08/20	180	0.0	0.1	20.6	0.0	0.4	1005	1.10	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	0	0.0	0.0	20.5	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	10	0.0	0.4	19.7	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	20	0.0	0.5	18.8	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	30	0.0	0.3	20.0	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	60	0.0	0.2	20.4	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	90	0.0	0.1	20.4	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	120	0.0	0.1	20.5	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	01/09/20	180	0.0	0.1	20.5	0.0	0.0	1017	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	0	0.0	0.0	20.4	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	10	0.0	0.0	20.7	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	20	0.0	0.1	20.4	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	30	0.0	0.1	20.4	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	60	0.0	0.3	20.1	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	90	0.0	0.5	19.9	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	120	0.0	0.6	19.5	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	01/09/20	180	0.0	0.7	19.2	0.0	0.0	1016	1.56	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	0	0.0	0.0	20.4	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	10	0.0	0.5	20.4	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	20	0.0	0.7	19.9	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	30	0.0	0.8	19.7	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	60	0.0	0.9	19.3	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	90	0.0	0.9	19.3	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	120	0.0	0.9	19.4	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	01/09/20	180	0.0	0.9	19.4	0.0	0.0	1017	1.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	0	0.0	0.0	20.4	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	10	0.0	0.7	20.4	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	20	0.0	0.8	20.0	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	30	0.0	0.8	19.9	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	60	0.0	0.9	19.7	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	90	0.0	1.2	19.4	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	120	0.0	1.4	19.2	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	01/09/20	180	0.0	1.4	19.2	0.0	0.1	1017	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	01/09/20	0	0.0	0.1	20.6	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	01/09/20	10	0.0	0.2	20.6	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	01/09/20	20	0.0	0.4	20.2	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	01/09/20	30	0.0	0.5	19.9	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN

Project: One Horton Heath
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Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS10	01/09/20	60	0.0	0.9	19.0	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	01/09/20	90	0.0	1.3	18.3	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	01/09/20	120	0.0	1.3	18.2	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	01/09/20	180	0.0	1.3	18.1	0.0	0.0	1017	1.25	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	0	0.0	0.0	20.5	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	10	0.0	0.3	20.8	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	20	0.0	0.4	20.6	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	30	0.0	0.4	20.6	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	60	0.0	0.1	20.6	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	90	0.0	0.0	20.6	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	120	0.0	0.0	20.6	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	01/09/20	180	0.0	0.0	20.6	0.0	0.1	1017	0.54	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	0	0.0	0.0	20.5	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	10	0.0	0.5	19.7	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	20	0.0	0.6	18.2	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	30	0.0	0.6	18.8	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	60	0.0	0.7	18.0	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	90	0.0	0.8	16.7	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	120	0.0	0.9	16.6	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	15/09/20	180	0.0	1.0	16.3	0.0	0.3	1014	1.85	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	0	0.0	0.0	20.8	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	10	0.0	0.7	20.7	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	20	0.0	0.8	20.2	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	30	0.0	0.8	20.2	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	60	0.0	1.0	19.9	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	90	0.0	1.1	19.8	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	120	0.0	1.3	19.6	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	15/09/20	180	0.0	1.3	19.6	0.0	0.7	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	0	0.0	0.0	20.7	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	10	0.0	0.1	21.1	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	20	0.0	0.2	20.9	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	30	0.0	0.3	20.8	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	60	0.0	0.3	20.7	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	90	0.0	0.4	20.7	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	120	0.0	0.4	20.7	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	15/09/20	180	0.0	0.5	20.7	0.0	0.0	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	0	0.0	0.0	20.5	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	10	0.0	0.8	19.9	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	20	0.0	0.9	19.4	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	30	0.0	1.0	19.1	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	60	0.0	1.3	18.9	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	90	0.0	1.5	18.3	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	120	0.0	1.6	18.1	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	15/09/20	180	0.0	1.6	18.1	0.0	0.4	1014	3.30	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	15/09/20	0	0.0	0.0	20.7	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN

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Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS10	15/09/20	10	0.0	0.3	21.0	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	15/09/20	20	0.0	0.5	20.5	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	15/09/20	30	0.0	1.0	19.8	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	15/09/20	60	0.0	1.2	19.4	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	15/09/20	90	0.0	1.6	18.6	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	15/09/20	120	0.0	1.7	18.8	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	15/09/20	180	0.0	1.6	18.8	0.0	0.4	1014	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	15/09/20	0	0.0	0.0	20.7	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	15/09/20	10	0.0	4.5	19.6	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	15/09/20	20	0.0	5.0	19.1	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	AMBER 1
WS15	15/09/20	30	0.0	2.9	19.7	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	15/09/20	60	0.0	0.7	20.6	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	15/09/20	90	0.0	0.0	20.7	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	15/09/20	120	0.0	0.0	20.8	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	15/09/20	180	0.0	0.0	20.8	0.0	0.7	1014	0.55	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	0	0.0	0.0	20.6	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	10	0.0	0.0	20.5	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	20	0.0	0.2	20.4	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	30	0.0	0.1	20.5	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	60	0.0	0.1	20.7	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	90	0.0	0.1	20.7	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	120	0.0	0.0	20.5	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS2	30/09/20	180	0.0	0.1	20.0	0.0	0.1	1005	1.80	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	0	0.0	0.0	20.4	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	10	0.0	0.8	20.4	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	20	0.0	1.0	19.9	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	30	0.0	1.1	19.7	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	60	0.0	1.2	19.6	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	90	0.0	1.3	19.5	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	120	0.0	1.3	19.6	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS5	30/09/20	180	0.0	1.2	19.9	0.0	0.0	1004	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	0	0.0	0.0	20.3	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	10	0.0	0.2	20.5	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	20	0.0	0.2	20.5	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	30	0.0	0.3	20.5	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	60	0.0	0.2	20.4	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	90	0.0	0.2	20.5	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	120	0.0	0.2	20.4	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS7	30/09/20	180	0.0	0.2	20.4	0.0	0.0	1004	1.60	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	30/09/20	0	0.0	0.0	20.5	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	30/09/20	10	0.0	0.7	20.4	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	30/09/20	20	0.0	0.8	19.9	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	30/09/20	30	0.0	0.8	19.8	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	30/09/20	60	0.0	0.7	19.9	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	30/09/20	90	0.0	0.7	19.8	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN

Project: One Horton Heath
Ref: GE18771
Client: Eastleigh Borough Council



Location	Date	Time (sec)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	Flow (l/hr)	VOC (ppm)	Pressure (mb)	GWL (m bgl)	GSV/Qhgs		Characteristic Situation		CS1 Limiting Value Check			NHBC			
										CH ₄	CO ₂	BS8485 & C665		Flow	CH ₄	CO ₂	CH ₄		CO ₂	
												CH ₄	CO ₂				GSV	Conc.	GSV	Conc.
WS8	30/09/20	120	0.0	0.8	19.8	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS8	30/09/20	180	0.0	0.8	19.8	0.0	0.0	1005	2.70	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	0	0.0	0.0	20.4	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	10	0.0	0.0	20.8	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	20	0.0	0.0	20.8	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	30	0.0	0.0	20.7	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	60	0.0	0.0	20.5	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	90	0.0	0.0	20.5	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	120	0.0	0.2	20.4	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS10	30/09/20	180	0.0	0.3	20.3	0.0	0.0	1005	1.50	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	30/09/20	0	0.0	0.0	20.4	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	30/09/20	10	0.0	4.6	19.2	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	30/09/20	20	0.0	6.0	18.3	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	CO2>CS1 limit	GREEN	GREEN	GREEN	AMBER 1
WS15	30/09/20	30	0.0	4.9	18.5	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	30/09/20	60	0.0	0.2	20.4	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	30/09/20	90	0.0	0.6	20.4	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	30/09/20	120	0.0	0.6	20.4	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
WS15	30/09/20	180	0.0	0.6	20.4	0.0	0.2	1005	0.20	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
Max values			0.0	6.0	21.1	0.0	1.0	1023.0	3.3	0.000	0.000	CS1	CS1	NO	NO	CO2>CS1 limit	GREEN	GREEN	GREEN	AMBER 1
Min Vaules			0.0	0.0	16.3	0.0	0.0	1004.0	0.2	0.000	0.000	CS1	CS1	NO	NO	NO	GREEN	GREEN	GREEN	GREEN
BH Flow LoD check			0.0	6.0	21.1	0.1	-	-	-	0.000	0.006	CS1	CS1	NO	NO	CO2>CS1 limit	GREEN	GREEN	GREEN	AMBER 1

APPENDIX C

FLOOD RISK ASSESSMENT AND WATER MANAGEMENT REPORT (ODYSSEY)

ONE
HORTON
HEATH



Detailed Planning Application Upper Acre

Flood Risk Assessment and Water
Management Strategy Part 1

December 2020



ODYSSEY

CELEBRATING **15** YEARS

HORTON HEATH

**FLOOD RISK ASSESSMENT AND WATER
MANAGEMENT STRATEGY**



HORTON HEATH, EASTLEIGH

**FLOOD RISK ASSESSMENT AND WATER MANAGEMENT STRATEGY
ON BEHALF OF EASTLEIGH BOROUGH COUNCIL**

Prepared by

Odyssey

Tuscany House

White Hart Lane

Basingstoke

RG21 4AF

Tel: 01256 331144

December 2020

**DOCUMENT CONTROL SHEET**

Project Name Horton Heath, Eastleigh

Project No. 19-367

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	Draft issue for Team comment	NA	NA	GG	GG	July 2020
A	Updated to suit latest site boundary and layout	NA/JW	JH	JW	JH	November 2020
B	Updated to suit comments	JW	JH	NA	JH	December 2020



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3.0	Planning Policy	4
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5.0	The Sequential Test and the Exception Test	8
6.0	Proposed Water Management Strategy	9
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DRAWINGS

19-367/001 Preliminary Engineering Layout

APPENDICES

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Appendix B	Site Location Plan and Proposed Site Layout
Appendix C	Topographical Survey
Appendix D	British Geological Survey Mapping
Appendix E	Ground Investigation Extracts
Appendix F	Existing Services
Appendix G	Indicative Surface Water Management Strategy
Appendix H	Drawings Extracted from the Site-Wide Flood Risk Assessment
Appendix I	Maintenance Schedules



1.0 INTRODUCTION

1.1.1 Odyssey has been commissioned by Eastleigh Borough Council (EBC) to undertake a Flood Risk Assessment (FRA), incorporating a surface water and foul water management strategy, to be submitted in association with a planning application for proposed residential development at Horton Heath in Eastleigh.

1.1.2 The wider One Horton Heath development has obtained planning permission via two separate applications. EBC is planning to submit a new composite outline planning permission for the wider site, increasing the number of proposed dwellings from circa 1,500 to 2,500.

1.1.3 This FRA and Water Management Strategy relates to the first residential parcel of the development, shown as OPA1 in the Phasing Plan in **Appendix A**.

1.1.4 The First Residential Parcel application (hereafter referred to as FRP) forms Phase 1 of the wider Outline Planning Application, providing 393 of the 2,500 dwellings for which outline consent is sought. The FRP has been submitted as a standalone planning application to enable the early deliver of homes within the One Horton Heath development. However the FRP proposal is entirely consistent with the outline parameter plans, with detailed assessment of the OPA and FRP having been considered in tandem to ensure consistency throughout the design process. In part, the FRP is reliant on the mitigation and enhancements of the OPA.

1.1.5 This report sets out the main flood risks to the site and those that may arise as a result of the development. It also demonstrates the principles of surface water management at the site.



2.0 EXISTING SITE CONDITIONS

2.1 *Site Location*

2.1.1 The site is located approximately three miles to the southeast of Eastleigh town centre. The site is bounded by trees and Chalcroft Business Park to the southwest, Chalcroft Farm to the northwest, land allocated for future residential development to the north, and Burnetts Lane to the southeast.

2.1.2 The site comprises undeveloped agricultural fields. The Ordnance Survey (OS) grid reference for the approximate centre of the site is 448918 East, 116267 North and the nearest postcode is SO30 2HH. The site location plan and proposed site layout are presented in **Appendix B**.

2.2 *Topography*

2.2.1 A topographical survey of the site was undertaken by Reuby and Stagg in May 2019. Levels generally fall from the southeast towards north and west of the site, and range from approximately 29.66m Above Ordnance Datum (AOD) in the southeast to approximately 19.8m AOD in the north. The topographical survey is presented in **Appendix C**.

2.3 *Geology and Hydrogeology*

2.3.1 British Geological Survey (BGS) online maps (accessed July 2020) indicate that the bedrock geology of the majority of the site comprises Wittering Formation (sand, silt and clay). There is a smaller area to the east of the site which comprises Earnley Sand Formation (sand, silt and clay). The maps show the presence of superficial deposits comprising Alluvium (clay, silt, sand and gravel) associated with the watercourse to the north of the site. BGS mapping is shown in **Appendix D**.

2.3.2 A ground investigation of the wider site was undertaken by Hydrock in October 2018. The geology encountered largely corresponds with the BGS maps; topsoil, Head Deposits and Wittering Formation were encountered within the area to be developed as the first residential parcel. Extracts from the ground investigation are presented in **Appendix E**.

2.3.3 Environment Agency (EA) online maps indicate that the nearest Main River is located approximately 4700m to the northwest of the site. There is a ditch network located along the western site boundary, and to the east of Chalcroft Farm.



2.3.4 BGS hydrogeology mapping shows that the site is located within the Bracklesham Group and Barton Group, described as a moderately productive aquifer.

2.3.5 Groundwater mapping published by the EA indicates that the site is not located within a groundwater Source Protection Zone. Groundwater levels were recorded across the wider site as part of the ground investigation. The groundwater level recorded within the first residential parcel area was 2.70m bgl. The groundwater level data summary is included in **Appendix E**.

2.3.6 The results of permeability testing at the site were not suitable to allow conventional calculation of infiltration rates due to slow or no ingress of water within the test locations. The ground investigation report states that this is likely to be due to the cohesive ground conditions.

2.4 Existing Drainage

2.4.1 Services information for the wider site was provided by Hilson Moran in October 2019. The Existing Services drawing shows that there are no existing surface water or foul sewers located within the immediate vicinity of the site. The Existing Services drawing is shown in **Appendix F**.



3.0 PLANNING POLICY

3.1 *Flood and Water Management Act (2010)*

3.1.1 The Flood and Water Management Act (FWMA) received royal assent on 8th April 2010. It was intended to implement Sir Michael Pitt's recommendations following the widespread summer 2007 floods. The FWMA encourages the use of sustainable drainage systems (SuDS) on development sites by removing the automatic right to connect to sewers.

3.2 *National Planning Policy Framework (2019)*

3.2.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies, and how these policies should be applied. Planning Practice Guidance (PPG) is available online and provides additional guidance to the NPPF.

3.2.2 Paragraph 155 of the NPPF states that *"inappropriate development in areas at risk of flooding should be avoided by directing development away from areas of highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere"*.

3.2.3 Paragraph 163 states *"when determining planning applications, Local Planning Authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:*

- *Within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;*
- *The development is appropriately flood resistant and resilient;*
- *It incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;*
- *Any residual risk can be safely managed; and*
- *Safe access and escape routes are included where appropriate, as part of an agreed emergency plan."*



3.3 *Planning Practice Guidance (2019)*

3.3.1 The PPG provides additional direction to the NPPF, and includes the following drainage hierarchy whereby the aim should be to discharge surface water runoff as high up the hierarchy of drainage options as reasonably practicable:

- Into the ground (infiltration);
- To a surface water body;
- To a surface water sewer, highway drain, or another drainage system;
- To a combined sewer.

3.4 *Adopted Eastleigh Borough Local Plan (2001 – 2011)*

3.4.1 Policy 43.ES addresses flooding and erosion. The policy states that development would only be permitted within areas at risk of flooding where the following criteria are met:

- It is demonstrated that the site is adequately defended from flooding; or
- An FRA satisfactorily demonstrates that measures incorporated into the scheme would prevent either life being endangered or an unacceptable likelihood of damage to the property; and
- It does not harm the integrity or maintenance of a flood defence structure, or inhibit the maintenance of a watercourse for the purpose of minimising flood risk, or increase flood risks elsewhere.

3.4.2 Policy 45.ES states that development proposals must incorporate adequate measures for the disposal of surface water from the development including, where practicable, source control techniques and SuDS, incorporating defined arrangements for the future maintenance of the system.



4.0 SOURCES OF FLOOD RISK

4.1 *Fluvial Flooding*

4.1.1 Fluvial flooding is caused by high flows in rivers or streams exceeding the capacity of the river channel and spilling into the floodplain, or in some cases on a designated floodplain which can occur after a period of heavy rainfall.

4.1.2 The site is located within fluvial Flood Zone 1, defined as land having a less than 1 in 1,000 annual probability of river or sea flooding.

4.2 *Surface Water Flooding*

4.2.1 Surface water (pluvial) flooding is caused by rainfall levels exceeding the natural infiltration properties of the surrounding soils. It occurs where there is a lack of a formalised drainage system, as a result of poorly designed or maintained sewer systems or due to no natural method of drainage such as watercourses or ditches, or where soil infiltration rates are low. It often results in ponding of water at low points or backing up behind obstructions.

4.2.2 EA mapping shows that the vast majority of the site is located in an area at 'very low' risk of surface water flooding. Very low risk means that each year this area has a less than 1 in 1,000 probability of flooding.

4.2.3 There are a small number of narrow areas at 'low', 'medium' and 'high' risk of flooding. These are located to the south and the north of the site, and largely along the field boundaries and associated with the ditches.

4.3 *Groundwater Flooding*

4.3.1 Groundwater flooding is caused by the emergence of water originating from sub-surface permeable strata. A groundwater flood event results from a rise in groundwater level sufficient for the water table to intersect the ground surface and inundate low lying land. Periods of prolonged rainfall may also be a cause of groundwater flooding with aquifers and soils becoming saturated.

4.3.2 The Partnership for South Hampshire (PUSH) Strategic Flood Risk Assessment (SFRA) mapping shows that there have been no recorded groundwater flood incidents at the site.



4.4 *Sewer Flooding*

4.4.1 Flooding can occur due to the failure of existing foul or surface water drainage infrastructure. If flows within the drainage system exceed the designed capacity or foreign matter causes blockages, overflow to the surface can occur, leading to flooding.

4.4.2 There are no surface water or foul sewers located at the site, and as such the risk of sewer flooding is deemed to be low.

4.5 *Flooding from Artificial Sources*

4.5.1 Failure and overtopping of reservoirs and navigable water bodies, and failure of water mains constitute the primary means of flooding from artificial sources.

4.5.2 The EA's Flood Risk from Reservoirs mapping shows that the site is not located within an area at risk of reservoir flooding.



5.0 THE SEQUENTIAL TEST AND THE EXCEPTION TEST

5.1 *The Sequential Test*

5.1.1 The EA Flood Zones are the starting point for the sequential approach promoted by the NPPF, and are shown on the EA flood maps. The PPG identifies that the overall aim of the Sequential Test is to steer new development to Flood Zone 1.

5.1.2 As stated by the NPPF, development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding. The SFRA would provide the basis for applying this test.

5.1.3 Following application of the Sequential Test, if it is not possible for the development to be located in zones with a lower probability of flooding (Flood Zone 1), proposed sites should take into account the flood risk vulnerability of land uses and consider reasonable sites in Flood Zone 2, and apply the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 and 2 should the suitability of sites in Flood Zone 3 be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required.

5.1.4 The development footprints are entirely situated within Flood Zone 1 and the site is therefore suitable for the proposed development in accordance with the NPPF and PPG. The Sequential Test is therefore not required.

5.2 *The Exception Test*

5.2.1 For the Exception Test to be passed, a development proposal:

- Must demonstrate that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a SFRA;
- The development should be on developable brownfield land, or, if not, it must be demonstrated that there is no such alternative land available; and
- An FRA must demonstrate that the development would be safe for its lifetime, taking into account the vulnerability of its users, without increasing flood risk elsewhere, and where possible, reducing flood risk overall.

5.2.2 The development footprints are entirely situated within Flood Zone 1, and as such the Exception Test is not required.



6.0 PROPOSED WATER MANAGEMENT STRATEGY

6.1 *Proposed Surface Water Management Strategy*

6.1.1 The indicative surface water management strategy for the FRP, drawing reference **19-367/001** described below is presented in **Appendix G**.

6.1.2 A SuDS Management Train drawing, reference **G277/24** was prepared by PFA Consulting in November 2020 and included as part of the PFA Flood Risk Assessment for the overall site. The drawing is also presented in **Appendix H** of this report for information.

6.1.3 The drainage hierarchy set out in **Section 3.3** states that infiltration should be the first option for surface water discharge. However, infiltration rates could not be calculated during the ground investigation due to the cohesive properties of the underlying geology. As such, infiltration is deemed to be unsuitable for the proposed development.

6.1.4 The next option in the drainage hierarchy is to discharge flows to a surface water body.

6.1.5 It is proposed that surface water runoff generated by the development would drain to permeable paving, swales and attenuation basins across the development parcel. Flows would then be discharged at restricted rates to the adjacent ditches to the west and northwest of the site. The location of the basins is set out in the site-wide Indicative Location of Strategic SuDS Features drawing, drawing number **G277/22 Sheet 2 of 2 Rev A**, prepared by PFA Consulting in November 2020. This plan is presented in **Appendix H**. Surface water generated by the main trunk road in the development parcel would drain to 'Basin South'.

6.1.6 The plan prepared by PFA Consulting also sets out the discharge rates for the site, based on the approved mean annual maximum flow rate (QMED) greenfield runoff rate of 8.1 litres per second per hectare (l/s/ha). The attenuation basins have been designed to meet these discharge rates. **Table 6.1** sets out the allowable discharge rate for each basin, as set out in the PFA Consulting plan.

Table 6-1: Allowable Discharge Rates

SuDs Feature	Allowable Discharge Rate (l/s)
Basin I and J	29.6
Basin K	13.6
Basin L	39.6

6.1.7 The SuDS attenuation features would be designed to accommodate the 1 in 100 year storm plus 40% to account for climate change. The basins would also be designed in line with the Typical



Layout of Strategic SuDS Features to Inform Detailed Design drawing, reference G277/23, prepared by PFA consulting in November 2020 as part of the Flood Risk Assessment for the overall site. The drawing is presented in **Appendix H**. A 10% increase in impermeable roof area would be incorporated within the calculations to account for urban creep.

6.2 Water Quality

6.2.1 The 'pollution hazard indices for different land use classifications' table has been extracted from CIRIA C 753 The SuDS Manual and applied to the development proposals, as shown in Table 6.2.

Table 6-2: Pollution Hazard Indices

Land Use	Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Residential Roofs	Very low	0.2	0.2	0.05
Individual property driveways, residential car parks, low traffic roads (e.g. cul de sacs, homezones and general access roads) and non-residential car parking with infrequent change (e.g. schools, offices) i.e. < 300 traffic movements per day	Low	0.5	0.4	0.4
Commercial yard and delivery areas, non-residential car parking with frequent change (e.g. hospitals, retail), all roads except low traffic roads and trunk roads or motorways	Medium	0.7	0.6	0.7

6.2.2 The proposed permeable paving, swales and attenuation basins would provide treatment for the surface water runoff from the site. The SuDS mitigation indices have been extracted from The SuDS Manual and are set out in **Table 6.3**.

Table 6-3: Pollution Mitigation Indices

Land Use	Mitigation Indices		
	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Permeable Paving	0.7	0.6	0.7
Swale	0.5	0.6	0.6
Detention Basin	0.5	0.5	0.6



6.2.3 Additional proprietary treatment devices could be used where necessary to ensure that all surface water runoff receives the appropriate level of treatment prior to discharging offsite.

6.2.4 The onsite water management system maintenance would be carried out by a private recognised management company through the implementation of an approved maintenance management plan to minimise the residual risk of water management system blockage. However, for clarity in this FRA, minimum maintenance schedules for permeable paving, swales, detention basins and proprietary treatment systems have been presented in **Appendix I**. These schedules have been extracted from The SuDS Manual.

6.3 *Proposed Foul Water Management Strategy*

6.3.1 It is proposed that foul flows from the site would drain by gravity to a foul pumping station located north of Phase 6A, refer to the site-wide Preliminary Water Management Strategy Plan (Sheet 2 of 2) drawing in **Appendix G**. Flows would then be pumped to the nearest public foul network, subject to approval by Southern Water.



7.0 SUMMARY AND CONCLUSIONS

7.1.1 Odyssey has been commissioned by EBC to undertake an FRA and water management strategy for the proposed residential led development at Horton Heath. The update is due to a change to the boundary of the proposed development.

7.1.2 Based on the EA flood maps, the site is shown to be located within Flood Zone 1. Most of the site lies in an area at 'very low' risk of surface water flooding.

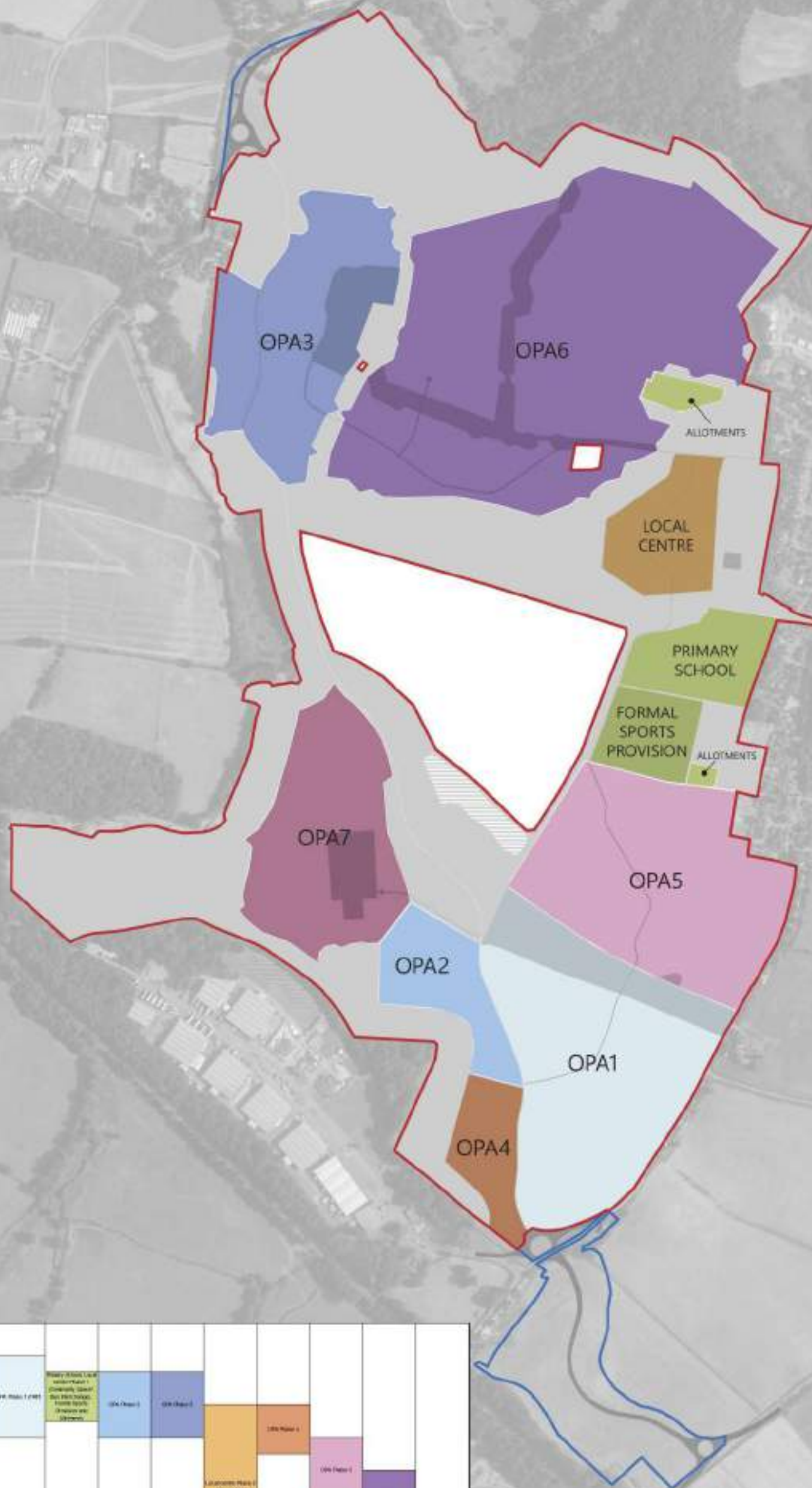
7.1.3 The underlying geological conditions indicate that infiltrating SuDS features are deemed to be unsuitable at the site. As such, surface water runoff would be attenuated using permeable paving, swales and basins, prior to restricted discharge to the local ditch network. The SuDS features would be designed to accommodate flows from the 1 in 100 year storm event plus 40% to account for climate change.

7.1.4 Foul flows would drain to a strategic pumping station and then discharge to the nearest public foul sewer.

7.1.5 This report demonstrates that the proposed development can be drained in a sustainable manner, commensurate with national and local policy.

APPENDIX A

Phasing Drawing



Rev	Description	Date	By	Ch
P1	Preliminary Issue	2010.20	GR/SWD GR	GR
P2	Updated further to client feedback	21.10.20	GR/SWD GR	GR

Romsey Portishead Camberley
 T: 01794 367709 T: 01275 407000 T: 01276 749050
 F: 01794 367276 F: 01794 367276 F: 01794 367276

www.thrivearchitects.co.uk

This drawing is the copyright of Thrive Architects Ltd © All rights reserved. Ordnance Survey Data © Crown Copyright. All rights reserved. Licence No. 100007356. DO NOT scale from this drawing. Contractors, Sub-contractors and suppliers are to check all relevant dimensions and levels of the site and building before commencing any site drawing or building work. Any discrepancies should be referred to the Architect. Where applicable this drawing is to be read in conjunction with the Consultants' drawings.

Rev Description
 P1 Preliminary Issue
 P2 Updated further to client feedback

Date By Ch
 2010.20 GR/SWD GR
 21.10.20 GR/SWD GR

Project **ONE HORTON HEATH**
 Drawing Phasing Plan-01

Client	Eastleigh Borough Council	Date	20.10.20
Job no.	EA5T200403	Rev.	P2
Dwg no.	PHP-01	Scale	NTS@A3
Author	GR/SWD	Checked	GR
Status	PRELIMINARY	Office	Romsey
Client ref.	-		

thrive.
 architects

APPENDIX B

Site Location Plan and Proposed Site Layout

Eastleigh Borough Council

Pond Cottages

Pond

Truck

Path (um)

Round Copse

Hillcrest

Hightingale Cottage

Longways

Milestone

Well

Flower Cottage

Kenreg Corner

Char Bungalow

Char House

Thanbray

High View

The Boys

Chestnut Cottage

Kranlee House

Abington

The Far

Diggers Patch

Golows

Craggy House

Issues

Squire

BARLEY FIELDS

Myrtle Cottage

Riverside Court

Pond Cottage

Drain

WB

1

0 25 50 75 100 200m

N

