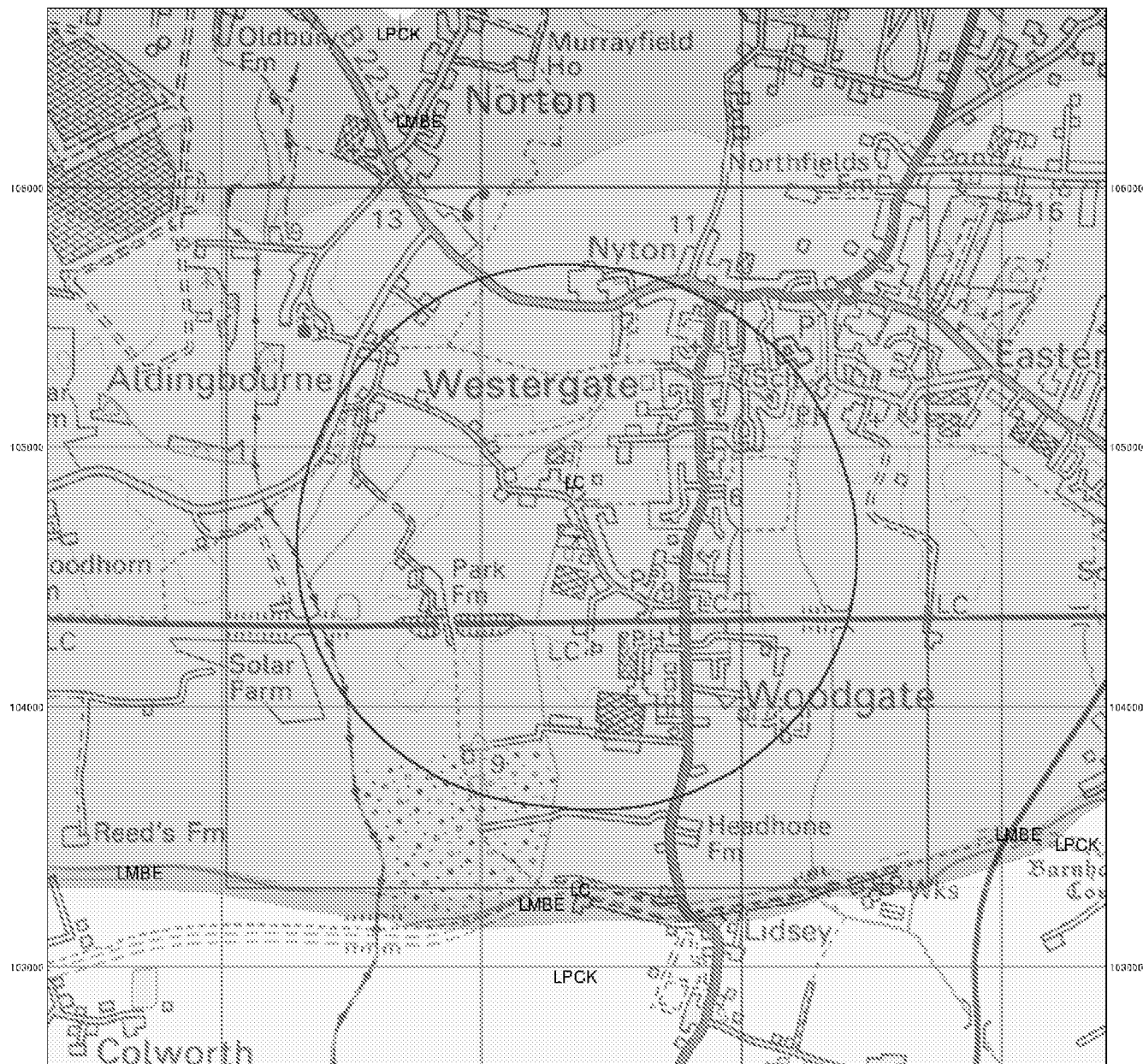


492000 493000 494000 495000



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Geo-Environmental

Bedrock and Faults

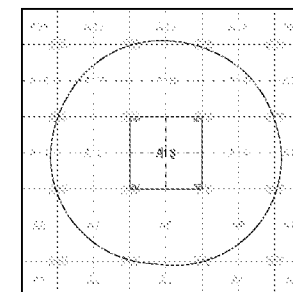
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

Order Number: 182826946_1_1
Customer Reference: GE17712
National Grid Reference: 493360, 104650
Slice: A
Site Area (Ha): 1.02
Search Buffer (m): 1000

Site Details:

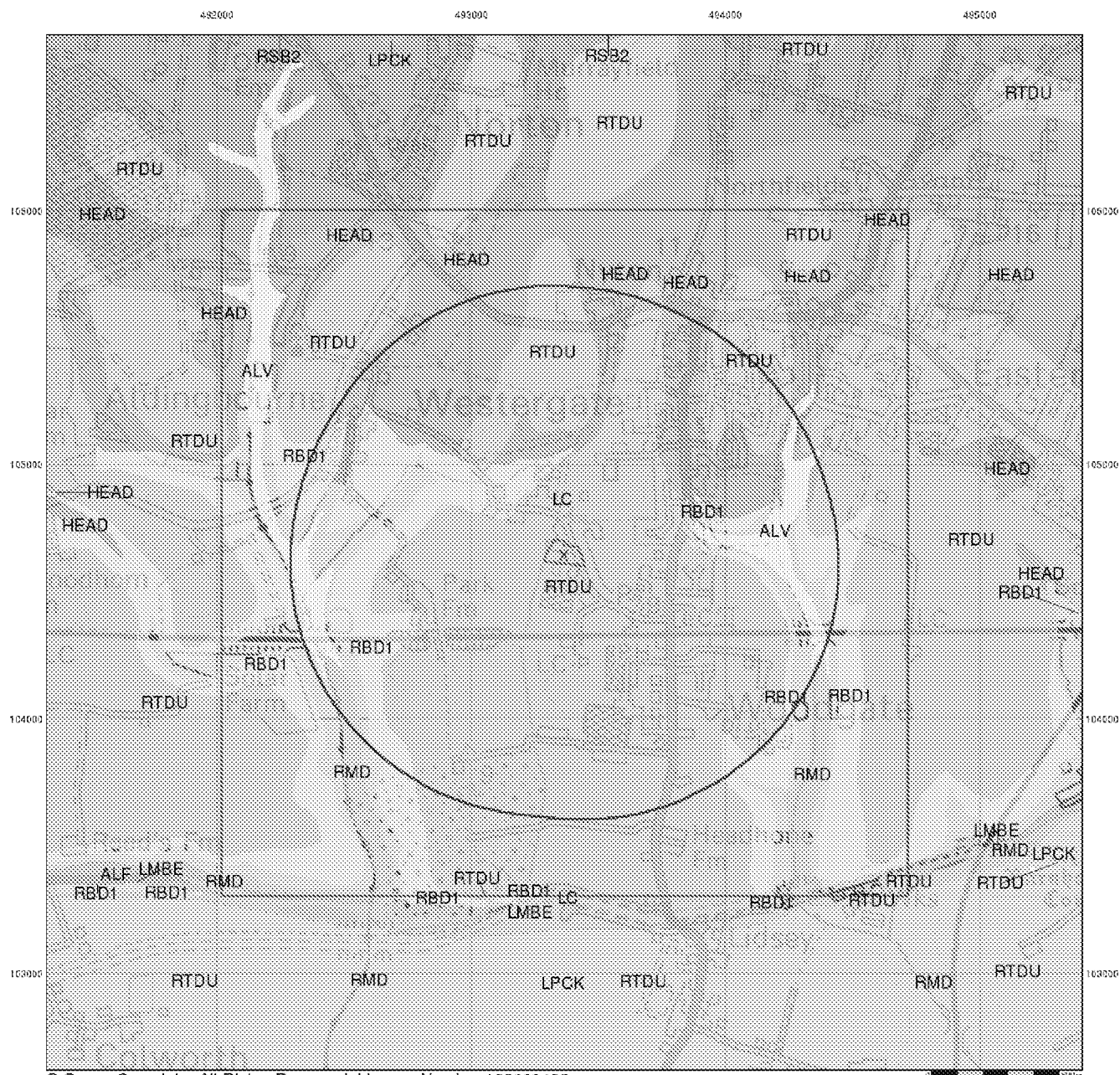
Banff, Hook Lane, Aldingbourne, CHICHESTER, PO20 3TE

Landmark
INFORMATION GROUP

Tel: 01244 544 0052
Fax: 01244 544 5551
Web: www.environment.co.uk

v15.0 12-Oct-2018

Page 4 of 5



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Geo-Environmental

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

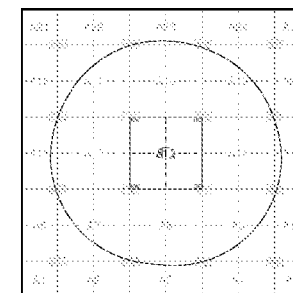
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number: 182826946_1_1
Customer Reference: GE17712
National Grid Reference: 493360, 104650
Slice: A
Site Area (Ha): 1.02
Search Buffer (m): 1000

Site Details:

Banff, Hook Lane, Aldingbourne, CHICHESTER, PO20 3TE

Landmark
INFORMATION GROUP

Tel: 0544 544 0052
Fax: 0544 544 5551
Web: www.environment.co.uk

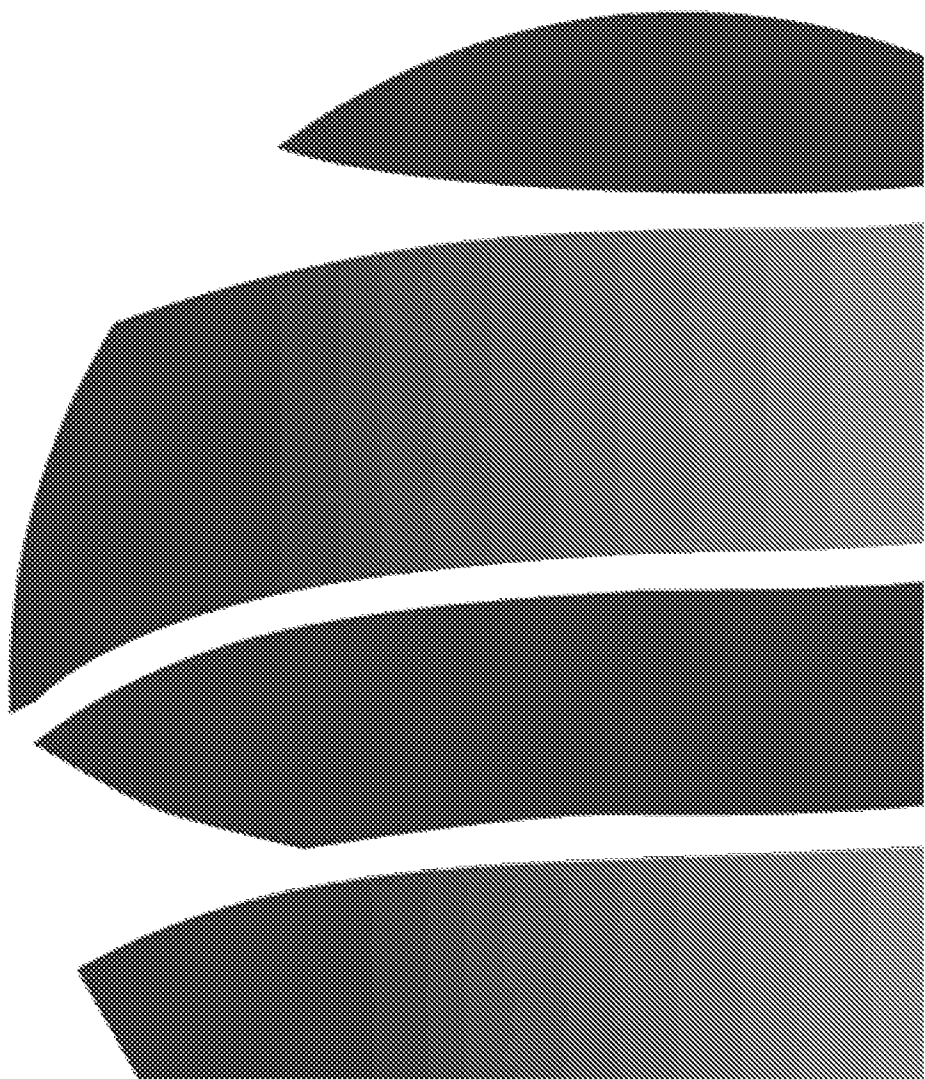
v15.0 12-Oct-2018

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APPENDIX B

Exploratory Hole Logs





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP01

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493360.36 - 104694.68
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions (m): 1.70

Depth
3.00

0.50

Scale
1:25

Logged
Edward
Newman

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES		0.20			Dark grey-brown fine sandy organic SILT with fine roots. TOPSOIL	
	0.50 0.50	D PP	PP=4.25kg/cm2				Very stiff light orange-brown fine sandy silty CLAY with scattered medium sub-rounded flint gravel. RIVER TERRACE DEPOSITS	
	1.00 1.00	D PP	PP=2kg/cm2	0.90			Stiff orange brown slightly mottled grey fine sandy silty CLAY with scattered medium sub-rounded flint gravel. RIVER TERRACE DEPOSITS	1
	1.50 1.50	D PP	PP=2.75kg/cm2					
	2.00 2.00	D PP	PP=1kg/cm2	1.95 2.10			Firm orange-brown slightly fine sandy silty CLAY with abundant fine to medium sub-rounded flint gravel. RIVER TERRACE DEPOSITS	2
							Grey-brown mottled orange-brown silty fine SAND. RIVER TERRACE DEPOSITS	
	2.50	D						
	3.00	D		3.00			End of Pit at 3.00m	3
								4
								5
Water Strike								
Depth Strike								
		Remarks	Collapse from c.2.0m. Seepage in base of pit.					
		Stability	Sides unstable below water table					





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP02

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493355.72 - 104647.68
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions (m):

1.80

Depth
3.00

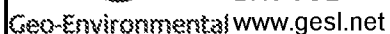
0.50

Scale
1:25

Logged
Edward
Newman

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES		0.25			Light grey-brown fine sandy organic SILT with fine roots. TOPSOIL	
	0.50 0.50	D PP	PP=1.5kg/cm2	0.80			Firm to stiff orange brown slightly mottled grey fine sandy silty CLAY with traces of fine rootlets and rare fine gravel. RIVER TERRACE DEPOSITS	1
	1.00 1.00	D PP	PP=1.5kg/cm2				Stiff orange-brown slightly fine sandy silty CLAY with scattered medium sub-rounded flint gravel. RIVER TERRACE DEPOSITS	
	1.50 1.50	D PP	PP=2.5kg/cm2					
	2.00 2.00	D PP	PP=1.75kg/cm2	2.20			Orange-brown fine silty SAND RIVER TERRACE DEPOSITS	2
	2.50	D						
	3.00	D		3.00			End of Pit at 3.00m	3
								4
								5
Water Strike		Remarks		Collapse from c.2.0m. Seepage in base of pit.				
Depth Strike		Stability		Sides unstable below water table				





Trial Pit Log

TP03

Sheet 1 of 1

Project No.
GE17712

Co-ords: 493416.36 - 104648.01
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions
(m):

Depth 3.10

0.50 1.70

Scale
1:25

Logged
Edward
Newman

Client: Metis Homes





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP04

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493324.59 - 104666.15
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions (m):

1.90

Depth
3.00

0.50

Scale
1:25

Logged
Edward
Newman

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES		0.20			Dark grey-brown sandy silt with whole bricks, glass, flint cobbles, flint and brick gravel. MADE GROUND	
	0.50 0.50	ES PP	PP=2.25kg/cm2				Stiff orange brown slightly mottled grey slightly gravelly sandy silty CLAY with traces of fine rootlets. Gravel is fine to medium and sub-angular to angular. RIVER TERRACE DEPOSITS	1
	1.00 1.00	D PP	PP=3kg/cm2					
	1.50 1.50	D PP	PP=2.5kg/cm2					
	2.00 2.00	D PP	PP=1.75kg/cm2	2.10				2
	2.50	D						
	3.00	D		3.00				3
							End of Pit at 3.00m	
								4
								5
Water Strike								
Depth Strike								
		Remarks	Collapse from c.2.0m. Seepage in base of pit.					
		Stability	Sides unstable below water table					





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP05

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493372.33 - 104648.54
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions (m):

1.90

0.50

Depth
3.00

Scale
1:25

Logged
Edward
Newman

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES		0.25			Light grey-brown clayey fine sandy organic SILT with rare fine sub-rounded flint gravel and fine roots. TOPSOIL	
	0.50 0.50	D PP	PP=1.25kg/cm2				Firm orange-brown mottled grey-brown fine sandy silty CLAY with rare fine sub-rounded flint gravel. RIVER TERRACE DEPOSITS	
	1.00 1.00	D PP	PP=1kg/cm2	1.00			Firm to stiff orange-brown mottled grey-brown fine sandy silty CLAY with rare fine sub-rounded flint gravel. RIVER TERRACE DEPOSITS	1
	1.50 1.50	D PP	PP=2kg/cm2					
	2.00 2.00	D PP	PP=1.5kg/cm2	1.90 2.05			Fine to medium sub-rounded flint gravel within a grey-brown silty sandy clay matrix. RIVER TERRACE DEPOSITS Orange-brown mottled grey-brown silty fine SAND with rare fine sub-rounded flint gravel. RIVER TERRACE DEPOSITS	2
	2.50	D						
	3.00	D		3.00			End of Pit at 3.00m	3
								4
								5
Water Strike								
Depth Strike								
		Remarks	Collapse from c.2.0m. Seepage in base of pit.					
		Stability	Sides unstable below water table					



Trial Pit Log

TrialPit No

TP06

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493322.71 - 104676.10
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions
(m):

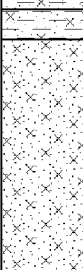
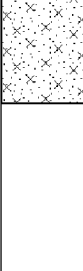
Depth 3.00

0.50 1.80

Scale
1:25

Logged
Edward
Newman

Client: Metis Homes

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	Newman
	Depth	Type	Results					
	0.20	ES		0.30			Dark grey-brown fine sandy organic SILT with fine roots and rare brick fragments. MADE GROUND	
	0.50 0.50	D PP	PP=1.25kg/cm2				Firm to stiff orange-brown slightly fine sandy silty CLAY with scattered medium sub-rounded flint gravel. RIVER TERRACE DEPOSITS	1
	1.00 1.00	D PP	PP=2.75kg/cm2					
	1.50 1.50	D PP	PP=2kg/cm2	1.80 1.90			Orange-brown slightly fine sandy silty CLAY with abundant fine to medium sub-rounded flint gravel. RIVER TERRACE DEPOSITS Orange-brown silty SAND. RIVER TERRACE DEPOSITS	2
	2.00	D						
	2.50	D						
	3.00	D		3.00			End of Pit at 3.00m	3
								4
								5
Water Strike		Remarks		Collapse from c.2.0m. Seepage in base of pit.				
Depth Strike		Stability		Sides unstable below water table				





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP07

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493346.27 - 104626.97
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions (m):

1.90

Depth
3.00

0.50

Scale
1:25

Logged
Edward
Newman

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	D		0.25			Dark grey-brown clayey fine sandy organic SILT with rare fine sub-rounded flint gravel and fine roots. TOPSOIL	
	0.50 0.50	ES PP	PP=.75kg/cm2				Soft orange-brown mottled grey-brown fine sandy silty CLAY with rare fine sub-rounded flint gravel. RIVER TERRACE DEPOSITS	
	1.00 1.00	D PP	PP=2.75kg/cm2	0.90			Stiff orange brown slightly mottled grey slightly gravelly sandy silty CLAY with occasional black flecks. Gravel is fine to medium and sub-angular to angular. RIVER TERRACE DEPOSITS	1
	1.50 1.50	D PP	PP=2kg/cm2					
	2.00 2.00	D PP	PP=2kg/cm2					2
	2.50	D		2.40			Orange-brown mottled grey-brown silty fine SAND with scattered medium sub-rounded flint gravel. RIVER TERRACE DEPOSITS	
	3.00	D		3.00			End of Pit at 3.00m	3
								4
								5
Water Strike								
Depth Strike								
		Remarks	Collapse from c.2.0m. Seepage in base of pit.					
		Stability	Sides unstable below water table					





Unit 7, Danworth Farm
Hurstpierpoint
BN6 9GL

Geo-Environmental www.gesl.net

Trial Pit Log

Trial Pit No

TP08

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493392.66 - 104621.21
Level:

Date
25/10/2018

Location: PO20 3TE

Dimensions (m): 1.80

Depth
3.00

0.50

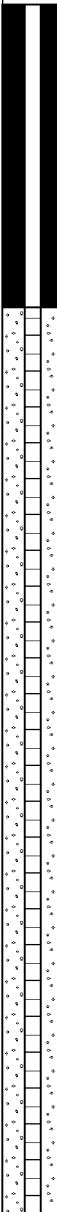
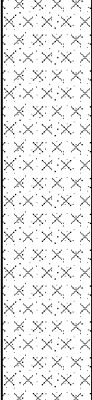
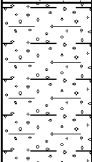
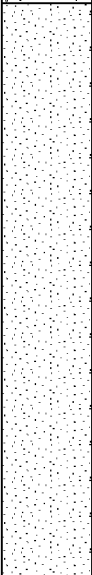
Scale
1:25

Logged
Edward Newman

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES		0.25			Light grey-brown fine sandy organic SILT with fine roots and roots up to 10mm. TOPSOIL	
	0.50 0.50	D PP	PP=3kg/cm2				Stiff orange brown mottled grey slightly fine sandy silty CLAY with rare fine sub-rounded flint gravel. RIVER TERRACE DEPOSITS	1
	1.00 1.00	D PP	PP=2.5kg/cm2	1.20			Stiff orange brown slightly mottled grey slightly gravelly sandy silty CLAY. Gravel is fine to medium and sub-angular to rounded. RIVER TERRACE DEPOSITS	
	1.50 1.50	D PP	PP=2kg/cm2				Orange brown mottled grey slightly fine sandy silty CLAY with abundant fine sub-rounded flint gravel. RIVER TERRACE DEPOSITS	2
	2.00	D		1.80 1.90			Orange-brown mottled grey-brown slightly silty fine SAND. RIVER TERRACE DEPOSITS	
	2.50	D						
	3.00	D		3.00			End of Pit at 3.00m	3
								4
								5
Water Strike		Remarks		Collapse from c.2.0m. Seepage in base of pit.				
Depth Strike		Stability		Sides unstable below water table				



 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS01 Sheet 1 of 1	
Project Name: Hook Lane, Westergate		Project No. GE17712		Co-ords: 493341E - 104699N		Hole Type WLS	
Location: PO20 3TE				Level:		Scale 1:25	
Client: Metis Homes				Dates: 25/10/2018		Logged By Jason Kanellis	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20		Very soft dark brown sandy silt with frequent rootlets and rare glass and carbonaceous inclusions MADE GROUND		
		0.50	D						Very soft to firm yellowish brown sandy clayey SILT with occasional ferruginous inclusions and roots (2-3mm) RIVER TERRACE DEPOSITS
		1.00	D		1.55		Medium dense to dense yellowish brown gravelly silty clayey SAND with occasional fine to medium chalk fragments. Gravel is fine to medium and sub-angular to rounded. RIVER TERRACE DEPOSITS		
		1.00	PP	1.8kg/cm2					
		1.50	D		2.10		Medium dense to dense orangish brown silty fine to medium SAND RIVER TERRACE DEPOSITS		
		1.50	PP	1.8kg/cm2					
		2.00	D						
		2.50	D						
		3.00	D						
		3.50	D						
	4.00	D		4.00			End of Borehole at 4.00m		

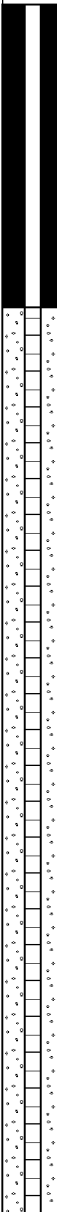
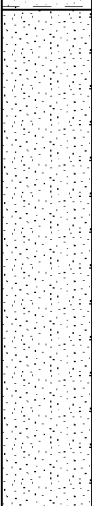
Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Collapsed to 2.45m bgl when drilled to 4.00m bgl. Standpipe pushed to 3.00m bgl. SP 1m plain 2m slotted	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS02 Sheet 1 of 1	
Project Name: Hook Lane, Westergate		Project No. GE17712		Co-ords: 493380E - 104639N		Hole Type WLS	
Location: PO20 3TE				Level:		Scale 1:25	
Client: Metis Homes				Dates: 25/10/2018		Logged By Jason Kanellis	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30		Very loose light brown silty sand with frequent rootlets TOPSOIL		
		0.50	D				Very soft light brown, grey and occasionally orange mottled clayey SILT with occasional roots (1-2mm) RIVER TERRACE DEPOSITS		
		0.80			0.80		Very soft to soft orangish brown and grey mottled silty CLAY with occasional black specks RIVER TERRACE DEPOSITS	1	
		1.00 1.00	D PP	2.0kg/cm2					
		1.50 1.50	D PP	2.2kg/cm2					
		1.80 1.80	D PP	1.2kg/cm2	1.75 1.90		Soft orange brown slightly mottled grey slightly gravelly sandy silty CLAY with occasional black flecks. Gravel is fine to medium and sub-angular to angular. RIVER TERRACE DEPOSITS Loose to medium dense orangish brown silty fine to medium SAND. RIVER TERRACE DEPOSITS	2	
		2.50	D						
		3.00	D					3	
		3.50	D						
		4.00	D		4.00			4	
								End of Borehole at 4.00m	

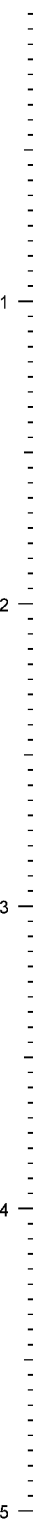
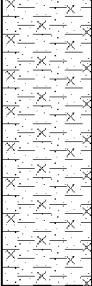
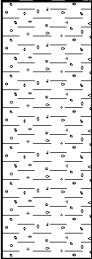
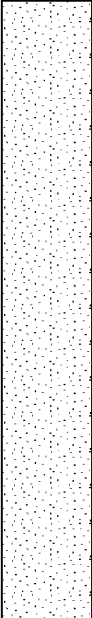
Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Collapsed to 2.10m bgl when drilled to 4.00m bgl. DP to 8.00m bgl. SP pushed to 3.00m bgl. SP 1m plain 2m slotted	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS03 Sheet 1 of 1	
Project Name: Hook Lane, Westergate		Project No. GE17712		Co-ords: 493341E - 104660N		Hole Type WLS	
Location: PO20 3TE				Level:		Scale 1:25	
Client: Metis Homes				Dates: 25/10/2018		Logged By Jason Kanellis	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30		Dark brown sandy silt with frequent rootlets. TOPSOIL		
		0.50	D						Orangish brown sandy clayey SILT with occasional roots (1-2mm) and rootlets RIVER TERRACE DEPOSITS
		1.00	D						Firm to stiff brown and light grey mottled sandy CLAY with frequent fine to medium sub-angular to sub-rounded flint gravel RIVER TERRACE DEPOSITS
		1.25	PP	1.8kg/cm2					
		1.50	D						
		1.50	PP	1.2kg/cm2					
		2.00	D		2.35		Orangish brown silty fine to medium SAND. RIVER TERRACE DEPOSITS		
		2.00	PP	0.2kg/cm2					
		2.50	D						
			3.00	D		4.00			
		3.50	D						
		4.00	D				End of Borehole at 4.00m	4	

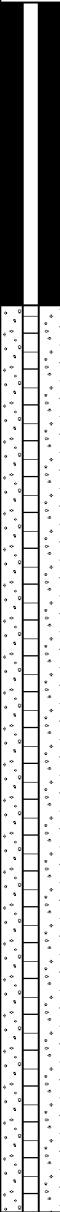
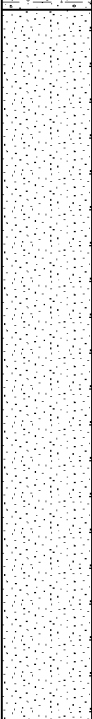
Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks Collapsed to 2.3pm bgl when drilled to 4.00m bgl.	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS04 Sheet 1 of 1	
Project Name: Hook Lane, Westergate		Project No. GE17712		Co-ords: 493405E - 104667N		Hole Type WLS	
Location: PO20 3TE				Level:		Scale 1:25	
Client: Metis Homes				Dates: 25/10/2018		Logged By Jason Kanellis	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		0.10	ES	1.0kg/cm2	0.15		 Very soft dark brown sandy Silt with frequent rootlets. TOPSOIL			
							 Very soft to soft orangish brown sandy silty CLAY RIVER TERRACE DEPOSITS			
		0.50	D							
		1.00	D							
		1.10	PP				1.10			 Very soft to soft light greyish brown slightly gravelly CLAY with frequent black specks. Gravel comprises fine to medium sub-angular to sub-rounded flint RIVER TERRACE DEPOSITS
		1.50	D							
		1.50	PP				1.0kg/cm2			
		1.75	PP				1.8kg/cm2			
		2.00	D				1.95			 Loose to medium dense orangish brown silty fine to medium SAND with rare fine gravel. RIVER TERRACE DEPOSITS
		2.50	D							
3.00	D									
3.50	D									
4.00	D		4.00							
----- 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		
						Collapsed to 2.50m bgl at 4.00m bgl. Redrilled to 4.00m bgl. Collapsed to 2.75m bgl. Standpipe pushed to 4.00m bgl. DP to 8.0m bgl. SP to 4.00m bgl (1m plain, 3m slotted)	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log		Borehole No. WS05 Sheet 1 of 1	
Project Name: Hook Lane, Westergate		Project No. GE17712		Co-ords: 493419E - 104637N	
Location: PO20 3TE		Level:		Hole Type WLS	
Client: Metis Homes		Dates: 25/10/2018		Scale 1:25	
Logged By Jason Kanellis					

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30		Greyish brown silty sand with frequent rootlets. TOPSOIL	1	
	0.50	D		Orangish brown and occasionally dark orange mottled very clayey fine to medium SAND with rare ferruginous inclusions and rootlets RIVER TERRACE DEPOSITS					
	1.00	D		1.05		Stiff orangish brown slightly mottled grey slightly gravelly sandy silty CLAY. Gravel is fine to medium and sub-angular to angular. RIVER TERRACE DEPOSITS			
	1.25	PP	1.8kg/cm2						
	1.50	D		1.55		Stiff orangish brown and grey mottled sandy gravelly CLAY. Gravel comprises fine to medium sub-angular to sub-rounded flint RIVER TERRACE DEPOSITS			
	1.75 1.75	D PP	2.0kg/cm2						
	2.50	D		1.95		Orangish brown fine and medium SAND RIVER TERRACE DEPOSITS	2		
	3.00	D							
	3.50	D							
	4.00	D		4.35		Grey, orange and black mottled gravelly fine to medium SAND. Gravel comprises fine to medium sub-angular to sub-rounded flint. RIVER TERRACE DEPOSITS	3		
	4.50	D							
	4.70	D							
	4.70	PP	1.5kg/cm2						
					4.80			Firm dark grey silty sandy CLAY. LONDON CLAY	4
							End of Borehole at 4.80m	5	

Casing		Water Strikes (mbgl)		Chiselling (mbgl)		Remarks	
Diameter	Depth (m)	Depth Strike	Rose to	Depth from	Depth to		
						Collapsed to 3.50m bgl when drilled to 4.00m bgl. Redrilled from 3.50mbgl to 4.80m bgl. Collapsed to 2.10m bgl	

 Unit 7, Danworth Farm Hurstpierpoint BN6 9GL www.gesl.net		Borehole Log				Borehole No. WS06 Sheet 1 of 1	
Project Name: Hook Lane, Westergate		Project No. GE17712		Co-ords: 493421E - 104619N		Hole Type WLS	
Location: PO20 3TE				Level:		Scale 1:25	
Client: Metis Homes				Dates: 25/10/2018		Logged By Jason Kanellis	

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.25		Light brownish grey sandy silt with frequent rootlets and occasional roots (3-30mm) TOPSOIL		
		0.50	D				Light yellowish brown sandy SILT with occasional roots (1-80mm). RIVER TERRACE DEPOSITS		
		1.00	D		1.05				
		1.30	D				Light greyish brown and occasionally orange mottled clayey sandy SILT with frequent rootlets and occasional roots (2-3mm) RIVER TERRACE DEPOSITS		
		1.50	D		1.40				
		1.50	PP	1.8kg/cm2			Firm to stiff orangish brown slightly mottled grey slightly gravelly sandy silty CLAY with occasional black flecks. Gravel is fine to medium and sub-angular to angular. RIVER TERRACE DEPOSITS		
		2.00	D						
		2.00	PP	1.2kg/cm2					
		2.50	D		2.55				
		2.50	PP	1.5kg/cm2			Orangish brown fine to medium SAND. RIVER TERRACE DEPOSITS		
		3.00	D						
		3.50	D						
		4.00	D		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		
						Collapsed to 2.30m bgl when drilled to 4.00m bgl.	



Geo-Environmental

Probe Log

Borehole No.

WS01/DP

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493341.39 - 104698.86

Hole Type
DP

Location: PO20 3TE

Level:

Scale
1:50

Client: Metis Homes

Dates: 25/10/2018 -

Logged By

Depth (m)	Blows/100mm				Torque (Nm)
	10	20	30	40	
0	1				0
1	1				10
2	1				0
3	1				10
4	1				20
5	1				30
6	1				30
7	1				
8	1				
9	1				
10	1				

Remarks

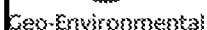
Fall Height

Cone Base Diameter

Hammer Wt 63.5 Final Depth 8.00

Probe Type DPSH Log Scale 1:50





Borehole No.
WS02/DP

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493380.25 - 104638.70

Hole Type
DP

Location: PO20 3TE

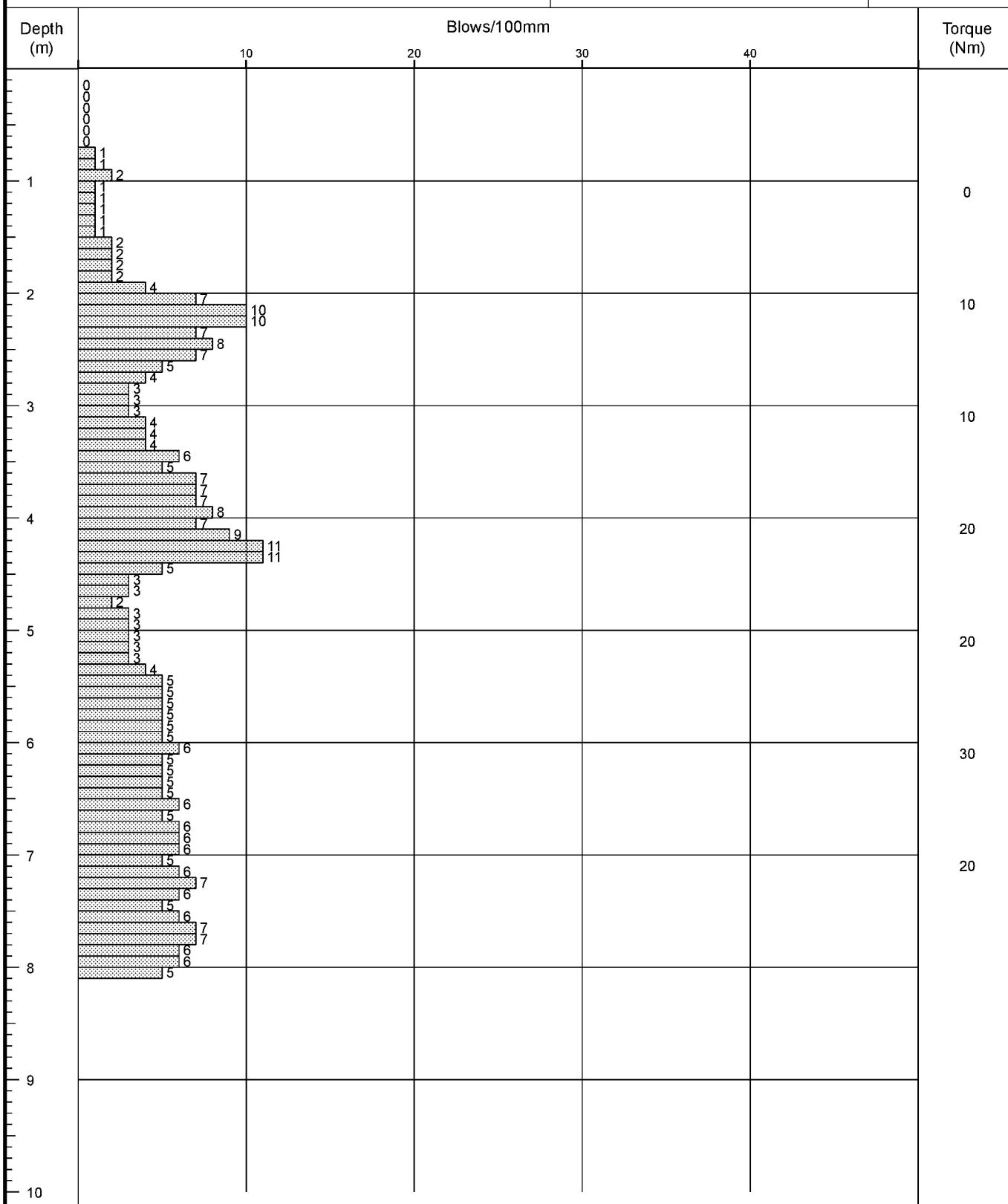
Level:

Scale
1:50

Client: Metis Homes

Dates: 25/10/2018 -

Logged By



Remarks

Fall Height	
-------------	--

Cone Base Diameter

Hammer Wt	63.5
-----------	------

Final Depth	8.00
-------------	------

Probe Type	DPSH
------------	------

Log Scale	1:50
-----------	------





Geo-Environmental

Probe Log

Borehole No.

WS04/DP

Sheet 1 of 1

Project Name: Hook Lane, Westergate

Project No.
GE17712

Co-ords: 493405.25 - 104666.84

Hole Type
DP

Location: PO20 3TE

Level:

Scale
1:50

Client: Metis Homes

Dates: 25/10/2018 -

Logged By

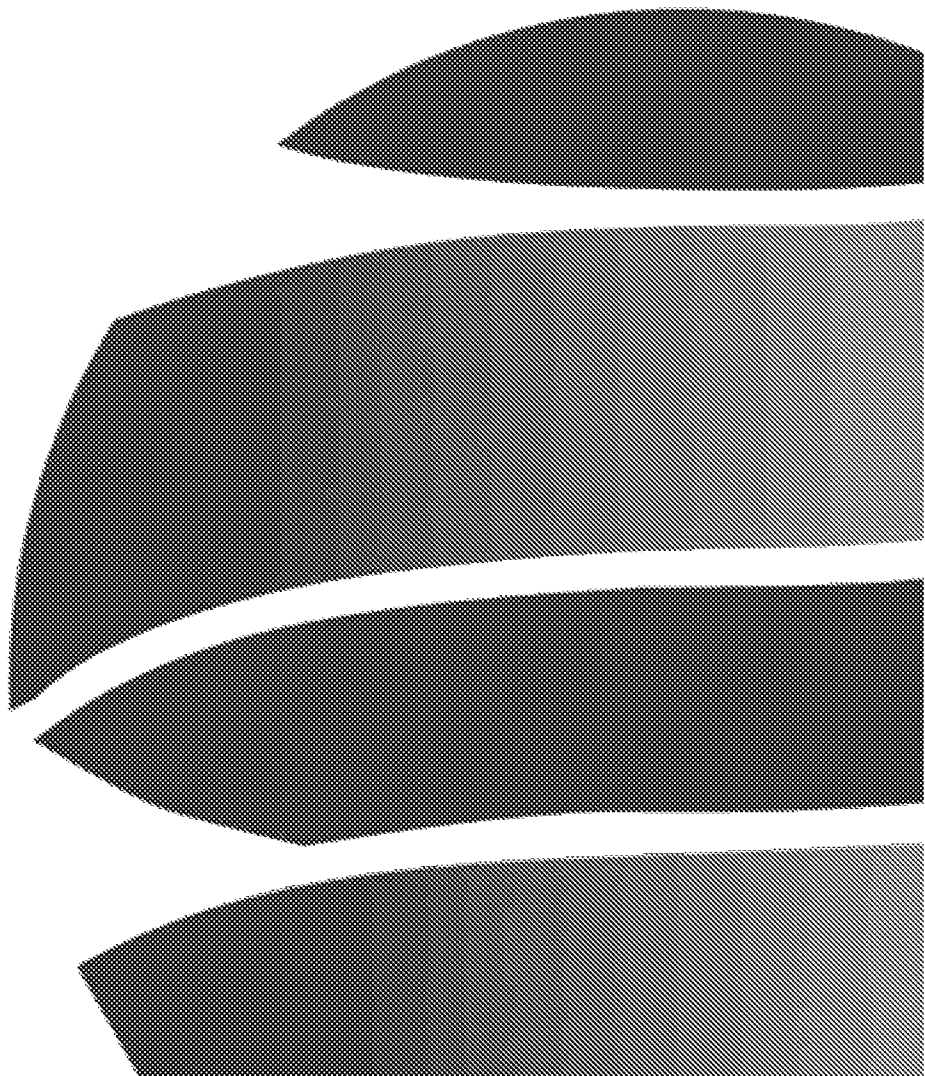
Depth (m)	Blows/100mm				Torque (Nm)
	10	20	30	40	
0	0				
1	2				0
2	4				0
3	12				0
4	10				10
5	5				30
6	4				30
7	4				30
8	6				
9					
10					
Remarks					
Fall Height			Cone Base Diameter		
Hammer Wt 63.5			Final Depth 8.00		
Probe Type DPSH			Log Scale 1:50		





APPENDIX C

Geotechnical Laboratory Results





Summary of Natural Moisture Content, Liquid Limit and Plastic Limit Results

Job No.	Project Name	Programme	
25423	Hook Lane, Westergate	Samples received	29/10/2018
		Schedule received	31/10/2018
Project No.	Client	Project started	01/11/2018
GE17712	GESL	Testing Started	13/11/2018

Hole No.	Sample				Soil Description	NMC %	Passing 425µm %	LL %	PL %	PI %	Remarks
	Ref	Top m	Base m	Type							
TP01	-	1.00	-	D	Orangish brown slightly mottled grey fine sandy silty CLAY with rare fine gravel	17	99	31	14	17	
TP02	-	0.50	-	D	Orangish brown slightly mottled grey slightly sandy silty CLAY with traces of fine rootlets and rare fine gravel	23	99	44	19	25	
TP03	-	1.00	-	D	Orangish brown slightly mottled grey sandy silty CLAY with occasional black flecks	20	100	38	16	22	
TP04	-	1.00	-	D	Orangish brown slightly mottled grey slightly gravelly sandy silty CLAY with traces of fine rootlets (gravel is fm and sub-angular to angular)	17	94	30	15	15	
TP07	-	1.50	-	D	Orangish brown slightly mottled grey slightly gravelly sandy silty CLAY with occasional black flecks (gravel is fm and sub-angular to angular)	20	90	31	14	17	
TP08	-	1.50	-	D	Orangish brown slightly mottled grey slightly gravelly sandy silty CLAY (gravel is fm and sub-angular to rounded)	24	89	29	13	16	
WS02	-	1.50	-	D	Orangish brown slightly mottled grey slightly gravelly sandy silty CLAY with occasional black flecks (gravel is fm and sub-angular to angular)	19	85	31	14	17	
WS05	-	1.50	-	D	Orangish brown slightly mottled grey slightly gravelly sandy silty CLAY (gravel is fm and sub-angular to angular)	19	95	31	14	17	
WS06	-	1.50	-	D	Orangish brown slightly mottled grey slightly gravelly sandy silty CLAY with occasional black flecks (gravel is fm and sub-angular to angular)	18	94	32	16	16	

	Test Methods: BS1377: Part 2: 1990: Natural Moisture Content : clause 3.2 Atterberg Limits: clause 4.3 and 5.0	Test Report by K4 SOILS LABORATORY Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU Tel: 01923 711 288 Email: James@k4soils.com	Checked and Approved Initials J.P Date: 14/11/2018
	2519 Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr) MSF-5-R1(b)		

2519

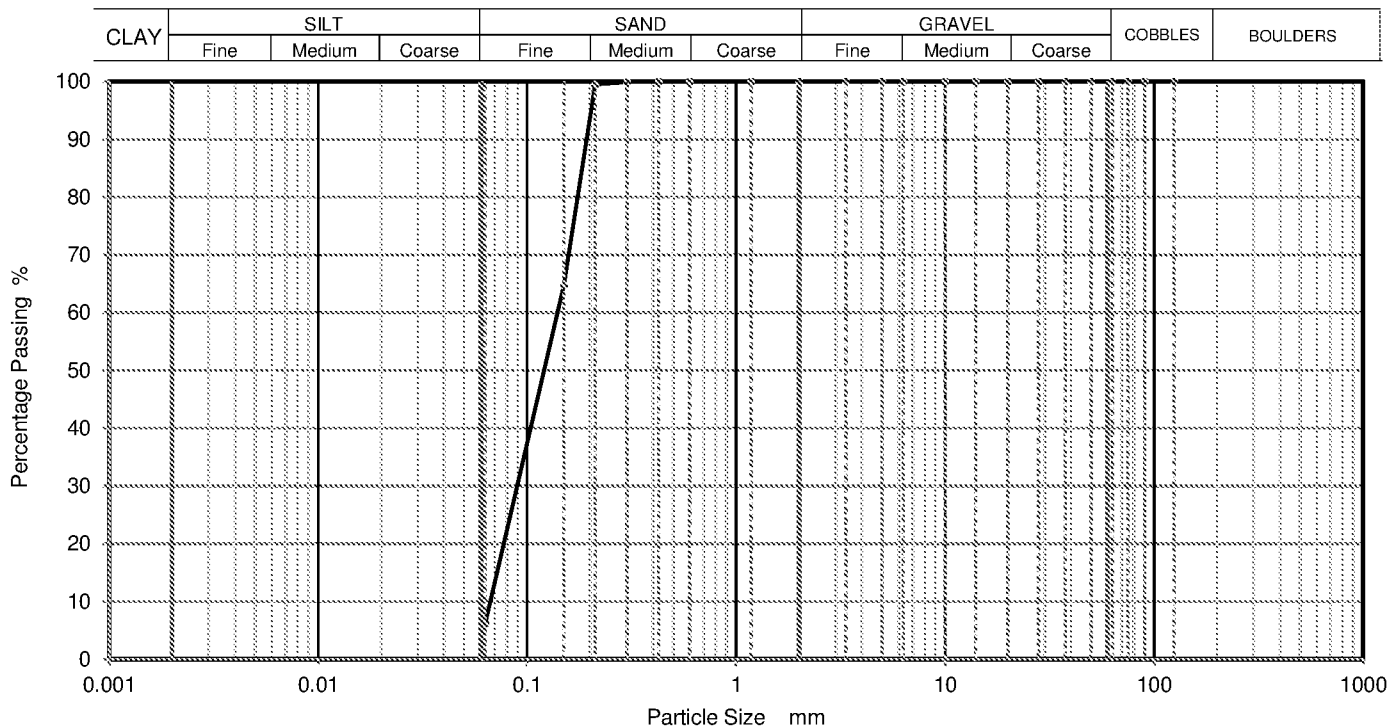
MSF-5-R1(b)



PARTICLE SIZE DISTRIBUTION

Job Ref	25423
Borehole/Pit No.	TP06
Sample No.	-
Depth Top	2.50 m
Depth Base	- m
Sample Type	D
Samples received	29/10/2018
Schedules received	31/10/2018
Project started	01/11/2018
Date tested	12/11/2018

Site Name	Hook Lane, Westergate		
Project No.	GE17712	Client	GESL
Soil Description	Orangish brown silty SAND		
Test Method	BS1377:Part 2: 1990, clause 9.0		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
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	100		
0.3	100		
0.212	100		
0.15	65		
0.063	6		

Dry Mass of sample, g 517

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	0.0
Sand	93.8
Fines <0.063mm	6.2

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	2.1
Curvature Coefficient	0.86

Remarks
Preparation and testing in accordance with BS1377 unless noted below



K4 Soils Laboratory
Unit 8, Olds Close, Watford, Herts, WD18 9RU
Email: james@k4soils.com
Tel: 01923 711288

Checked and Approved

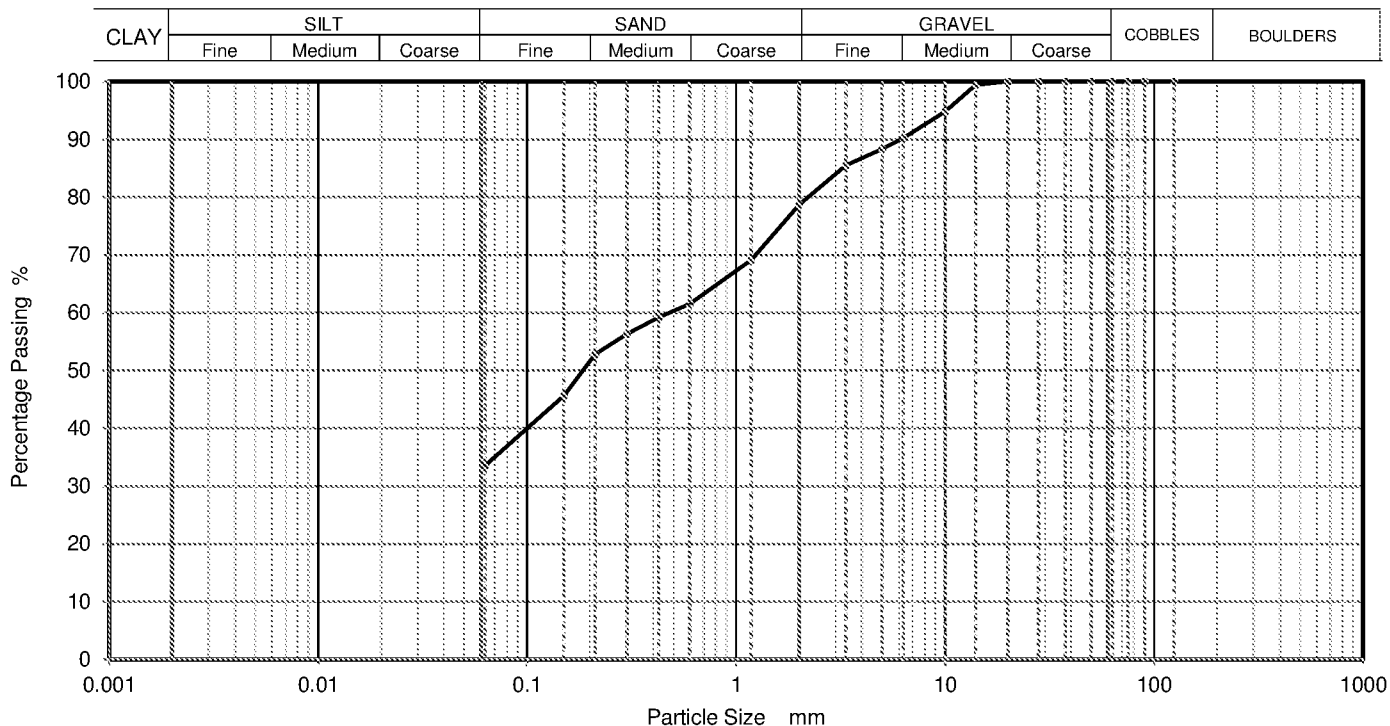
Initials: J.P
Date: 14/11/2018



PARTICLE SIZE DISTRIBUTION

Job Ref	25423
Borehole/Pit No.	WS01
Sample No.	-
Depth Top	2.00 m
Depth Base	- m
Sample Type	D
Samples received	29/10/2018
Schedules received	31/10/2018
Project started	01/11/2018
Date tested	12/11/2018

Site Name	Hook Lane, Westergate		
Project No.	GE17712	Client	GESL
Soil Description	Yellowish brown gravelly silty clayey SAND with occasional fm chalk fragments (gravel is fm and sub-angular to rounded)		
Test Method	BS1377:Part 2: 1990, clause 9.0		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	95		
6.3	90		
5	88		
3.35	86		
2	79		
1.18	69		
0.6	62		
0.425	59		
0.3	56		
0.212	53		
0.15	46		
0.063	34		

Dry Mass of sample, g 431

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	21.3
Sand	45.2
Fines <0.063mm	33.5

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

Remarks
Preparation and testing in accordance with BS1377 unless noted below



K4 Soils Laboratory
Unit 8, Olds Close, Watford, Herts, WD18 9RU
Email: james@k4soils.com
Tel: 01923 711288

Checked and Approved

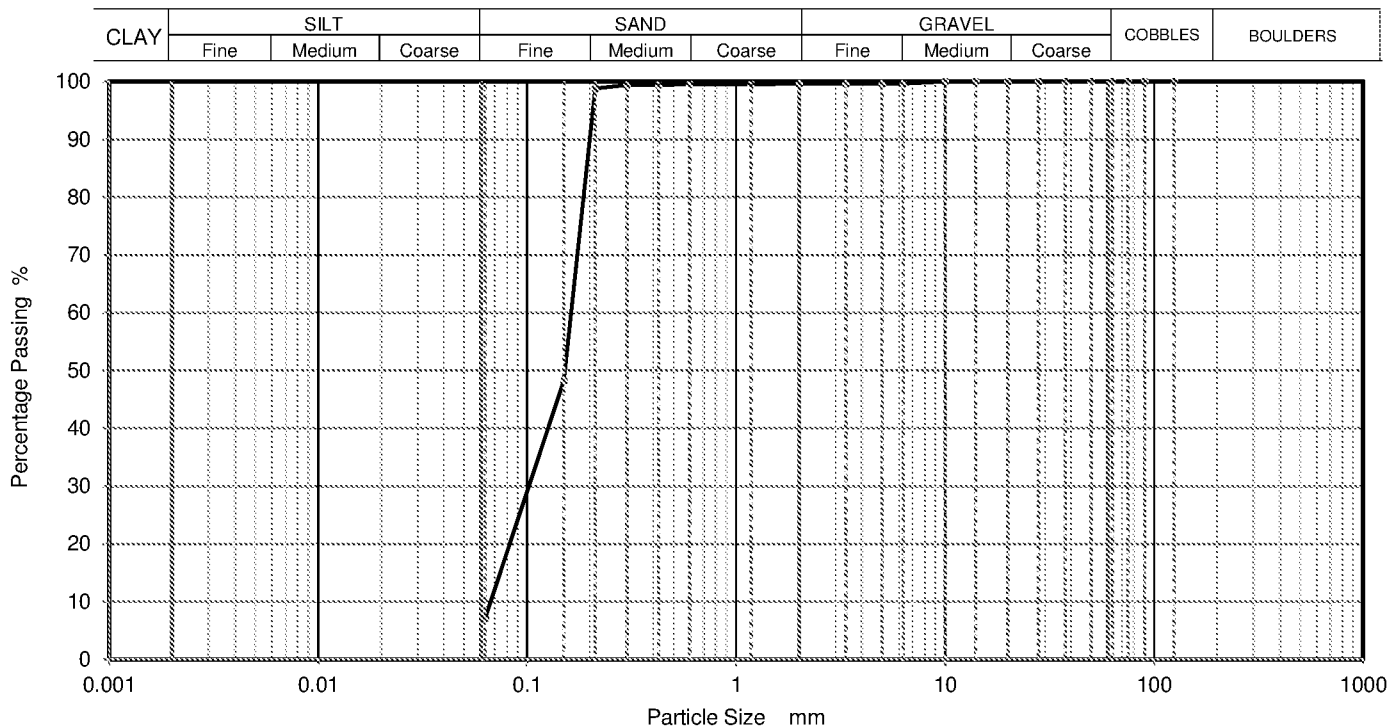
Initials: J.P
Date: 14/11/2018



PARTICLE SIZE DISTRIBUTION

Job Ref	25423
Borehole/Pit No.	WS04
Sample No.	-
Depth Top	2.00 m
Depth Base	- m
Sample Type	D
Samples received	29/10/2018
Schedules received	31/10/2018
Project started	01/11/2018
Date tested	12/11/2018

Site Name	Hook Lane, Westergate		
Project No.	GE17712	Client	GESL
Soil Description	Orangish brown silty SAND with rare fine gravel		
Test Method	BS1377:Part 2: 1990, clause 9.0		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
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	48		
0.063	7		

Dry Mass of sample, g 507

Sample Proportions	% dry mass
Very coarse	0.0
Gravel	0.4
Sand	92.4
Fines <0.063mm	7.1

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	2.4
Curvature Coefficient	0.96

Remarks
Preparation and testing in accordance with BS1377 unless noted below



K4 Soils Laboratory
Unit 8, Olds Close, Watford, Herts, WD18 9RU
Email: james@k4soils.com
Tel: 01923 711288

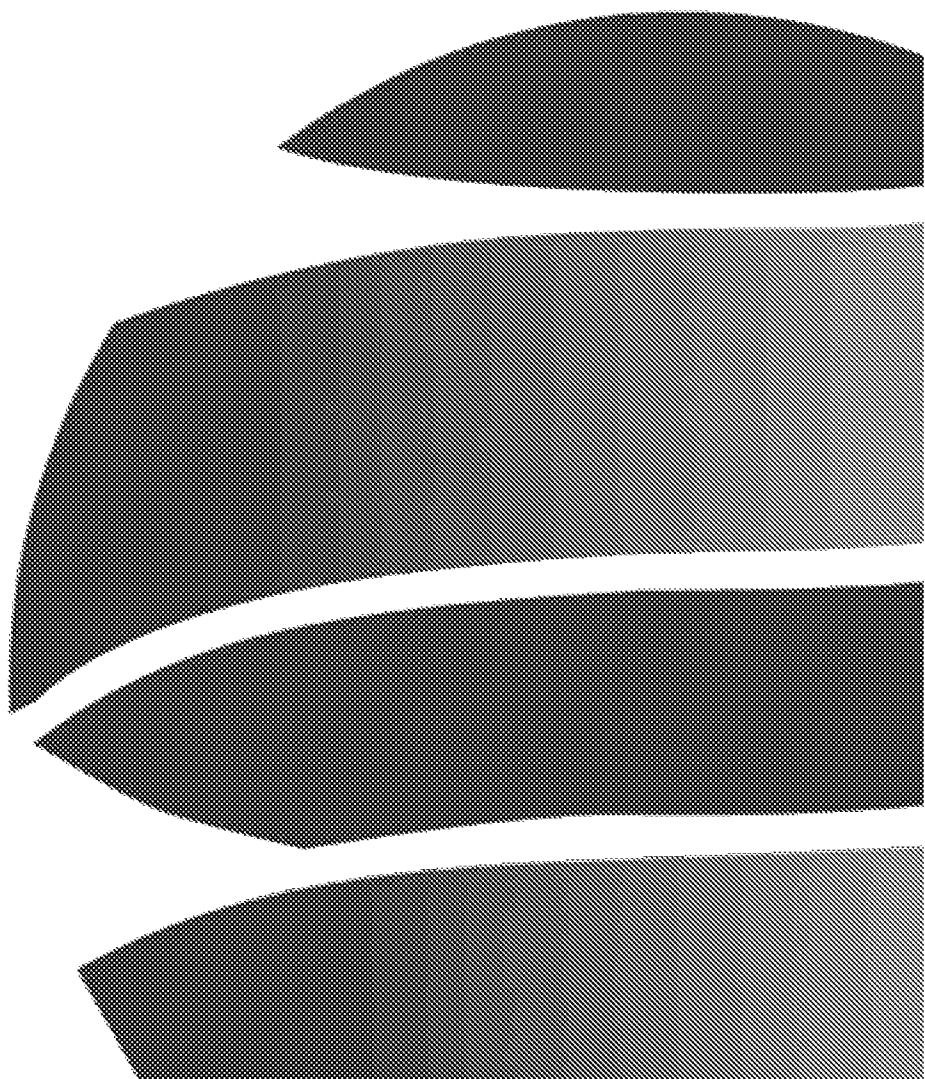
Checked and Approved

Initials: J.P
Date: 14/11/2018



APPENDIX D

Geochemical Laboratory Results





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

THE ENVIRONMENTAL LABORATORY

Analytical Report Number: 18-20278

Issue: 1

Date of Issue: 01/11/2018

Contact: Ed Newman

Customer Details: GESL
Unit 7
Danworth Farm
Hurstpierpoint
West Sussex
BN6 9GL

Quotation No: Q14-00021

Order No: Not Supplied

Customer Reference: GE17712

Date Received: 26/10/2018

Date Approved: 01/11/2018

Details: Hook Lane, Westergate

Approved by:

John Wilson, Operations

Any comments, opinions or inter

Sample Summary

Report No.: 18-20278

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
154910	TP01 0.20	25/10/2018	26/10/2018	Silty loam	
154911	TP01 2.00	25/10/2018	26/10/2018	Silty loam	
154912	TP02 0.20	25/10/2018	26/10/2018	Silty loam	
154913	TP03 0.50	25/10/2018	26/10/2018	Silty loam	
154914	TP04 0.20	25/10/2018	26/10/2018	Silty loam	
154915	TP04 0.50	25/10/2018	26/10/2018	Silty loam	
154916	TP04 2.50	25/10/2018	26/10/2018	Sand	
154917	TP05 0.20	25/10/2018	26/10/2018	Silty loam	
154918	TP06 0.20	25/10/2018	26/10/2018	Silty loam	
154919	TP07 0.20	25/10/2018	26/10/2018	Silty loam	
154920	TP07 1.00	25/10/2018	26/10/2018	Silty loam	
154921	TP08 0.20	25/10/2018	26/10/2018	Silty loam	
154922	TP08 2.00	25/10/2018	26/10/2018	Sand	
154923	WS01 0.20	25/10/2018	26/10/2018	Silty loam	
154924	WS02 0.20	25/10/2018	26/10/2018	Silty loam	
154925	WS02 1.00	25/10/2018	26/10/2018	Silty loam	
154926	WS03 0.20	25/10/2018	26/10/2018	Silty loam	
154927	WS04 0.20	25/10/2018	26/10/2018	Silty loam	
154928	WS05 0.20	25/10/2018	26/10/2018	Silty loam	
154929	WS06 0.20	25/10/2018	26/10/2018	Silty loam	
154930	TP03 0.20	25/10/2018	26/10/2018		

Results Summary

Report No.: 18-20278

ELAB Reference				154910	154911	154912	154913	154914	154915	154916	154917
Customer Reference											
Sample ID											
Sample Type				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location				TP01	TP01	TP02	TP03	TP04	TP04	TP04	TP05
Sample Depth (m)				0.20	2.00	0.20	0.50	0.20	0.50	2.50	0.20
Sampling Date				25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018
Determinand	Codes	Units	LOD								
Metals											
Arsenic	M	mg/kg	1	8.7	n/t	7.2	8.5	7.7	12.4	n/t	7.9
Barium	U	mg/kg	10	96.9	n/t	75.4	65.4	115	88.4	n/t	77.5
Beryllium	U	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0	< 1.0	n/t	< 1.0
Cadmium	M	mg/kg	0.5	< 0.5	n/t	< 0.5	< 0.5	< 0.5	< 0.5	n/t	< 0.5
Chromium	M	mg/kg	5	27.0	n/t	25.5	28.3	21.0	30.9	n/t	24.9
Copper	M	mg/kg	5	50.7	n/t	13.6	9.6	17.3	18.9	n/t	14.0
Lead	M	mg/kg	5	63.3	n/t	25.6	11.4	124	15.3	n/t	29.0
Mercury	M	mg/kg	0.5	< 0.5	n/t	< 0.5	< 0.5	< 0.5	< 0.5	n/t	< 0.5
Nickel	M	mg/kg	5	16.3	n/t	12.8	12.2	11.1	28.8	n/t	13.8
Selenium	M	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0	< 1.0	n/t	< 1.0
Vanadium	M	mg/kg	5	36.4	n/t	34.7	38.1	27.5	42.5	n/t	34.7
Zinc	M	mg/kg	5	165	n/t	63.6	44.4	103	54.9	n/t	84.9
Anions											
Water Soluble Chloride	M	mg/kg	40	< 40	n/t	< 40	< 40	< 40	< 40	n/t	< 40
Water Soluble Sulphate	M	g/l	0.02	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Inorganics											
Elemental Sulphur	M	mg/kg	20	< 20	n/t	< 20	< 20	< 20	< 20	n/t	< 20
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	n/t	< 0.8	< 0.8	< 0.8	< 0.8	n/t	< 0.8
Total Sulphide	N	mg/kg	2	< 2	n/t	< 2	< 2	< 2	< 2	n/t	< 2
Total Cyanide	M	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0	< 1.0	n/t	< 1.0
Total Sulphur	N	%	0.01	n/t	0.01	n/t	0.01	n/t	n/t	< 0.01	n/t
Acid Soluble Sulphate (SO4)	U	%	0.02	0.05	0.07	0.06	0.06	0.06	0.06	0.04	0.05
Water Soluble Boron	N	mg/kg	0.5	0.7	n/t	< 0.5	< 0.5	0.6	< 0.5	n/t	0.6
Miscellaneous											
Acid Neutralisation Capacity	N	mol/kg	0.1	n/t	n/t	n/t	< 0.1	< 0.1	n/t	n/t	n/t
Loss On Ignition (450°C)	M	%	0.01	n/t	n/t	n/t	2.37	3.05	n/t	n/t	n/t
pH	M	pH units	0.1	6.4	8.4	7.1	7.1	8.0	8.5	8.7	5.6
Total Organic Carbon	N	%	0.01	2.0	n/t	0.77	0.25	0.86	0.10	n/t	1.0
Phenols											
Total Phenols	N	mg/kg	6	< 6	n/t	< 6	< 6	< 6	< 6	n/t	< 6
Polyaromatic hydrocarbons											
Naphthalene	M	mg/kg	0.1	< 0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1	n/t	< 0.1
Acenaphthylene	M	mg/kg	0.1	< 0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1	n/t	< 0.1
Acenaphthene	M	mg/kg	0.1	< 0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1	n/t	< 0.1
Fluorene	M	mg/kg	0.1	< 0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1	n/t	< 0.1
Phenanthrene	M	mg/kg	0.1	0.1	n/t	0.1	< 0.1	0.3	< 0.1	n/t	< 0.1
Anthracene	M	mg/kg	0.1	< 0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1	n/t	< 0.1
Fluoranthene	M	mg/kg	0.1	0.3	n/t	0.2	< 0.1	0.5	< 0.1	n/t	0.1
Pyrene	M	mg/kg	0.1	0.3	n/t	0.2	< 0.1	0.4	< 0.1	n/t	0.1
Benzo(a)anthracene	M	mg/kg	0.1	0.1	n/t	0.1	< 0.1	0.3	< 0.1	n/t	< 0.1
Chrysene	M	mg/kg	0.1	0.2	n/t	0.2	< 0.1	0.3	< 0.1	n/t	< 0.1
Benzo(b)fluoranthene	M	mg/kg	0.1	0.2	n/t	0.1	< 0.1	0.3	< 0.1	n/t	0.1
Benzo(k)fluoranthene	M	mg/kg	0.1	0.3	n/t	0.3	< 0.1	0.3	< 0.1	n/t	0.2
Benzo(a)pyrene	M	mg/kg	0.1	0.2	n/t	0.1	< 0.1	0.3	< 0.1	n/t	< 0.1
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	0.2	n/t	0.1	< 0.1	0.2	< 0.1	n/t	0.1
Dibenzo(a,h)anthracene	M	mg/kg	0.1	< 0.1	n/t	< 0.1	< 0.1	< 0.1	< 0.1	n/t	< 0.1
Benzo(g,h,i)perylene	M	mg/kg	0.1	0.1	n/t	< 0.1	< 0.1	0.2	< 0.1	n/t	< 0.1
Total PAH(16)	M	mg/kg	0.4	2.1	n/t	1.6	< 0.4	3.3	< 0.4	n/t	1.1
Total PAH (Including Coronene)	N	mg/kg	2	n/t	n/t	n/t	< 2	3	n/t	n/t	n/t

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The Environmental Laboratory Ltd. Reg. No. 3882193

Results Summary

Report No.: 18-20278

ELAB Reference	154910	154911	154912	154913	154914	154915	154916	154917
Customer Reference								
Sample ID								
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location	TP01	TP01	TP02	TP03	TP04	TP04	TP04	TP05
Sample Depth (m)	0.20	2.00	0.20	0.50	0.20	0.50	2.50	0.20
Sampling Date	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018
Determinand	Codes	Units	LOD					
BTEX								
Benzene	M	ug/kg	10	< 10.0	n/t	< 10.0	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	n/t	< 10.0	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	n/t	< 10.0	< 10.0	< 10.0
Xylenes	M	ug/kg	10	< 10.0	n/t	< 10.0	< 10.0	< 10.0
Total BTEX	M	mg/kg	0.01	n/t	n/t	n/t	< 0.01	< 0.01
TPH CWG								
>C5-C6 Aliphatic	N	mg/kg	0.01	< 0.01	n/t	< 0.01	< 0.01	< 0.01
>C6-C8 Aliphatic	N	mg/kg	0.01	< 0.01	n/t	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C10-C12 Aliphatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C35-C40 Aliphatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic	N	mg/kg	0.01	< 0.01	n/t	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic	N	mg/kg	0.01	< 0.01	n/t	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C10-C12 Aromatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
>C21-C35 Aromatic	N	mg/kg	1	3.0	n/t	< 1.0	< 1.0	< 1.0
>C35-C40 Aromatic	N	mg/kg	1	< 1.0	n/t	< 1.0	< 1.0	< 1.0
Total (>C5-C40) Ali/Aro	N	mg/kg	1	3.0	n/t	< 1.0	< 1.0	< 1.0
Total Petroleum Hydrocarbons								
Mineral Oil	U	mg/kg	5	n/t	n/t	n/t	< 5	< 5
PCB (ICES 7 congeners)								
PCB (Total of 7 Congeners)	M	mg/kg	0.03	n/t	n/t	n/t	< 0.03	< 0.03

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The Environmental Laboratory Ltd. Reg. No. 3882193

Results Summary

Report No.: 18-20278

ELAB Reference				154918	154919	154920	154921	154922	154923	154924	154925
Customer Reference											
Sample ID											
Sample Type				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location				TP06	TP07	TP07	TP08	TP08	WS01	WS02	WS02
Sample Depth (m)				0.20	0.20	1.00	0.20	2.00	0.20	0.20	1.00
Sampling Date				25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018
Determinand	Codes	Units	LOD								
Metals											
Arsenic	M	mg/kg	1	8.1	7.3	n/t	6.5	n/t	7.5	9.5	n/t
Barium	U	mg/kg	10	90.2	74.0	n/t	62.7	n/t	90.1	69.7	n/t
Beryllium	U	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
Cadmium	M	mg/kg	0.5	< 0.5	< 0.5	n/t	< 0.5	n/t	0.6	< 0.5	n/t
Chromium	M	mg/kg	5	25.2	24.6	n/t	22.9	n/t	23.8	23.6	n/t
Copper	M	mg/kg	5	18.8	13.8	n/t	8.6	n/t	18.2	14.1	n/t
Lead	M	mg/kg	5	62.8	30.7	n/t	13.8	n/t	92.5	32.5	n/t
Mercury	M	mg/kg	0.5	< 0.5	< 0.5	n/t	< 0.5	n/t	< 0.5	< 0.5	n/t
Nickel	M	mg/kg	5	14.6	12.6	n/t	10.5	n/t	13.9	14.9	n/t
Selenium	M	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
Vanadium	M	mg/kg	5	34.3	34.2	n/t	30.9	n/t	30.7	33.1	n/t
Zinc	M	mg/kg	5	166	73.0	n/t	41.8	n/t	203	71.0	n/t
Anions											
Water Soluble Chloride	M	mg/kg	40	< 40	< 40	n/t	95	n/t	< 40	< 40	n/t
Water Soluble Sulphate	M	g/l	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Inorganics											
Elemental Sulphur	M	mg/kg	20	< 20	< 20	n/t	< 20	n/t	< 20	< 20	n/t
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	< 0.8	n/t	< 0.8	n/t	< 0.8	< 0.8	n/t
Total Sulphide	N	mg/kg	2	< 2	< 2	n/t	< 2	n/t	< 2	< 2	n/t
Total Cyanide	M	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
Total Sulphur	N	%	0.01	n/t	n/t	0.02	n/t	< 0.01	n/t	n/t	0.01
Acid Soluble Sulphate (SO ₄)	U	%	0.02	0.07	0.05	0.05	0.04	0.04	0.10	0.06	0.05
Water Soluble Boron	N	mg/kg	0.5	1.2	0.7	n/t	< 0.5	n/t	1.2	1.0	n/t
Miscellaneous											
Acid Neutralisation Capacity	N	mol/kg	0.1	n/t	n/t	n/t	n/t	n/t	n/t	n/t	n/t
Loss On Ignition (450°C)	M	%	0.01	n/t	n/t	n/t	n/t	n/t	n/t	n/t	n/t
pH	M	pH units	0.1	7.0	6.2	8.4	6.7	8.5	6.4	6.3	8.0
Total Organic Carbon	N	%	0.01	1.8	1.1	n/t	0.50	n/t	2.4	1.3	n/t
Phenols											
Total Phenols	N	mg/kg	6	< 6	< 6	n/t	< 6	n/t	< 6	< 6	n/t
Polyaromatic hydrocarbons											
Naphthalene	M	mg/kg	0.1	< 0.1	< 0.1	n/t	< 0.1	n/t	< 0.1	< 0.1	n/t
Acenaphthylene	M	mg/kg	0.1	< 0.1	< 0.1	n/t	< 0.1	n/t	< 0.1	< 0.1	n/t
Acenaphthene	M	mg/kg	0.1	< 0.1	< 0.1	n/t	< 0.1	n/t	< 0.1	< 0.1	n/t
Fluorene	M	mg/kg	0.1	< 0.1	< 0.1	n/t	< 0.1	n/t	< 0.1	< 0.1	n/t
Phenanthrene	M	mg/kg	0.1	0.2	< 0.1	n/t	< 0.1	n/t	0.3	< 0.1	n/t
Anthracene	M	mg/kg	0.1	< 0.1	< 0.1	n/t	< 0.1	n/t	< 0.1	< 0.1	n/t
Fluoranthene	M	mg/kg	0.1	0.6	0.1	n/t	0.2	n/t	0.5	0.2	n/t
Pyrene	M	mg/kg	0.1	0.6	0.1	n/t	< 0.1	n/t	0.6	0.2	n/t
Benzo(a)anthracene	M	mg/kg	0.1	0.4	< 0.1	n/t	0.2	n/t	0.3	0.2	n/t
Chrysene	M	mg/kg	0.1	0.4	< 0.1	n/t	0.3	n/t	0.4	0.2	n/t
Benzo(b)fluoranthene	M	mg/kg	0.1	0.5	0.1	n/t	< 0.1	n/t	0.6	0.2	n/t
Benzo(k)fluoranthene	M	mg/kg	0.1	0.5	0.2	n/t	< 0.1	n/t	0.6	0.4	n/t
Benzo(a)pyrene	M	mg/kg	0.1	0.4	< 0.1	n/t	< 0.1	n/t	0.3	0.1	n/t
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	0.4	< 0.1	n/t	< 0.1	n/t	0.3	0.2	n/t
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.1	< 0.1	n/t	< 0.1	n/t	0.1	< 0.1	n/t
Benzo(g,h,i)perylene	M	mg/kg	0.1	0.3	< 0.1	n/t	< 0.1	n/t	0.3	< 0.1	n/t
Total PAH(16)	M	mg/kg	0.4	4.5	1.1	n/t	0.9	n/t	4.4	1.8	n/t
Total PAH (Including Coronene)	N	mg/kg	2	n/t	n/t	n/t	n/t	n/t	n/t	n/t	n/t

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The Environmental Laboratory Ltd. Reg. No. 3882193

Results Summary

Report No.: 18-20278

ELAB Reference	154918	154919	154920	154921	154922	154923	154924	154925
Customer Reference								
Sample ID								
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location	TP06	TP07	TP07	TP08	TP08	WS01	WS02	WS02
Sample Depth (m)	0.20	0.20	1.00	0.20	2.00	0.20	0.20	1.00
Sampling Date	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018	25/10/2018

Determinand	Codes	Units	LOD								
BTEX											
Benzene	M	ug/kg	10	< 10.0	< 10.0	n/t	< 10.0	n/t	< 10.0	< 10.0	n/t
Toluene	M	ug/kg	10	< 10.0	< 10.0	n/t	< 10.0	n/t	< 10.0	< 10.0	n/t
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0	n/t	< 10.0	n/t	< 10.0	< 10.0	n/t
Xylenes	M	ug/kg	10	< 10.0	< 10.0	n/t	< 10.0	n/t	< 10.0	< 10.0	n/t
Total BTEX	M	mg/kg	0.01	n/t	n/t	n/t	n/t	n/t	n/t	n/t	n/t
TPH CWG											
>C5-C6 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	n/t	< 0.01	n/t	< 0.01	< 0.01	n/t
>C6-C8 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	n/t	< 0.01	n/t	< 0.01	< 0.01	n/t
>C8-C10 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C10-C12 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C12-C16 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C16-C21 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C21-C35 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C35-C40 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C5-C7 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	n/t	< 0.01	n/t	< 0.01	< 0.01	n/t
>C7-C8 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	n/t	< 0.01	n/t	< 0.01	< 0.01	n/t
>C8-C10 Aromatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C10-C12 Aromatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C12-C16 Aromatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C16-C21 Aromatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C21-C35 Aromatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
>C35-C40 Aromatic	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
Total (>C5-C40) Ali/Aro	N	mg/kg	1	< 1.0	< 1.0	n/t	< 1.0	n/t	< 1.0	< 1.0	n/t
Total Petroleum Hydrocarbons											
Mineral Oil	U	mg/kg	5	n/t	n/t	n/t	n/t	n/t	n/t	n/t	n/t
PCB (ICES 7 congeners)											
PCB (Total of 7 Congeners)	M	mg/kg	0.03	n/t	n/t	n/t	n/t	n/t	n/t	n/t	n/t

Results Summary

Report No.: 18-20278

ELAB Reference	154926	154927	154928	154929
Customer Reference				
Sample ID				
Sample Type	SOIL	SOIL	SOIL	SOIL
Sample Location	WS03	WS04	WS05	WS06
Sample Depth (m)	0.20	0.20	0.20	0.20
Sampling Date	25/10/2018	25/10/2018	25/10/2018	25/10/2018

Determinand	Codes	Units	LOD				
Metals							
Arsenic	M	mg/kg	1	8.5	6.9	7.4	6.8
Barium	U	mg/kg	10	127	69.6	69.1	61.6
Beryllium	U	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
Cadmium	M	mg/kg	0.5	0.5	< 0.5	< 0.5	< 0.5
Chromium	M	mg/kg	5	28.0	26.0	21.8	20.7
Copper	M	mg/kg	5	34.3	25.0	16.0	12.6
Lead	M	mg/kg	5	140	30.9	32.1	36.8
Mercury	M	mg/kg	0.5	< 0.5	< 0.5	< 0.5	< 0.5
Nickel	M	mg/kg	5	16.9	12.7	11.6	10.7
Selenium	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium	M	mg/kg	5	35.5	29.5	30.2	27.5
Zinc	M	mg/kg	5	475	116	81.5	57.8
Anions							
Water Soluble Chloride	M	mg/kg	40	45	71	< 40	< 40
Water Soluble Sulphate	M	g/l	0.02	< 0.02	0.02	< 0.02	< 0.02
Inorganics							
Elemental Sulphur	M	mg/kg	20	< 20	< 20	< 20	< 20
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	< 0.8	< 0.8	< 0.8
Total Sulphide	N	mg/kg	2	< 2	< 2	< 2	< 2
Total Cyanide	M	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphur	N	%	0.01	n/t	n/t	n/t	n/t
Acid Soluble Sulphate (SO4)	U	%	0.02	0.08	0.06	0.05	0.05
Water Soluble Boron	N	mg/kg	0.5	1.4	1.0	0.8	0.9
Miscellaneous							
Acid Neutralisation Capacity	N	mol/kg	0.1	n/t	n/t	n/t	n/t
Loss On Ignition (450°C)	M	%	0.01	n/t	n/t	n/t	n/t
pH	M	pH units	0.1	6.7	6.2	6.0	6.1
Total Organic Carbon	N	%	0.01	3.3	2.9	1.5	1.0
Phenols							
Total Phenols	N	mg/kg	6	< 6	< 6	< 6	< 6
Polyaromatic hydrocarbons							
Naphthalene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	M	mg/kg	0.1	0.1	0.1	0.2	0.1
Anthracene	M	mg/kg	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	M	mg/kg	0.1	0.4	0.3	0.4	0.5
Pyrene	M	mg/kg	0.1	0.4	0.3	0.4	0.2
Benzo(a)anthracene	M	mg/kg	0.1	0.2	0.2	0.3	0.5
Chrysene	M	mg/kg	0.1	0.3	0.2	0.3	0.6
Benzo (b) fluoranthene	M	mg/kg	0.1	0.3	0.3	0.4	0.2
Benzo(k)fluoranthene	M	mg/kg	0.1	0.4	0.4	0.6	0.5
Benzo (a) pyrene	M	mg/kg	0.1	0.3	0.2	0.3	0.2
Indeno (1,2,3-cd) pyrene	M	mg/kg	0.1	0.2	0.2	0.3	0.2
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.1	< 0.1	< 0.1	0.1
Benzo[g,h,i]perylene	M	mg/kg	0.1	0.2	0.2	0.2	0.1
Total PAH(16)	M	mg/kg	0.4	3.1	2.7	3.5	3.3
Total PAH (Including Coronene)	N	mg/kg	2	n/t	n/t	n/t	n/t

Tests marked N are not UKAS accredited.

The Environmental Laboratory Ltd. Reg. No. 3882193

Results Summary

Report No.: 18-20278

ELAB Reference	154926	154927	154928	154929
Customer Reference				
Sample ID				
Sample Type	SOIL	SOIL	SOIL	SOIL
Sample Location	WS03	WS04	WS05	WS06
Sample Depth (m)	0.20	0.20	0.20	0.20
Sampling Date	25/10/2018	25/10/2018	25/10/2018	25/10/2018

Determinand	Codes	Units	LOD				
BTEX							
Benzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Toluene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Ethylbenzene	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Xylenes	M	ug/kg	10	< 10.0	< 10.0	< 10.0	< 10.0
Total BTEX	M	mg/kg	0.01	n/t	n/t	n/t	n/t
TPH CWG							
>C5-C6 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C6-C8 Aliphatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aliphatic	N	mg/kg	1	< 1.0	2.0	< 1.0	< 1.0
>C35-C40 Aliphatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C5-C7 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C7-C8 Aromatic	N	mg/kg	0.01	< 0.01	< 0.01	< 0.01	< 0.01
>C8-C10 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C10-C12 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C12-C16 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C16-C21 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
>C21-C35 Aromatic	N	mg/kg	1	< 1.0	1.7	< 1.0	2.0
>C35-C40 Aromatic	N	mg/kg	1	< 1.0	< 1.0	< 1.0	< 1.0
Total (>C5-C40) Ali/Aro	N	mg/kg	1	< 1.0	3.7	< 1.0	2.0
Total Petroleum Hydrocarbons							
Mineral Oil	U	mg/kg	5	n/t	n/t	n/t	n/t
PCB (ICES 7 congeners)							
PCB (Total of 7 Congeners)	M	mg/kg	0.03	n/t	n/t	n/t	n/t

Results Summary

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WAC Analysis

Elab Ref:	154914				Landfill Waste Acceptance Criteria Limits		
Sample Date:	25/10/2018				Inert Waste Landfill	Stable Non-reactive Hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID:	TP04						
Depth (m)	0.2						
Site:	Hook Lane, Westergate						
Determinand		Code	Units				
Total Organic Carbon		N	%	0.86	3	5	6
Loss on Ignition		M	%	3.1	--	--	10
Total BTEX		M	mg/kg	< 0.01	6	--	--
Total PCBs (7 congeners)		M	mg/kg	< 0.03	1	--	--
TPH Total WAC		M	mg/kg	< 5	500	--	--
Total (of 17) PAHs		N	mg/kg	3.0	100	--	--
pH		M		8.0	--	>6	--
Acid Neutralisation Capacity		N	mol/kg	< 0.1	--	To evaluate	To evaluate

Eluate Analysis

				10:1	10:1	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg	
				mg/l	mg/kg		
Arsenic	N	0.005	0.05	0.5	2	25	
Barium	N	0.007	0.07	20	100	300	
Cadmium	N	< 0.001	< 0.01	0.04	1	5	
Chromium	N	< 0.005	< 0.05	0.5	10	70	
Copper	N	0.006	0.06	2	50	100	
Mercury	N	< 0.005	< 0.01	0.01	0.2	2	
Molybdenum	N	< 0.005	< 0.05	0.5	10	30	
Nickel	N	0.002	< 0.05	0.4	10	40	
Lead	N	0.001	< 0.05	0.5	10	50	
Antimony	N	< 0.005	< 0.05	0.06	0.7	5	
Selenium	N	< 0.005	< 0.05	0.1	0.5	7	
Zinc	N	0.007	0.07	4	50	200	
Chloride	N	< 5	< 50	800	15000	25000	
Fluoride	N	< 5	< 10	10	150	500	
Sulphate	N	1	13.80	1000	20000	50000	
Total Dissolved Solids	N	66	658.00	4000	60000	100000	
Phenol Index	N	< 0.01	< 0.10	1	-	-	
Dissolved Organic Carbon	N	12.800	128.00	500	800	1000	

Leach Test Information

pH	N	7.7					
Conductivity (uS/cm)	N	98					
Dry mass of test portion (g)		103.000					
Dry Matter (%)		83					
Moisture (%)		21					
Eluent Volume (ml)		971					

Results are expressed on a dry weight basis, after correction for moisture content where applicable

Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation

Results Summary

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WAC Analysis

Elab Ref:	154913				Landfill Waste Acceptance Criteria Limits		
Sample Date:	25/10/2018				Inert Waste Landfill	Stable Non-reactive Hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID:	TP03						
Depth (m)	0.5						
Site:	Hook Lane, Westergate						
Determinand		Code	Units				
Total Organic Carbon		N	%	0.25	3	5	6
Loss on Ignition		M	%	2.4	--	--	10
Total BTEX		M	mg/kg	< 0.01	6	--	--
Total PCBs (7 congeners)		M	mg/kg	< 0.03	1	--	--
TPH Total WAC		M	mg/kg	< 5	500	--	--
Total (of 17) PAHs		N	mg/kg	< 2	100	--	--
pH		M		7.1	--	>6	--
Acid Neutralisation Capacity		N	mol/kg	< 0.1	--	To evaluate	To evaluate

Eluate Analysis

		10:1		Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
		mg/l	mg/kg			
Arsenic	N	< 0.005	< 0.05	0.5	2	25
Barium	N	< 0.005	< 0.05	20	100	300
Cadmium	N	< 0.001	< 0.01	0.04	1	5
Chromium	N	< 0.005	< 0.05	0.5	10	70
Copper	N	< 0.005	< 0.05	2	50	100
Mercury	N	< 0.005	< 0.01	0.01	0.2	2
Molybdenum	N	< 0.005	< 0.05	0.5	10	30
Nickel	N	< 0.001	< 0.05	0.4	10	40
Lead	N	< 0.001	< 0.05	0.5	10	50
Antimony	N	< 0.005	< 0.05	0.06	0.7	5
Selenium	N	< 0.005	< 0.05	0.1	0.5	7
Zinc	N	0.007	0.07	4	50	200
Chloride	N	< 5	< 50	800	15000	25000
Fluoride	N	< 5	< 10	10	150	500
Sulphate	N	1	13.10	1000	20000	50000
Total Dissolved Solids	N	15	148.00	4000	60000	100000
Phenol Index	N	< 0.01	< 0.10	1	-	-
Dissolved Organic Carbon	N	13.400	134.00	500	800	1000

Leach Test Information

pH	N	7.1				
Conductivity (uS/cm)	N	22				
Dry mass of test portion (g)		102.000				
Dry Matter (%)		82				
Moisture (%)		22				
Eluent Volume (ml)		959				

Results are expressed on a dry weight basis, after correction for moisture content where applicable

Stated limits are for guidance only and ELAB cannot be held responsible for any discrepancies with current legislation

Results Summary

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Asbestos Results

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

Elab No	Depth (m)	Clients Reference	Description of Sample Matrix #	Asbestos Identification	Gravimetric Analysis Total (%)	Gravimetric Analysis by ACM Type (%)	Free Fibre Analysis (%)	Total Asbestos (%)
154910	0.20	TP01	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154912	0.20	TP02	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154913	0.50	TP03	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154914	0.20	TP04	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154915	0.50	TP04	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154917	0.20	TP05	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154918	0.20	TP06	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154919	0.20	TP07	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154921	0.20	TP08	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154923	0.20	WS01	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154924	0.20	WS02	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154926	0.20	WS03	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154927	0.20	WS04	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154928	0.20	WS05	Brown sandy soil	No asbestos detected	n/t	n/t	n/t	n/t
154929	0.20	WS06	Brown sandy soil,stones	No asbestos detected	n/t	n/t	n/t	n/t

Method Summary

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Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Sulphide	N	As submitted sample	30/10/2018	109	Colorimetry
Hexavalent chromium	N	As submitted sample	30/10/2018	110	Colorimetry
Acid Soluble Sulphate	U	Air dried sample	31/10/2018	115	Ion Chromatography
Aqua regia extractable metals	M	Air dried sample	30/10/2018	118	ICPMS
Phenols in solids	N	As submitted sample	30/10/2018	121	HPLC
Elemental Sulphur	M	Air dried sample	30/10/2018	122	HPLC
PAH (GC-FID)	M	As submitted sample	30/10/2018	133	GC-FID
Water soluble anions	M	Air dried sample	30/10/2018	172	Ion Chromatography
Low range Aliphatic hydrocarbons soil	N	As submitted sample	31/10/2018	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	31/10/2018	181	GC-MS
Water soluble boron	N	Air dried sample	30/10/2018	202	Colorimetry
Total cyanide	M	As submitted sample	30/10/2018	204	Colorimetry
Aliphatic hydrocarbons in soil	N	As submitted sample	30/10/2018	214	GC-FID
Aliphatic/Aromatic hydrocarbons in soil	N	As submitted sample	31/10/2018	214	GC-FID
Aromatic hydrocarbons in soil	N	As submitted sample	30/10/2018	214	GC-FID
Asbestos identification	U	Air dried sample	01/11/2018	PMAN	Microscopy
Leachate					
Arsenic*	N		01/11/2018	101	ICPMS
Cadmium*	N		01/11/2018	101	ICPMS
Chromium*	N		01/11/2018	101	ICPMS
Lead*	N		01/11/2018	101	ICPMS
Nickel*	N		01/11/2018	101	ICPMS
Copper*	N		01/11/2018	101	ICPMS
Zinc*	N		01/11/2018	101	ICPMS
Mercury*	N		01/11/2018	101	ICPMS
Selenium*	N		01/11/2018	101	ICPMS
Antimony	N		01/11/2018	101	ICPMS
Barium*	N		01/11/2018	101	ICPMS
Molybdenum*	N		01/11/2018	101	ICPMS
pH Value*	N		01/11/2018	113	Electrometric
Electrical Conductivity*	N		01/11/2018	136	Probe
Dissolved Organic Carbon	N		01/11/2018	102	TOC analyser
Chloride*	N		01/11/2018	131	Ion Chromatography
Fluoride*	N		01/11/2018	131	Ion Chromatography
Sulphate*	N		01/11/2018	131	Ion Chromatography
Total Dissolved Solids	N		01/11/2018	144	Gravimetric
Phenol index	N		01/11/2018	121	HPLC
WAC Solids analysis					
pH Value**	M	Air dried sample	31/10/2018	113	Electrometric
Total Organic Carbon	N	Air dried sample	30/10/2018	210	IR
Loss on Ignition**	M	Air dried sample	31/10/2018	129	Gravimetric
Acid Neutralization Capacity to pH 7	N	Air dried sample	31/10/2018	NEN 737	Electrometric
Total BTEX**	M	As submitted sample	31/10/2018	181	GCMS
Mineral Oil**	U	As submitted sample	30/10/2018	117	GCFID
Total PCBs (7 congeners)	M	Air dried sample	30/10/2018	120	GCMS
Total PAH (17)**	N	As submitted sample	31/10/2018	133	GCFID

Tests marked N are not UKAS accredited



Report Information

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Key

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

Soil sample results are expressed on an air dried basis (dried at < 30°C)

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

The results relate only to the items tested

PCB congener results may include any coeluting PCBs

Uncertainty of measurement for the determinands tested are available upon request

Deviation Codes

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

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

Sample Retention and Disposal

All soil samples will be retained for a period of one month

All water samples will be retained for 7 days following the date of the test report

Charges may apply to extended sample storage