



Plate 13: View showing TT211.



Plate 14: View showing TT212.



Plate 15: View showing TT213.



Plate 16: View showing TT214.



Plate 17: View showing TP201.

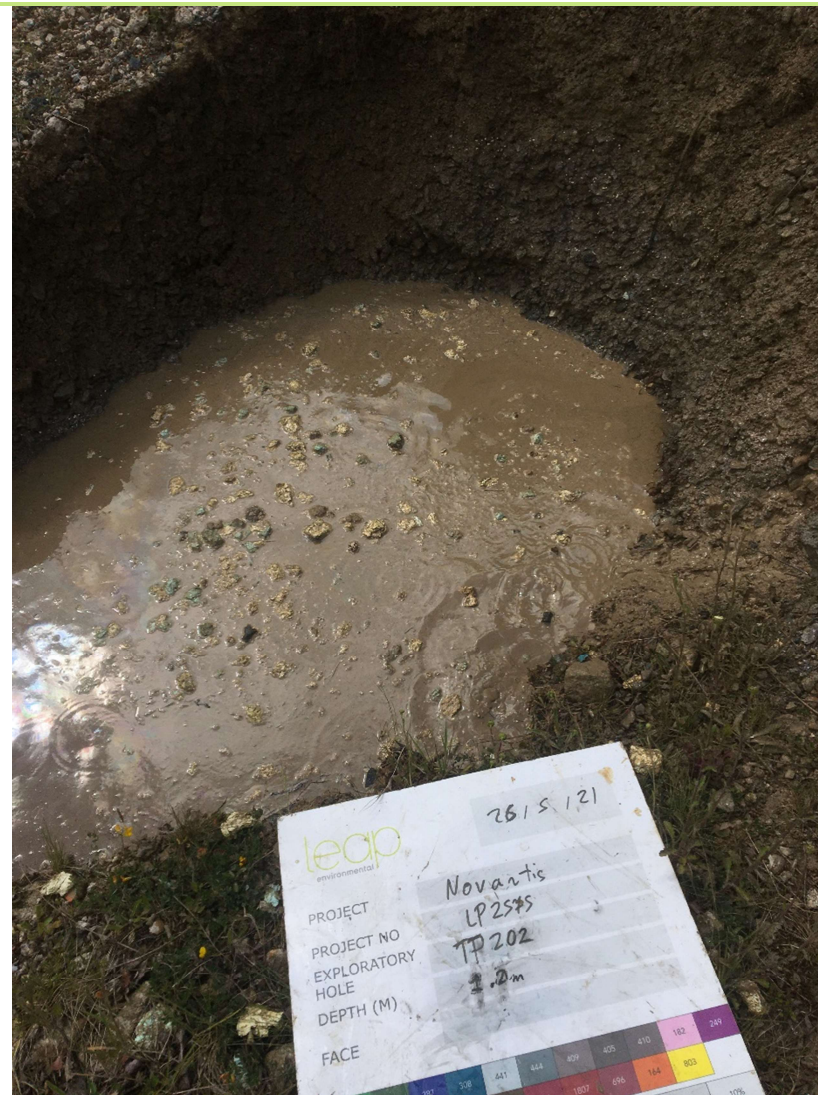


Plate 18: View showing TP202.



Plate 19: View showing TP203.



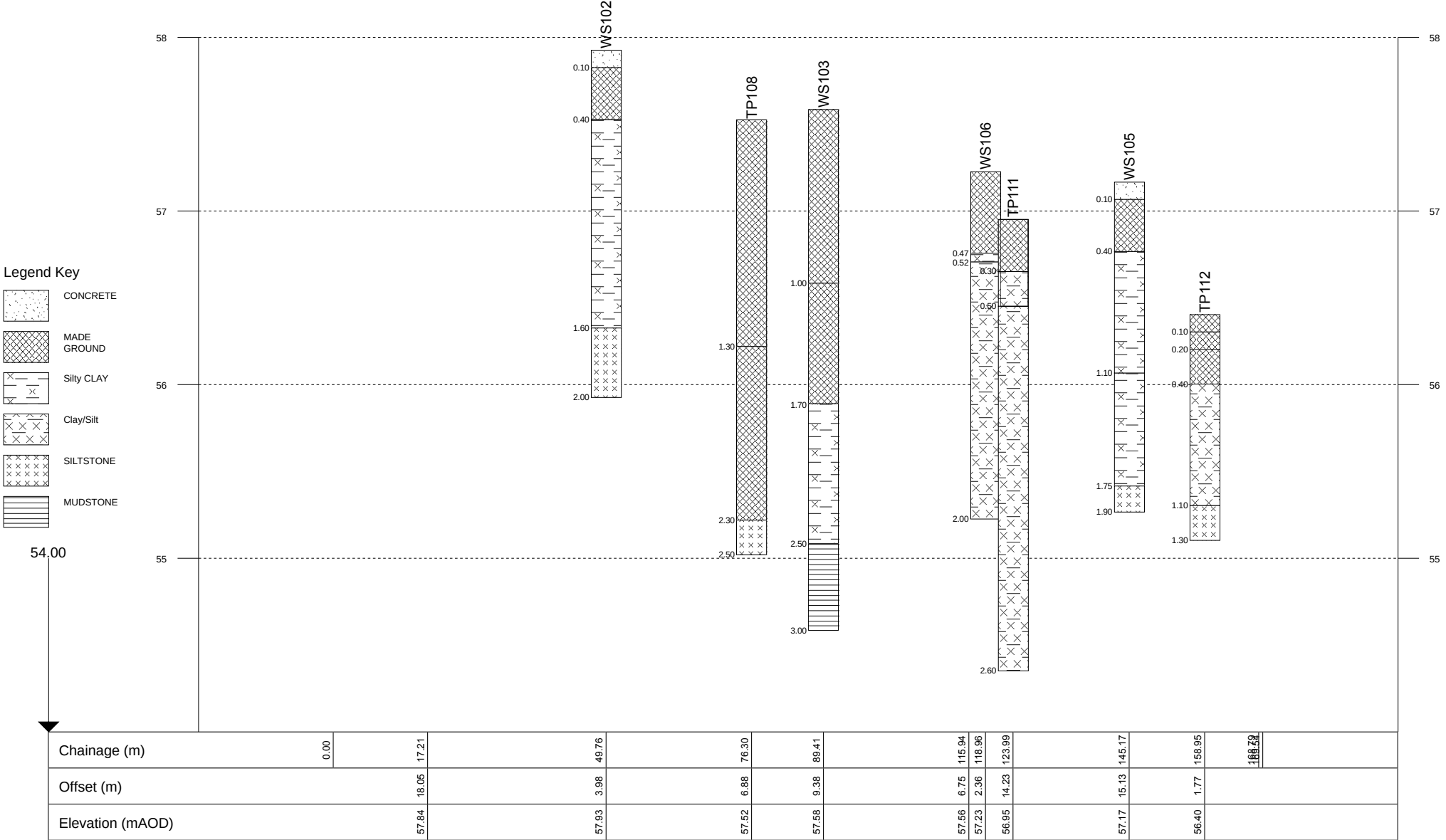
Plate 20: View showing TP204.

APPENDIX D – EXPLORATORY LOGS

Project Id: LP2441
Project Title: Horsham Enterprise Park
Location: Parsonage Road, Horsham, RH12 4AN
Client: West Sussex County Council

Title: Figure 7 Section Line 1
Vertical Scale: 1:31
Horizontal Scale: 1:982
Engineer: OA

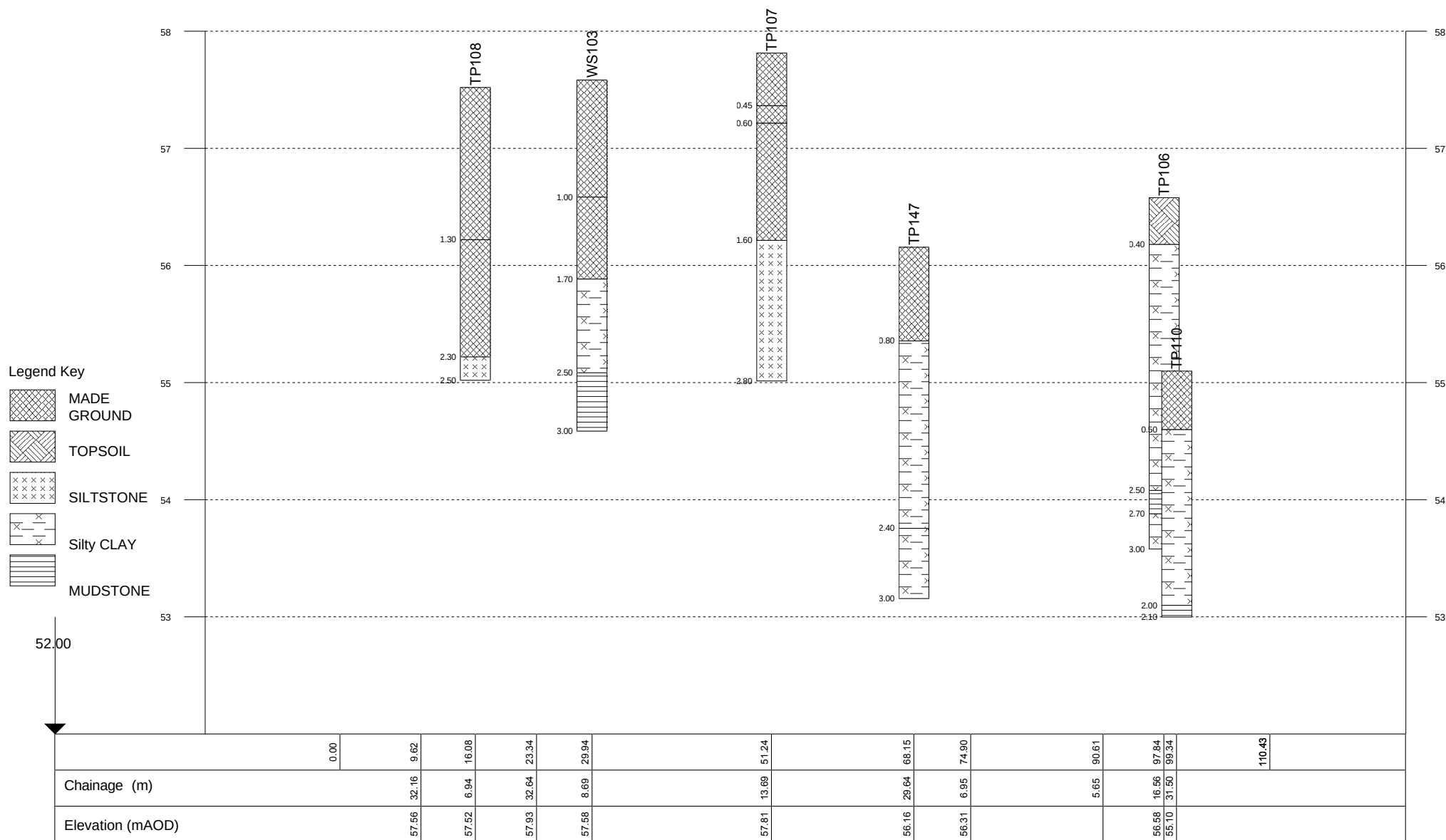
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Client: West Sussex County Council

Engineer: OA

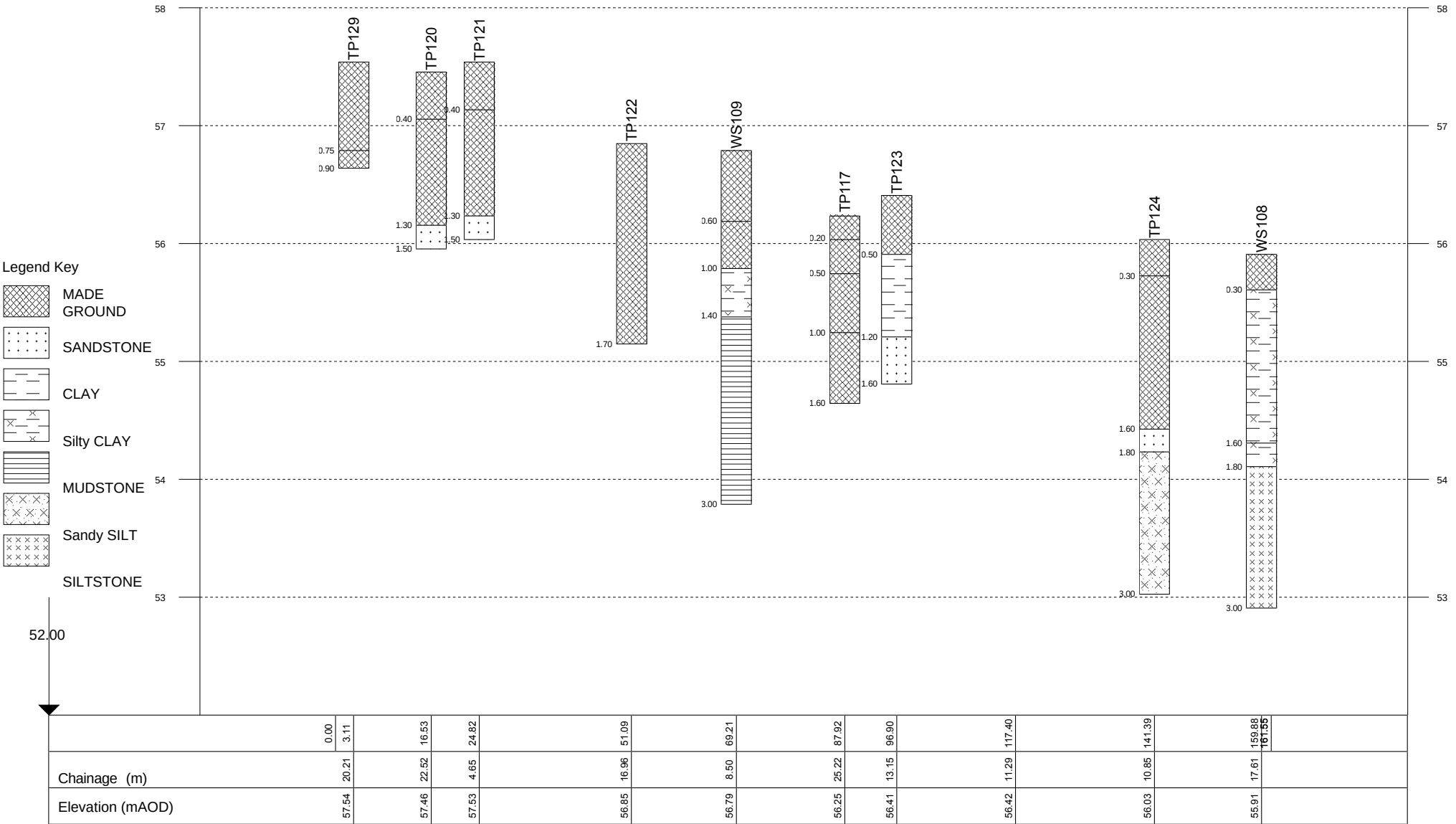
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Project Id: LP2441
Project Title: Horsham Enterprise Park
Location: Parsonage Road, Horsham, RH12 4AN
Client: West Sussex County Council

Title: Figure 9 Section Line 3
Vertical Scale: 1:46
Horizontal Scale: 1:936
Engineer: OA

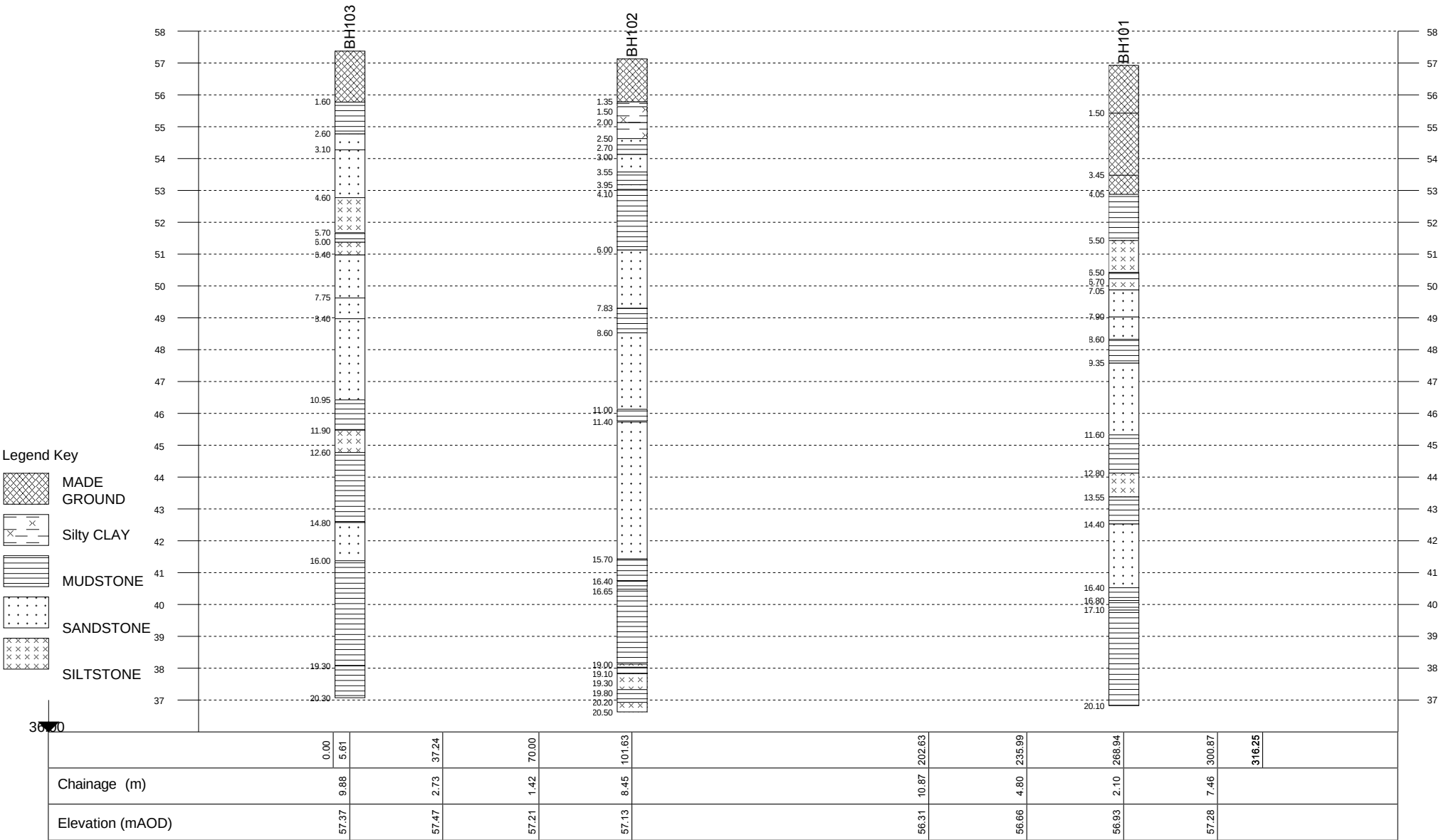
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Project Id: LP2441
Project Title: Horsham Enterprise Park
Location: Parsonage Road, Horsham, RH12 4AN
Client: West Sussex County Council

Title: Figure 10 Section Line 4
Vertical Scale: 1:169
Horizontal Scale: 1:1832
Engineer: OA

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 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No B1 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 518052 - 131735 Level:		Date 25/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 0.60		Logged OA	
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES		0.15		   	Grass over TOPSOIL with rootlets.		
	0.30	ES					Stiff mottled grey brown sandy silty CLAY.		
	0.40	D		Hand Pen at 0.5m = 156kPa					
				0.60			End of pit at 0.60 m		
1 2 3 4 5									
Remarks: Trial pit remained dry and stable.									
Stability:									





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Trial Pit Log

Trialpit No

B2

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 518044 - 131707

Level:

Date

25/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

Depth
0.60

Scale

1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.10	ES		0.15			Grass over TOPSOIL with rootlets.
	0.30	ES					Stiff mottled grey brown sandy clayey SILT.
	0.40	D		0.60			Hand Pen at 0.5m = 173kPa
							End of pit at 0.60 m

1

2

3

4

5

Remarks: Trial pit remained dry and stable.

Stability: Stable



Trial Pit Log

Trialpit No

B3

Sheet 1 of 1

Project Name:	Novartis
---------------	----------

Project No.
LP2441

Co-ords: 518040 - 131655
Level:

Date
25/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

Depth
1.00

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES		0.30			Grass over TOPSOIL with rootlets.	1
	0.50	ES					Reworked brown grey clayey SILT.	
							Orange coarse SAND.	
	0.95	ES				1.00			----- End of pit at 1.00 m -----
								2
								3
								4
								5

Remarks:	No further progress due to encountered utility service caution tape. Trial pit remained dry and stable.
----------	---

Stability:

AGS

Trial Pit Log

Trialpit No

B4

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 518033 - 131625

Level:

Date
25/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

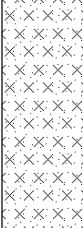
Dimensions
(m):

Depth
1.00

Scale
1:25

Logged
OA

Client: West Sussex County Council

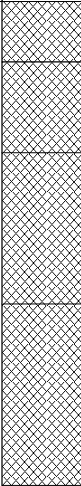
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=40	0.20		Grass over TOPSOIL with rootlets.	1	
	0.30	ES				Stiff to very stiff mottled grey brown sandy clayey SILT.		
	0.90	B D		1.00				Hand Pen at 0.5m = 206kPa
	0.90					End of pit at 1.00 m		
							2	
							3	
							4	
							5	

Remarks:	Trial pit remained dry and stable.
----------	------------------------------------

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP117 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517891 - 131752 Level: 56.25		Date 19/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 1.60		Logged OA	

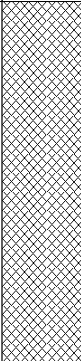
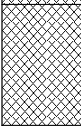
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES	N=20	0.20	56.04		Grass over TOPSOIL with rootlets.	1	
							Reworked brown CLAY.		
	0.40	ES		0.50	55.74		Reworked black stained CLAY.		
	0.60	ES					Pipe surrounded by brickwork encountered at 0.8m		
	0.90	ES		1.00	55.24		Reworked yellowish brown sandy silty CLAY.		
	1.20	ES	Refused 2/5/10/20/20/25					2	
				1.60	54.64		Hand Pen at 1.5m = 216kPa	3	
							End of pit at 1.60 m		
									4
								5	

Remarks: Grounwater seepage encountered at 1.4m. No further progress due to hard ground and water ingress limiting vision at the bottom of the trial pit.

Stability:



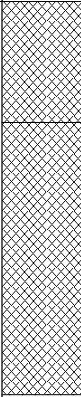
 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP118 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517915 - 131787 Level: 57.28		Date 19/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 1.90		Logged OA	

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic and rebar.	1
	0.50	ES						
	0.90	ES						
				1.20	56.08		Reworked gravelly CLAY	2
	1.50	ES					<u>Concrete foundation footing encountered between 1.4 to 1.6m</u>	
				1.60	55.68		Extremely weak reddish grey brown laminated ferruginous sandy silty MUDSTONE with black iron staining.	
	1.80	D					End of pit at 1.90 m	
				1.90	55.38			3
								4
								5

Remarks: Groundwater seepage encountered at 1.2m.

Stability:



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Project Name: Novartis				Project No. LP2441		Co-ords: 517940 - 131804 Level: 57.46		Date 19/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 1.50		Logged OA	
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES	N=67	0.40	57.06		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.		
	0.25	ES					Reworked mottled grey brown clayey SILT.		
	0.50	ES							
	1.00	D					Hand Pen at 1.0m = 183kPa		
	1.40	D		1.30	56.16		Extremely weak reddish grey brown ferruginous SANDSTONE with black iron staining.		
		1.50	55.96	End of pit at 1.50 m					
1 2 3 4 5									
Remarks: No further progress in the hard ground. Trial pit remained dry and stable.									
Stability:									



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Trial Pit Log

Trialpit No

TP121

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517948 - 131786
Level: 57.53

Date
19/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
1.50

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
	0.30	ES		0.40	57.13		Reworked mottled reddish brown silty CLAY.	
							Hand Pen at 0.6m = 206kPa	
	1.00	B	Refused 1/2/3/6/10/17/25				Hand Pen at 1.0m = 316kPa	1
	1.40	D		1.30	56.23		Extremely weak orange brown ferruginous coarse SANDSTONE with black iron staining.	
				1.50	56.03		End of pit at 1.50 m	
								2
								3
								4
								5

Remarks: No further progress in the hard ground. Trial pit remained dry and stable.

Stability:

AGS

Project Name:	Novartis
---------------	----------

Project No.
LP2441

Co-ords:	517947 - 131752
Level:	56.85

Date
19/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

Scale
1:25

Client: West Sussex County Council

Depth
1.70

Logged
OA

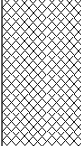
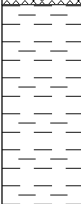
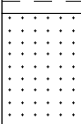
[illegible]

Remarks:	Grounwater seepage encountered at 1.2m. No further progress due to hard ground and water ingress limiting vision at the bottom of the trial pit.
----------	--

Stability:



 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP123 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517914 - 131720 Level: 56.41		Date 18/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 1.60		Logged OA	

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES	N=68	0.50	55.91		Reddish brown grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	1
	0.40	ES					Stiff blueish grey CLAY.	
	0.70	D						
	1.30	D		1.20	55.21		Extremely weak mottled brown grey laminated silty SANDSTONE.	
				1.60	54.81		End of pit at 1.60 m	2
								3
								4
								5

Remarks: No further progress in the hard ground. Trial pit remained dry and stable.



Stability:



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Trial Pit Log

Trialpit No

TP124

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517883 - 131688
Level: 56.03

Date
18/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
3.00

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=8	0.30	55.73		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	1
							Reworked mottled brown grey silty CLAY.	
	0.90	ES					<i>Black stained soils encountered between 0.8m to 1.4m</i>	2
	1.00	D						
	1.70	D		1.60	54.43		Extremely weak mottled grey brown red laminated ferruginous clayey silty SANDSTONE with black iron staining.	3
				1.80	54.23		Stiff mottled grey brown sandy clayey SILT.	
	2.30	D					<i>Hand Pen at 2.5m = 266kPa</i>	4
	2.80	D		3.00	53.03		End of pit at 3.00 m	

Remarks: Trial pit remained dry and stable.

Stability:

AGS

Trial Pit Log

Trialpit No

TP125

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords:	517882 - 131655
Level:	55.97

Date
25/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

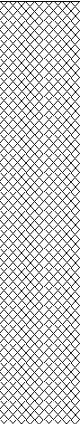
Dimensions
(m):

Scale
1:25

Client: West Sussex County Council

Depth
1.40

Logged
OA

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.20	ES		1.40	54.57		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.
	0.60	ES					
	1.20	ES					<u>Groundwater seepage encountered at 1.2m.</u>
							- - - - End of pit at 1.40 m

Remarks:	No further progress due to encountered obstruction. Groundwater seepage encountered at 1.2m.
----------	--

Stability:

AGS

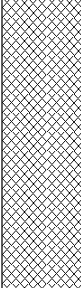
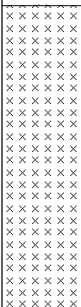
 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP126A Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517915 - 131623 Level: 56.55		Date 25/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 2.10		Logged OA	

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES	N=12				Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.		
	0.35	ES							
	0.70	ES							
	0.80			0.80	55.75			Red gravel fill MADE GROUND.	
	0.90			0.90	55.65			Black stained clayey SILT. <i>Moderate to strong organic/manure odour encountered below 0.9m.</i>	1
	1.00	ES							
	1.40	ES							
	1.60			1.60	54.95		Hand Pen at 1.5m = 246kPa		
	1.80	D					Stiff mottled grey brown slightly sandy slightly gravelly clayey SILT. <i>Hand Pen at 1.8m = 266kPa</i>		
				2.10	54.45			End of pit at 2.10 m	2
								3	
								4	
								5	

Remarks: Soakage testing installed with 110 slotted HDPE pipe. Backfill: 0-0.7m arisings, 0.7-2.1m gravel. Minor water seepage encountered at bottom of the trial pit.

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP126B Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517949 - 131654 Level: 57.07		Date 21/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 2.30		Logged OA	
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES	N=79	1.00	56.06		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic. <i>Black staining encountered at 0.8m.</i>		
	0.50	ES							
	0.80	ES							
	1.20	D		1.30	55.76		Very stiff mottled brown grey silty CLAY. <i>Hand Pen at 1.2m = 400kPa</i>		
	1.70	D							
	2.10 2.20	ES D							
			2.30	54.76		Extremely weak dark reddish brown ferruginous sandy SILTSTONE with black iron staining. End of pit at 2.30 m			
Remarks: Water seepage encountered at 1.3m. Water level risen from bottom of pit to 2.0m 20 minutes post-excavation.									
Stability:									



Trial Pit Log

Trialpit No

TP127

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords:	517948 - 131719
Level:	56.52

Date
25/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

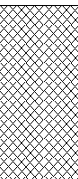
Dimensions
(m):

Depth
2.00

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.20	ES	N=40	0.60	55.92		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick, pavement blocks and kerbs and occasional fragments of plastic.	1	
	0.40	ES					Stiff to very stiff mottled grey brown clayey sandy SILT. <i>Minor groundwater seepage encountered at 0.6m.</i>		
	1.00	B							
	1.00	D							
	1.80	D			Extremely weak dark reddish brown ferruginous sandy SILTSTONE.			2	
	2.00								
									3
									4
									5

Remarks:	No further progress due to ground hardness. Minor water seepage encountered at 0.6m.
----------	--

Stability:

AGS

Project Name: Novartis

Project No.
LP2441

Co-ords: 517980 - 131754

Level: 57.00

Date _____

19/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

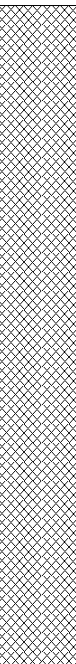
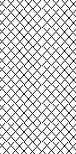
Scale

1:25

Logged
OA

Client: West Sussex County Council

Depth
2.30

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
1	0.10	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic, ceramic, cables, polythene.
	0.50	ES					
	0.90	ES					
	1.30	ES					
	1.90	ES					
	2.25	D					
2							<u>Metal drainage object encountered within arisings at 1.7m</u> <u>Disused black drainage pipe encountered at 1.85m</u>
							Recovered arisings comprising fragments of greyish brown laminated SANDSTONE End of pit at 2.30 m
3							
4							
5							

Remarks:	Groundwater seepage encountered at 1.2m and major drainage water ingress encountered at 1.85m.
----------	--

Stability:



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Trial Pit Log

Trialpit No

TP129

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517981 - 131786
Level: 57.54

Date
19/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
0.90

Scale
1:25

Logged
OA

Client: West Sussex County Council

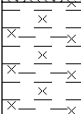
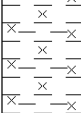
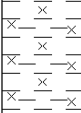
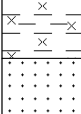
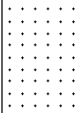
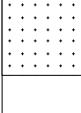
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic and cables.	
	0.50	ES						
	0.80	ES		0.75	56.79		Medium pea shingle GRAVEL.	
				0.90	56.64		End of pit at 0.90 m	1
								2
								3
								4
								5

Remarks: Trial pit stopped due to encountered service pipe at 0.9m. Trial pit remained dry and stable.

Stability:



 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP130 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 518046 - 131786 Level: 58.88		Date 19/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 2.40		Logged OA	

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	Refused 3/5/25	0.30	58.58		Grass over TOPSOIL with rootlets.	
							Stiff brown silty CLAY.	
	0.70	D					Hand Pen at 0.7m = 206kPa	1
								
	1.40	D					Hand Pen at 1.4m = 186kPa	
						Extremely weak reddish brown laminated ferruginous SANDSTONE with black iron staining.	2	
	2.00	D						
				2.40	56.48	End of pit at 2.40 m		3
								4
								5

Remarks: Trial pit remained dry and stable.

Stability:



 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP131 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 518056 - 131763 Level:		Date 25/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 2.90		Logged OA	

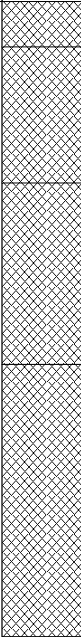
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES		0.30			Grass over TOPSOIL with rootlets and occasional brick and BLACKTOP.	1
	0.40	ES					Dark brown clayey sandy MADE GROUND with occasional brick and concrete.	
	0.80	ES						
				1.10			Stiff mottled grey brown clayey sandy SILT.	
	1.50	D					Hand Pen at 1.5m = 220kPa	
	2.40	D		2.70				2
	2.80	D		2.90			Extremely weak reddish brown grey black stained ferruginous silty SANDSTONE.	3
							End of pit at 2.90 m	
								4
								5

Remarks: Minor water seepage encountered at bottom of trial pit. No further progress due to ground hardness.

Stability:



 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP132 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 518012 - 131720 Level: 57.21		Date 20/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 2.10		Scale 1:25 Logged OA	
Client: West Sussex County Council									

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=7	0.15	57.06		CONCRETE	1
							Red sandy gravel fill MADE GROUND.	
	0.40	ES						
	0.60				56.61		Reworked reddish brown sandy SILTSTONE.	
	0.80	ES						
	1.30	ES		1.20	56.01	Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	2	
	1.80	ES						
				2.10	55.11		End of pit at 2.10 m	3
								4
								5

Remarks: Water ingress and standing water level encountered at 1.0m. Water level risen from trial pit bottom to 1.6m 15 minutes post-excavation. No further progress due to hard ground.

Stability:





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Trial Pit Log

Trialpit No

TP133

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517981 - 131688
Level: 56.97

Date
20/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
2.30

Scale
1:25

Logged
OA

Client: West Sussex County Council

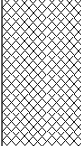
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
	0.80	ES						1
	1.50	ES						
	1.80	D		1.70	55.27		Stiff grey clayey SILT.	
							Hand Pen at 1.9m = 286kPa	
				2.00	54.97		Extremely weak reddish brown laminated ferruginous slightly sandy SILTSTONE with black iron staining.	2
	2.20	D		2.30	54.67		End of pit at 2.30 m	
								3
								4
								5

Remarks: No further progress in the hard ground. Trial pit remained dry and stable.

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log Trialpit No TP134 Sheet 1 of 1					
Project Name: Novartis				Project No. LP2441		Co-ords: 518042 - 131718 Level: 57.14		Date 21/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 3.00		Scale 1:25 Logged OA	
Client: West Sussex County Council									

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=64				Reddish brown MADE GROUND gravel fill with occasional fragments of blacktop at the surface.	1
	0.30	ES					Stiff greyish brown clayey SILT.	
				0.50	56.64			
				0.80	56.34		Extremely weak reddish brown laminated ferruginous silty SANDSTONE.	
	1.00	D		1.10	56.04		Stiff to very stiff weak grey SILT with cobbles of siltstone.	
	1.50	D						2
	2.50	D						3
				3.00	54.14		End of pit at 3.00 m	4
								5

Remarks: Trial pit remained dry. Moderate wall collapse at the end of excavation.

Stability:





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Trial Pit Log

Trialpit No

TP135

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 518047 - 131687
Level: 56.59

Date
20/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
2.70

Scale
1:25

Logged
OA

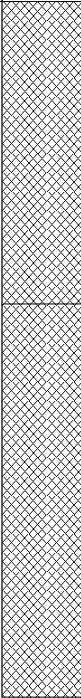
Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=31	0.60	55.99		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
	0.40	ES					Stiff to very stiff grey clayey SILT.	
	1.00	D		2.70	53.89		Hand Pen at 1.0m = 286kPa	1
	1.60	D					Hand Pen at 1.5m = 343kPa	
	2.10	D					Hand Pen at 2.0m = 366kPa	2
	2.60	D					Hand Pen at 2.5m = 400kPa	
							End of pit at 2.70 m	3
								4
								5

Remarks: Major water ingress encountered at 0.4m. No further progress in hard ground.

Stability:

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 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP136 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517981 - 131654 Level: 57.05		Date 21/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 2.30		Scale 1:25 Logged OA	
Client: West Sussex County Council									
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES	N=23	1.00	56.05		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.		
	0.60	ES							
	1.20	D							
	1.50	ES							
	2.00 2.00	B ES							
				2.30	54.75		MADE GROUND comprising gravel of dark reddish brown silty sandstone and occasional fragments of concrete, brick and ceramic.		
							End of pit at 2.30 m		
Remarks: Water seepage encountered at 1.6m. Water level risen from bottom of pit to 1.8m 20 minutes post excavation. No further progress in hard ground.									
Stability:									





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Trial Pit Log

Trialpit No

TP137

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517981 - 131622
Level: 56.86

Date
21/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

Depth
1.60

Scale
1:25

Logged
OA

Client: West Sussex County Council

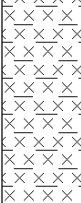
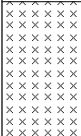
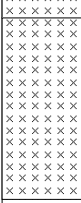
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
	0.60	ES						
	0.90	ES						
				1.10	55.76		Reworked mottled grey brown clayey SILT	1
							<i>Shingle encountered between 1.2 and 1.6m in the southern end of the trial pit.</i>	
	1.50 1.50	D ES		1.60	55.26		End of pit at 1.60 m	2
								3
								4
								5

Remarks: Water seepage encountered at 1.1m. Water level risen from bottom of pit to 1.4m 20 minutes post excavation. No further progress due to potential service within encountered shingle.

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP138 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 518014 - 131620 Level: 56.34		Date 20/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 2.00		Logged OA	

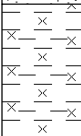
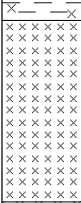
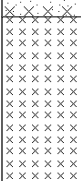
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10	ES	Refused 10/15/15/25	0.20	56.14	 	Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic. Stiff to very stiff mottled brown grey silty CLAY.		
	0.50	D					Hand Pen at 0.7m = 360kPa		
	1.10	D			0.90	55.44		Extremely weak reddish brown laminated ferruginous slightly sandy SILTSTONE with black iron staining.	1
					1.40	54.94		Extremely weak grey SILTSTONE.	
	1.70	D			2.00	54.34		End of pit at 2.00 m	2
								3	
								4	
								5	

Remarks: Soakage testing installed with 110 slotted HDPE pipe. Backfill: 0-0.3m arisings, 0.3-2m gravel. Surface water seepage from the northern face of pit encountered at 0.3m.

Stability:



 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log Trialpit No TP139 Sheet 1 of 1					
Project Name: Novartis				Project No. LP2441		Co-ords: 518013 - 131589 Level: 57.60		Date 20/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 2.80		Logged OA	

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES	N=21	0.30	57.30		Orange coarse SAND.	1
	0.50	ES		0.80	56.80		Stiff to very stiff grey silty CLAY.	
	0.60	D						
	1.00	D					Extremely weak reddish brown laminated ferruginous sandy SILTSTONE.	
				1.40	56.20		Stiff to very stiff grey clayey SILT.	
				1.80	55.80		Stiff to very stiff grey sandy clayey SILT.	
	2.20	B		2.20	55.40				Extremely weak reddish brown laminated ferruginous sandy SILTSTONE with black iron staining.
	2.60	D						
			2.80	54.80	----- End of pit at 2.80 m		3	
								4
								5

Remarks: No further progress in the hard ground. Trial pit remained dry and stable.

Stability:





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Trial Pit Log

Trialpit No

TP140

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517948 - 131589
Level: 56.70

Date
21/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
3.00

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
	0.40	ES						
	0.60	B						
	1.20	ES						1
	1.80	ES						
	2.10	ES		2.00	54.70		Stiff mottled grey brown clayey SILT.	2
	2.40	D						
	2.90	D		3.00	53.70			3
							End of pit at 3.00 m	4
								5

Remarks: Water seepage encountered at 0.7m

Stability:

AGS

Trial Pit Log

Trialpit No

TP141

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517917 - 131594

Level: 55.78

Date _____

27/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

Depth
0.10

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	Stratum No.
	Depth	Type	Results					
								1
								2
								3
								4
								5

Remarks:	No excavation carried out due to potential proximity to utility services. Only surface environmental sample taken.
----------	--

Stability:

AGS



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Trial Pit Log

Trialpit No

TP142

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517948 - 131556
Level: 56.36

Date
21/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
2.00

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=4	0.30	56.06		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	1
	0.50 0.60	ES D					Reworked mottled brown grey silty CLAY.	
	1.20	D		2.00	54.36		End of pit at 2.00 m	2
	1.80	D						
								3
								4
								5

Remarks: Water seepage encountered at 1.0m. No further progress due to increasing trial pit wall instability and major collapse.

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP143 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517980 - 131557 Level: 56.66		Date 25/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 1.80		Scale 1:25 Logged OA	
Client: West Sussex County Council									

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=72				Grass over TOPSOIL with occasional large concrete block and rootlets.	1
	0.40	ES		0.30	56.36		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
				0.50	56.16		Very stiff mottled grey brown silty CLAY.	
	1.20	D					Hand Pen at 1.2m = 316kPa	
	1.70	D		1.60	55.06		Extremely weak black stained reddish brown laminated ferruginous sandy SILTSTONE.	
				1.80	54.86	End of pit at 1.80 m		2
								3
								4
								5

Remarks: No further progress due to ground hardness. Trial pit remained dry and stable.

Stability:





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Trial Pit Log

Trialpit No

TP144

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 518014 - 131555
Level: 57.62

Date
25/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
3.10

Scale
1:25

Logged
OA

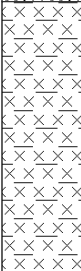
Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
	0.40	ES						
				0.60	57.02		Reworked mottled grey brown clayey SILT. <i>Vertical layer of land drain shingle encountered from 0.6m to 1.4m</i>	1
				1.40	56.22		Mottled grey brown sandy SILT.	2
	1.50	D						
				2.10	55.52		Mottled grey brown sandy gravelly SILT with gravel of extremely weak fragments of laminated reddish brown siltstone.	3
	2.70	D						
				3.10	54.52		End of pit at 3.10 m	4
								5

Remarks: Trial pit remained dry and stable.

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP145 Sheet 1 of 1		
Project Name: Novartis				Project No. LP2441		Co-ords: 518013 - 131524 Level: 58.71		Date 25/01/2021		
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25		
Client: West Sussex County Council						Depth 2.00		Logged OA		
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
	Depth	Type	Results							
	0.15	ES	N=23	0.30	58.41		Grass over TOPSOIL with rootlets.			1 2 3 4 5
	0.40	ES					Reworked grey brown clayey SILT.			
	0.85	D		Land drain encountered at 0.6m.						
	1.20	D		0.90	57.81		Stiff to very stiff mottled grey brown very clayey SILT.			
	1.90	D					Hand Pen at 1.5m = 306kPa			
				1.80	56.91		Extremely weak yellowish light brown slightly sandy clayey SILTSTONE.			
							End of pit at 2.00 m			
				2.00	56.71					

Remarks: No further progress due to ground hardness. Trial pit remained dry and stable.

Stability:



Trial Pit Log

Trialpit No

TP146

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517982 - 131491

Level: 57.28

Date _____

21/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

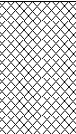
Dimensions
(m):

Depth
1.10

Scale
1:25

Logged
OA

Client: West Sussex County Council

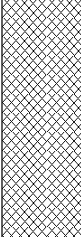
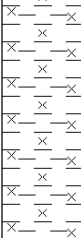
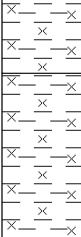
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES	Refused at 1m	0.45	56.82		Yellowish brown sandy gravelly MADE GROUND with gravel of subangular to subrounded fine to coarse concrete.	1
	0.50	ES					Black stained sandy silt MADE GROUND with occasional fragments of concrete.	
	0.80	D			Yellowish brown sandy SILT.			
					Extremely weak yellowish brown sandy SILTSTONE.			
	1.00	D						
					1.10	56.18			----- End of pit at 1.10 m
								2
								3
								4
								5

Remarks:	Water seepage encountered at 0.5m. No further progress due to ground hardness.
----------	--

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP147 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517771 - 131811 Level: 56.16		Date 18/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 3.00		Logged OA	

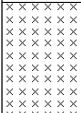
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	N=39	0.80	55.36		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and flint and occasional fragments of plastic and vinyl.	1
	0.70	ES					Stiff to very stiff mottled brown grey silty CLAY with occasional gravel of subangular to subrounded fine to coarse flint. <i>Hand Pen at 1.0m = 366kPa</i>	
	1.20	D		2.40	53.76		<i>Hand Pen at 2.0m = 230kPa</i>	2
	2.00	D					Very stiff mottled grey brown red silty CLAY. <i>Hand Pen at 2.5m = 326kPa</i>	
	2.50	D		3.00	53.16		<i>Hand Pen at 2.8m = 343kPa</i>	3
	2.90	D					End of pit at 3.00 m	
								4
								5

Remarks: Soakage testing installed with 110 slotted HDPE pipe. Backfill: 0-1m arisings, 1-3m gravel. Surface water seepage from the northern face of pit encountered at 0.3m.

Stability:



 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP148 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 517998 - 131444 Level: 57.31		Date 22/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 1.60		Scale 1:25 Logged OA	
Client: West Sussex County Council									

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	Refused 25				Grass over TOPSOIL with rootlets.	1
	0.35	ES		0.25	57.06		Red sandy gravel fill MADE GROUND.	
	0.50	ES		0.45	56.86		Reworked mottled yellowish brown grey sandy SILT.	
	0.60	D						
	0.90	D		0.80	56.51		Extremely weak reddish brown black iron stained laminated ferruginous very fine sandy SILTSTONE. <u>Land drain encountered at 0.8m.</u>	
				1.20	56.11		<u>Groundwater seepage encountered at 1.1m.</u>	
	1.40	D						
				1.60	55.71		Extremely weak grey gravelly SILT with gravel of laminated red iron stained SILTSTONE.	
							End of pit at 1.60 m	2 3 4 5

Remarks: No further progress due to ground hardness. Groundwater seepage encountered at 1.1m.

Stability:



Project Name: Novartis

Project No.
LP2441

Co-ords:	518044 - 131752
Level:	58.07

Date
27/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

Scale
1:25

Logged
OA

Client: West Sussex County Council

Depth
0.60

[illegible]

Remarks:	No further progress due to concrete encountered and difficulty in breaking out.
----------	---

Stability:

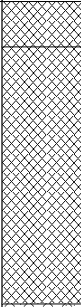
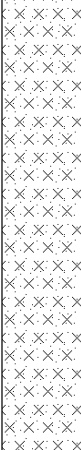
 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP150 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 518046 - 131738 Level: 57.63		Date 19/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 2.10		Scale 1:25 Logged OA	
Client: West Sussex County Council									

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10	ES	Refused 5/10/15/25	0.20	57.43		Grass over TOPSOIL with rootlets.	1
	0.30	ES					MADE GROUND comprising shingle. <i>Land drain pipe encountered at 0.3m</i>	
				0.50	57.13		Stiff to very stiff brown silty sandy CLAY. <i>Hand Pen at 0.7m = 313kPa</i>	
	1.10	B		0.90	56.73		Extremely weak reddish brown laminated ferruginous SANDSTONE with black iron staining.	
				1.40	56.23		Extremely weak grey SILTSTONE with silt.	
	1.80	B		2.10	55.53	End of pit at 2.10 m			2
								3
								4
								5

Remarks: Water seepage encountered at 1.0m. No further progress due to hard ground.

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP151 Sheet 1 of 1	
Project Name: Novartis				Project No. LP2441		Co-ords: 518013 - 131753 Level: 57.47		Date 20/01/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m):		Scale 1:25	
Client: West Sussex County Council						Depth 2.50		Logged OA	
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.20	ES	Refused 5/7/8/17/20/25	0.15	57.32		CONCRETE		
	0.70	ES		Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic, scrap metal, rebar and cables.					
	1.30	D		1.00	56.47		Stiff to very stiff mottled reddish brown grey clayey slightly sandy SILT.		
	1.80	D							
	2.10	D							
	2.40	D							
					2.50	54.97	End of pit at 2.50 m		
Remarks: No further progress in the hard ground. Trial pit remained dry and stable.									
Stability:									





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Trial Pit Log

Trialpit No

TP152

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 518029 - 131660
Level: 56.52

Date
20/01/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions (m):

Depth
1.60



Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.20	ES					Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic.	
	0.60	ES		0.40	56.12		MADE GROUND comprising gravel of black crystalline rock.	
				1.60	54.92		End of pit at 1.60 m	

1

2

3

4

5

Remarks: Major water flooding encountered at 1.0m. No further progress due to water flooding limiting vision within the trial pit.

Stability:

AGS

Borehole Log

Borehole No.

WS108

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517849 - 131693

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

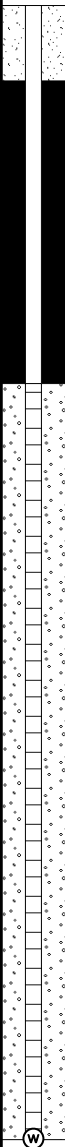
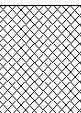
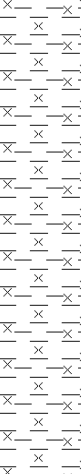
Level: 55.91

Scale
1:20

Client: West Sussex County Council

Dates: 20/01/2021 - 20/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	55.61		Demolition rubble over clayey sandy gravelly MADE GROUND.	
		0.50	ES					Soft blue grey and dark grey silty CLAY with abundant rootlets and slight organic odour.	
		1.00	ES	N=6 (0,0/1,2,2,1)					1
		1.00						Hand Pen at 1.1m =70kPa	
		1.25	D						
					1.60	54.31		Firm blue grey silty CLAY.	
					1.80	54.11		Hand Pen at 1.7m =230kPa	
		2.00	D	N=58 (9,12/14,14,14,16)				Extremely weak finely laminated interbedded orange brown mottled grey SILTSTONE and MUDSTONE	2
		2.00							
		2.50	D						
		3.00		54 (2,8/54 for 225mm)	3.00	52.91		End of borehole at 3.00 m	3
									4

Remarks

Borehole refused at 3.0m bgl. A monitoring well was installed to 3.0m bgl comprising 1.0m of plain pipe over 2.0m of slotted pipe and finished at surface with a raised steel cover. SPT hammer energy ratio 73.31%.

Borehole Log

Borehole No.

WS109

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517916 - 131755

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

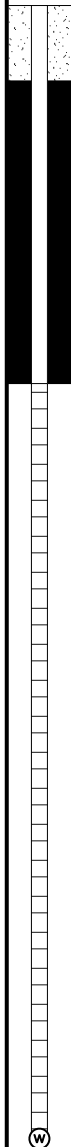
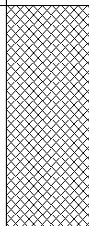
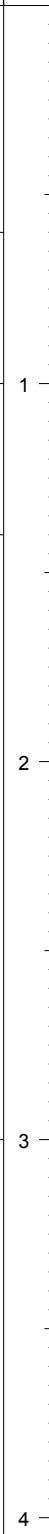
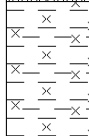
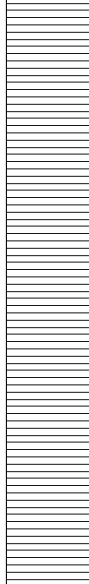
Level: 56.79

Scale
1:20

Client: West Sussex County Council

Dates: 22/01/2021 - 22/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	ES		0.60	56.19		Demolition rubble over sandy gravelly MADE GROUND. Gravel is flint, concrete and rare brick.	
		0.80	ES					Reddish brown slightly sandy clayey MADE GROUND. Gravel is fine to coarse crystalline rock.	
		1.00		N=18 (1,1/2,3,6,7)	1.00	55.79		Firm mottled orange and grey very silty CLAY with pockets of SILT. <i>Hand Pen at 1.1m = 170kPa</i>	
		1.20	D		1.40	55.39		Extremely weak orange and grey iron stained dark brown silty MUDSTONE. <i>Hand Pen at 1.5m exceeds 500kPa</i>	
		1.90	D						
		2.00		N=32 (4,4/5,6,10,11)					
		2.50	D					<i>Hand Pen at 2.5m exceeds 500kPa</i>	
		3.00		65 (4,9/65 for 225mm)	3.00	53.79		End of borehole at 3.00 m	

Remarks

Borehole refused at 3.0m bgl. A monitoring well was installed to 3.0m bgl comprising 1.0m of plain pipe over 2.0m of slotted pipe and finished at surface with a raised steel cover. SPT hammer energy ratio 73.31%.



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Borehole Log

Borehole No.

WS110

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 518029 - 131741

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

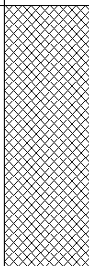
Level: 56.83

Scale
1:20

Client: West Sussex County Council

Dates: 21/01/2021 - 21/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES	50 (6,8/50 for 210mm)	0.70	56.13		Demolition rubble over light brown sandy gravelly MADE GROUND. Gravel is fine to coarse flint and concrete with occasional tile, plastic and brick. <u>Water seepage at 0.2m bgl</u>	1
		0.80 0.80	D ES					Brown to orange brown clayey slightly sandy gravelly MADE GROUND. Gravel is flint and concrete.	
		1.00 1.10	D							Very stiff orange brown mottled grey finely laminated silty CLAY.
					1.25 1.30	55.58 55.53		<u>Hand Pen at 1.2m exceeds 400kPa</u> Extremely weak grey mottled orange brown very slightly sandy SILTSTONE. Sand is fine. End of borehole at 1.30 m	
									2
									3
									4

Remarks

Borehole refused at 1.3m bgl and was backfilled with arisings on completion. Groundwater encountered at 0.2m bgl. SPT hammer energy ratio 73.31%.



Borehole Log

Borehole No.

WS111

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517980 - 131719

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

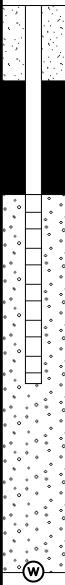
Level: 57.15

Scale
1:20

Client: West Sussex County Council

Dates: 21/01/2021 - 21/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.25	56.90		Demolition rubble over sandy gravelly MADE GROUND. Gravel is fine to medium sub-rounded flint, fine to medium concrete and rare fine brick and mortar.	1
								MADE GROUND comprising concrete rubble.	
		1.00		N=10 (3,4/4,2,2,2)	1.10	56.05		MADE GROUND comprising concrete and flint gravel with pockets of reworked brown mottled orange and grey silty clay with partings of clayey silt.	2
		2.20 - 2.40	D		2.10	55.05		Extremely weak mottled grey and orange laminated sandy MUDSTONE with lenses of clayey siltstone.	3
		2.60		50 (12,40/50 for 25mm)	2.60	54.55		End of borehole at 2.60 m	

Remarks

Borehole refused at 2.6m bgl. A monitoring well installed to 1.5m bgl comprising 0.5m of slotted pipe over 1.0m of plain pipe and finished with a raised steel cover at surface. Groundwater was encountered at 0.90m bgl. SPT hammer energy ratio 73.31%.



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Borehole Log

Borehole No.

WS112

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517914 - 131689

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

Level: 56.37

Scale
1:20

Client: West Sussex County Council

Dates: 20/01/2021 - 20/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES					Demolition rubble over sandy gravelly MADE GROUND. Gravel is concrete, brick and flint with rare wood and blacktop.	
		1.00		N=17 (4,4/3,4,5,5)	1.10	55.27			1
		2.00		N=51 (3,7/10,14,15,12)				Stiff to very stiff orange mottled dark orange brown and grey finely laminated clayey SILT. <u>Hand Pen at 1.5m exceeds 400kPa</u>	2
		2.60		52 (6,10/52 for 150mm)	2.60	53.77		<u>Hand Pen at 2.2m =370kPa</u> End of borehole at 2.60 m	3
									4

Remarks

Borehole refused at 2.6m bgl and was backfilled with arisings on completion. SPT hammer energy ratio 73.31%.





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Borehole Log

Borehole No.

WS113

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517915 - 131654

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

Level: 56.70

Scale
1:20

Client: West Sussex County Council

Dates: 20/01/2021 - 20/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES					Demolition rubble over orange brown sandy gravelly MADE GROUND. Gravel is concrete, brick and flint.	
		0.70	ES		0.60	56.10		Reddish brown clayey gravelly MADE GROUND. Gravel is crystalline rock.	
					0.90	55.80		Stiff very stiff grey mottled orange clayey SILT.	1
		1.30	D					Hand Pen at 1.3m = 360kPa	
					1.55	55.15		Extremely to very weak grey mottled orange and dark orange laminated clayey SILTSTONE.	
		1.90	D		1.90	54.80		Hand Pen at 1.7m exceeds 500kPa	
								End of borehole at 1.90 m	2
									3
									4

Remarks

Borehole refused at 1.9m bgl. A monitoring well was installed to 1.9m bgl comprising 0.9m of plain pipe over 1.0m of slotted pipe finished at ground level with a raised steel cover. No SPT tests undertaken due to failure of the equipment on site.



Borehole Log

Borehole No.

WS115

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517979 - 131591

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

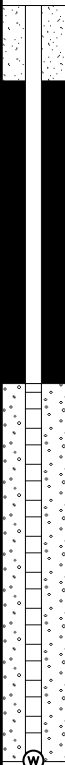
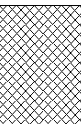
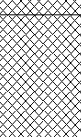
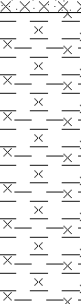
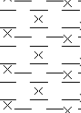
Level: 56.31

Scale
1:20

Client: West Sussex County Council

Dates: 21/01/2021 - 21/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES					Demolition rubble over orange brown slightly clayey sandy gravelly MADE GROUND. Gravel is fine to coarse flint, concrete and mortar with occasional plastic, fine brick and fabric.	
		0.45	ES		0.35	55.96		<i>Slight organic odour noted below 0.3m</i> Orange brown mottled black/dark brown sandy gravelly clayey MADE GROUND. Gravel is flint concrete and siltstone.	
		0.90	D		0.70	55.61		Firm mottled orange brown and grey slightly sandy SILT with partings of fine silty sand and occasional fine siltstone gravel.	
		1.00		N=17 (4,6/5,4,4,4)	1.00	55.31		Very stiff orange mottled grey and speckled black silty CLAY with fine siltstone gravel. <i>Hand Pen at 1.1m exceeds 500kPa</i>	1
		1.50	D					<i>Hand Pen at 1.5m exceeds 400kPa</i>	
		1.90	D		1.80	54.51		Extremely weak finely laminated orange brown and grey sandy SILTSTONE.	
		2.00		40 (7,16/50 for 50mm)	2.00	54.31		End of borehole at 2.00 m	2
									3
									4

Remarks

Borehole refused at 2.0m bgl. A monitoring well was installed to 2.0m bgl comprising 1.0m of plain pipe over 1.0m of slotted pipe and was finished at ground level with raised steel cover. SPT hammer energy ratio 73.31%.

Borehole Log

Borehole No.

WS116

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 518015 - 131655

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

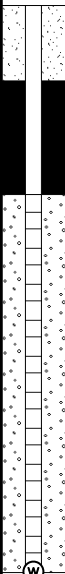
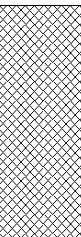
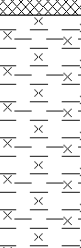
Level: 56.63

Scale
1:20

Client: West Sussex County Council

Dates: 22/01/2021 - 22/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES					Demolition rubble over grey brown silty sandy gravelly MADE GROUND. Gravel is concrete, flint, brick, blacktop and rare metal wire.	1
								<u>Water seepage at 0.3m bgl</u>	
		0.80	D		0.65	55.98		Very stiff orange and grey finely laminated silty CLAY with silt partings and bands of extremely weak siltstone.	
		1.00		N=81 (5,7/12,30,21,18)				<u>Hand Pen at 0.9m exceeds 500kPa</u>	
		1.40	D		1.30	55.33		Stiff friable grey SILT.	2
					1.50	55.13		End of borehole at 1.50 m	
									3
									4

Remarks

Borehole refused at 1.5m bgl. A monitoring well was installed to 1.5m bgl comprising 0.5m of plain pipe over 1.0m of slotted pipe. Groundwater was encountered at 0.3m bgl. SPT hammer energy ratio 73.31%.



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The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
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Borehole Log

Borehole No.

WS117

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517948 - 131687

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

Level:

Scale
1:20

Client: West Sussex County Council

Dates: 21/01/2021 - 21/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.05	ES					Demolition rubble over pinkish brown sandy gravelly MADE GROUND. Gravel is concrete and flint with occasional fine brick and rare wood fragments.	
								<i>Water seepage at 0.8m bgl</i>	
		1.00		N=25 (8,7/5,4,6,10)	0.95			Stiff mottled orange and grey and locally darkly iron stained slightly sandy silty CLAY.	1
								<i>Hand Pen at 1.1m exceeds 400kPa</i>	
		1.30	D					<i>Hand Pen at 1.5m exceeds 500kPa</i>	
					1.60			Extremely weak becoming very weak orange brown and pale grey iron stained dark brown slightly sandy SILTSTONE.	
		1.90	D	65 (16,19/65 for 225mm)	1.90			End of borehole at 1.90 m	2
		1.90							3
									4

Remarks

Borehole refused at 1.9m bgl and was backfilled with arisings on completion. Groundwater encountered at 0.8m bgl. SPT hammer energy ratio 73.31%.



Borehole Log

Borehole No.

WS118

Sheet 1 of 1

Project Name: Novartis

Project No.
LP2441

Co-ords: 517730 - 131819

Hole Type
WS

Location: Parsonage Road, Horsham, RH12 4AN

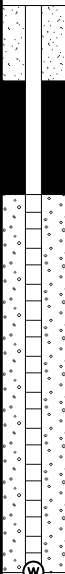
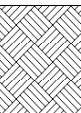
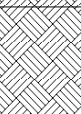
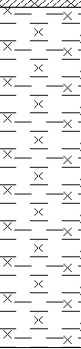
Level:

Scale
1:20

Client: West Sussex County Council

Dates: 22/01/2021 - 22/01/2021

Logged By
ADC

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.25	ES		0.30			Grass over brown silty clayey TOPSOIL with rootlets.	1
					0.60			Brown silty clayey SUBSOIL.	
		0.90	D					Firm becoming stiff orange and grey silty CLAY and clayey silt with rare fine siltstone gravel.	
		1.00		N=19 (2,3/4,4,5,6)				Hand Pen at 0.9m = 140kPa	
		1.40	D		1.50			Hand Pen at 1.3m exceeds 500kPa	2
								End of borehole at 1.50 m	
									3
									4

Remarks

Borehole was terminated at 1.5m bgl. A monitoring well was installed to 1.5m bgl and comprised 0.5m of plain pipe over 1.0m of slotted pipe and was finished at ground level with a raised steel cover. SPT hammer energy ratio 73.31%.



Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH101

Sheet 1 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 517982 - 131523

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 56.93

Scale
1:20

Client: West Sussex County Council

Dates: 25/01/2021 - 27/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		1.20 - 1.50	D							MADE GROUND comprising light grey sandy gravel with fine to coarse flint and concrete.	1
		1.50 - 3.00	C				1.50	55.43		MADE GROUND comprising loose cobbles of concrete and flint. <i>Electrical wire recovered within arisings from 1.5m to 3.0m.</i>	2
		3.00 - 3.90	C				3.45	53.48		CONCRETE slab reinforced with rebar.	3
		3.90 - 5.10	C								4
Continued on next sheet											

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Groundwater recorded at 5.5m upon completion. Two monitoring wells installed to 14m and 2m, comprising 8m plain pipe over 6m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.



Rotary Core Log

Borehole No.

BH101

Sheet 2 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 517982 - 131523

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

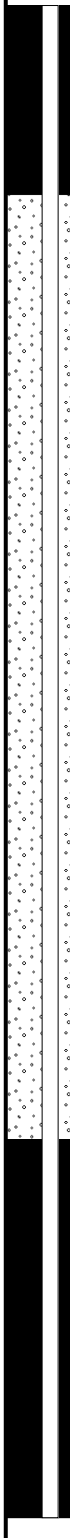
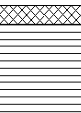
Level: 56.93

Scale
1:20

Client: West Sussex County Council

Dates: 25/01/2021 - 27/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		4.05					4.05	52.88		Very weak yellowish greenish grey slightly fine grain sandy silty MUDSTONE interbedded with light grey laminated SANDSTONE beds 3-5cm thick.	
		3.90 - 5.10		100	97	94				Horizontal fracture at 4.48m. Horizontal fracture at 4.51m.	
		5.10 - 6.60	C							Horizontal fracture at 4.98m.	5
		5.10 - 6.60		100	100	100	5.50	51.43		Very weak greenish grey clayey SILTSTONE.	
		6.60 - 8.10	C				6.50	50.43		Very weak grey fine grain sandy MUDSTONE. Horizontal fracture at 6.50m.	
		6.60 - 8.10		100	96	73	6.70	50.23		Very weak greenish grey clayey SILTSTONE. Horizontal fracture at 6.70m.	
		6.60 - 8.10					7.05	49.88		Weak grey to brownish yellow medium to coarse grained SANDSTONE with occasional coal deposits. Horizontal fracture at 7.15m.	7
										Horizontal fracture at 7.65m.	
										Horizontal fracture at 7.75m.	
							7.90	49.03		Horizontal fracture at 7.85m. Weak light grey laminated clayey fine grain	8

Continued on next sheet

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Groundwater recorded at 5.5m upon completion. Two monitoring wells installed to 14m and 2m, comprising 8m plain pipe over 6m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

Rotary Core Log

Borehole No.

BH101

Sheet 3 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 517982 - 131523

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

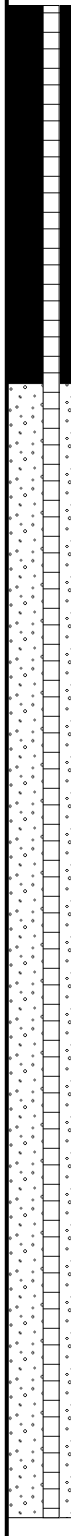
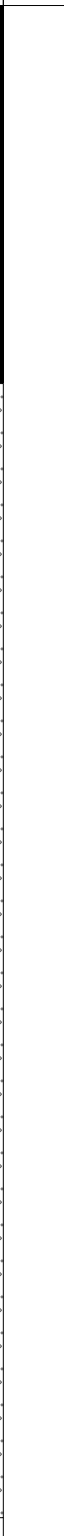
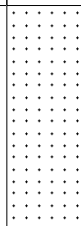
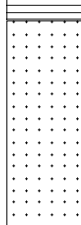
Level: 56.93

Scale
1:20

Client: West Sussex County Council

Dates: 25/01/2021 - 27/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		8.10 - 9.60	C				8.60	48.33		SANDSTONE. <u>Horizontal fracture at 8.00m.</u>	9
										<u>Horizontal fracture at 8.48m.</u> <u>Horizontal fracture at 8.58m.</u> Weak dark grey fine grain sandy MUDSTONE.	
		8.10 - 9.60		100	100	88				<u>Horizontal fracture at 8.90m.</u> <u>Horizontal fracture at 9.10m.</u> <u>Horizontal fracture at 9.20m.</u>	
							9.35	47.58		Weak light grey laminated fine grain SANDSTONE with occasional reddish brown grey ferruginous zones.. <u>Horizontal fracture at 9.40m.</u> <u>Horizontal fracture at 9.45m.</u> <u>Sub-horizontal fracture at 9.5m.</u>	
		9.60 - 11.10	C							<u>Horizontal fracture at 9.85m.</u>	
										<u>Horizontal fracture at 10.32m.</u> <u>Horizontal fracture at 10.45m.</u>	
		9.60 - 11.10		100	96	96				<u>Horizontal fracture at 10.99m.</u> <u>Horizontal fracture at 11.07m.</u>	11
										<u>Horizontal fracture at 11.3m.</u> <u>Horizontal fracture at 11.4m.</u>	
		11.10 - 12.60	C				11.60	45.33		Extremely weak to weak dark grey MUDSTONE. <u>Horizontal fracture at 11.6m.</u>	
		11.10 - 12.60		100	100	94					

Continued on next sheet

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Groundwater recorded at 5.5m upon completion. Two monitoring wells installed to 14m and 2m, comprising 8m plain pipe over 6m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.



Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH101

Sheet 4 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 517982 - 131523

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 56.93

Scale
1:20

Client: West Sussex County Council

Dates: 25/01/2021 - 27/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		12.60 - 14.10	C				12.80	44.13		Horizontal fracture at 12.05m.	13
										Horizontal fracture at 12.25m.	
		12.60 - 14.10		100	100	90	13.55	43.38		Very weak greenish dark grey clayey SILTSTONE. Horizontal fracture at 12.95m.	
										Weak dark grey MUDSTONE.	
		14.10 - 15.60	C				14.40	42.53		Horizontal fracture at 13.99m.	14
										Horizontal fracture at 14.25m.	
		14.10 - 15.60		100	100	92				Weak light to dark grey clayey fine grain SANDSTONE. Horizontal fracture at 14.46m.	
										Horizontal fracture at 14.96m.	
		15.60 - 17.10	C							Horizontal fracture at 15.32m.	15
										Horizontal fracture at 15.75m.	
										Horizontal fracture at 15.9m.	
										Horizontal fracture at 15.9m.	
Continued on next sheet											16

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Groundwater recorded at 5.5m upon completion. Two monitoring wells installed to 14m and 2m, comprising 8m plain pipe over 6m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

AGS



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Dorking, Surrey RH4 1XA
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Rotary Core Log

Borehole No.

BH101

Sheet 5 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 517982 - 131523

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

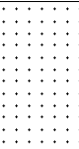
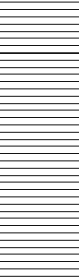
Level: 56.93

Scale
1:20

Client: West Sussex County Council

Dates: 25/01/2021 - 27/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		15.60 - 17.10	C	93	100	85	16.40	40.53		Weak dark grey fine grain sandy MUDSTONE. <u>Horizontal fracture at 16.45m.</u>	17
		16.80	40.13		Weak greenish dark grey silty MUDSTONE. <u>Horizontal fracture at 16.95m.</u>						
		17.10	39.83		Weak dark grey MUDSTONE. 						



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Tel: 01306 646510
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Rotary Core Log

Borehole No.

BH101

Sheet 6 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 517982 - 131523

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 56.93

Scale
1:20

Client: West Sussex County Council

Dates: 25/01/2021 - 27/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							20.10	36.83		----- End of borehole at 20.10 m	
											21
											22
											23
											24

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Groundwater recorded at 5.5m upon completion. Two monitoring wells installed to 14m and 2m, comprising 8m plain pipe over 6m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.



Rotary Core Log

Borehole No.

BH102

Sheet 1 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518014 - 131688

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.13

Scale
1:20

Client: West Sussex County Council

Dates: 28/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		1.20 - 1.50	D				1.35	55.78		MADE GROUND comprising light brown gravelly silty clayey gravel with fine to coarse subangular to subrounded flint.	1
		1.50 - 2.00	U				1.50	55.63		Hand Pen at 1.3m =30kPa Dark grey silty CLAY.	
		2.00 - 2.50	U				2.00	55.13		Hand Pen at 1.45m =86kPa Undisturbed sample.	2
		2.50 - 4.00	C				2.50	54.63		Undisturbed sample.	
							2.70	54.43		Extremely weak light grey clayey fine grain SANDSTONE.	
							3.00	54.13		Horizontal fracture at 2.66m. Extremely weak light grey fine grained sandy MUDSTONE. Horizontal fracture at 2.73m. Horizontal fracture at 2.79m. Horizontal fracture at 2.86m. Horizontal fracture at 2.98m.	3
		2.50 - 4.00		90	73	54				Extremely weak light grey laminated clayey fine grain SANDSTONE with orange iron staining present Horizontal fracture at 3.10m.	
							3.55	53.58		Horizontal fracture at 3.34m. Extremely weak weak light grey fine grained sandy MUDSTONE.	
							3.95	53.18		Horizontal fracture at 3.78m.	4
		4.00 - 5.50	C							Continued on next sheet	

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing. No groundwater encountered during drilling and upon completion. Potentially masked by drilling flush used in rotary coring. A monitoring well installed to 20.5m comprising 17.5m plain pipe over 3m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

Rotary Core Log

Borehole No. _____

BH102

Sheet 2 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518014 - 131688

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.13

Scale
1:20

Client: West Sussex County Council

Dates: 28/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description
				TCR	SCR	RQD				
W-1		4.00 - 5.50		100	100	97	4.10	53.03	.....	Very weak fine to medium grain SANDSTONE.
									.....	Very weak to weak grey silty MUDSTONE.
									.....	Horizontal fracture at 4.10m.
									.....	Horizontal fracture at 4.17m.
									.....	Horizontal fracture at 4.26m.
									.....	Horizontal fracture at 4.36m.
										
										
										
										
W-1		5.50 - 7.00	C				6.00	51.13	.....	Horizontal fracture at 5.67m.
										
									.....	Horizontal fracture at 5.92m.
									.....	Horizontal fracture at 5.96m.
									.....	Weak fine to coarse grain SANDSTONE with occasional coal deposits.
									.....	Horizontal fracture at 6.10m.
										
									.....	Horizontal fracture at 6.62m.
									.....	Horizontal to sub-horizontal fracture zone present from 6.8m to 7.0m.
									.....	Vertical joint and horizontal fracture zone from 7.0m to 7.66m.
W-1		7.00 - 8.50	C				7.83	49.30	.....	Horizontal fracture at 7.66m.
										
										
										
										
										
										
										
										
										
W-1		7.00 - 8.50		100	90	62			.....	Weak dark grey silty MUDSTONE.
									.....	Horizontal fracture at 7.83m.
										
										
										
										
										
										
										
										
Continued on next sheet										

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing. No groundwater encountered during drilling and upon completion. Potentially masked by drilling flush used in rotary coring. A monitoring well installed to 20.5m comprising 17.5m plain pipe over 3m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

AGS



Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH102

Sheet 3 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518014 - 131688

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.13

Scale
1:20

Client: West Sussex County Council

Dates: 28/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		8.50 - 10.00	C				8.60	48.53		Horizontal fracture at 8.42m.	
										Weak light grey laminated fine grained SANDSTONE.	
										Horizontal fracture at 8.64m.	
										Horizontal fracture at 9.00m.	9
		8.50 - 10.00		100	100	1				Horizontal fracture at 9.65m.	
										Horizontal fracture at 9.77m.	
		10.00 - 11.50	C							Horizontal fracture at 10.05m.	10
										Horizontal fracture at 10.28m.	
										Horizontal fracture at 10.53m.	
		10.00 - 11.50		97	97	91	11.00	46.13		Weak dark grey silty MUDSTONE.	11
										Horizontal fracture at 11.14m.	
										Horizontal fracture at 11.20m.	
		11.50 - 13.00	C				11.40	45.73		Weak dark grey clayey fine grain SANDSTONE with occasional zones of lamination.	
										Continued on next sheet	12

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing. No groundwater encountered during drilling and upon completion. Potentially masked by drilling flush used in rotary coring. A monitoring well installed to 20.5m comprising 17.5m plain pipe over 3m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.





Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH102

Sheet 4 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518014 - 131688

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.13

Scale
1:20

Client: West Sussex County Council

Dates: 28/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		11.50 - 13.00		100	100	98					
		13.00 - 14.50	C								13
		13.00 - 14.50		100	100	95					14
		14.50 - 16.00	C								
		14.50 - 16.00		100	93	84				Horizontal fracture at 14.60m.	
		14.50 - 16.00								Horizontal fracture at 15.10m.	15
		14.50 - 16.00					15.70	41.43		Weak dark grey silty MUDSTONE. Horizontal fracture at 15.70m.	
		14.50 - 16.00								Horizontal fracture at 15.90m.	
		16.00 - 17.50	C								16

Continued on next sheet

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing. No groundwater encountered during drilling and upon completion. Potentially masked by drilling flush used in rotary coring. A monitoring well installed to 20.5m comprising 17.5m plain pipe over 3m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

AGS



Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH102

Sheet 5 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518014 - 131688

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.13

Scale
1:20

Client: West Sussex County Council

Dates: 28/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description		
				TCR	SCR	RQD						
1		16.00 - 17.50		100	94	86	16.40	40.73		Horizontal fracture at 16.30m.		
										Horizontal fracture at 16.39m.		
										Weak dark grey MUDSTONE.		
		16.00 - 17.50		100	94	86	16.65	40.48		Weak dark grey silty MUDSTONE.		
		17.50 - 19.00	C								Horizontal fracture at 17.02m.	17
17.50 - 19.00									Horizontal fracture at 17.22m.			
17.50 - 19.00									Horizontal fracture at 17.40m.			
19.00 - 20.50	C											
19.00 - 20.50												
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Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing. No groundwater encountered during drilling and upon completion. Potentially masked by drilling flush used in rotary coring. A monitoring well installed to 20.5m comprising 17.5m plain pipe over 3m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.





Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH102

Sheet 6 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518014 - 131688

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

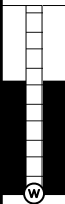
Level: 57.13

Scale
1:20

Client: West Sussex County Council

Dates: 28/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							20.20	36.93		Weak blueish dark grey clayey SILTSTONE.	
							20.50	36.63		End of borehole at 20.50 m	
											21
											22
											23
											24

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 1.5m and rotary coring to full depth. Drilled in 146mm diameter casing. No groundwater encountered during drilling and upon completion. Potentially masked by drilling flush used in rotary coring. A monitoring well installed to 20.5m comprising 17.5m plain pipe over 3m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.



Rotary Core Log

Borehole No.

BH103

Sheet 1 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518011 - 131785

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

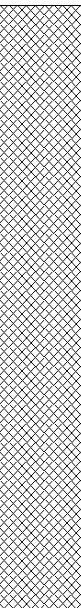
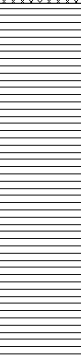
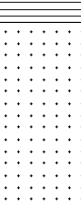
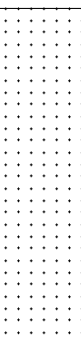
Level: 57.37

Scale
1:20

Client: West Sussex County Council

Dates: 29/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		1.30 - 2.00	D				1.60	55.77		MADE GROUND comprising loose gravel of flint cobbles.	1
		2.00 - 3.50	C							Very weak greenish grey silty MUDSTONE with brownish red ferruginous zones.	2
		2.00 - 3.50		100	86	77	2.60	54.77		Weak to moderately strong yellowish grey coarse SANDSTONE with laminations.	3
		3.50 - 5.00	C				3.10	54.27		Very weak yellowish grey MUDSTONE interbedded with 3-4mm fine grain SANDSTONE beds.	4

Continued on next sheet

Remarks

Hand dug pit to 1.3m followed by rotary coring to full depth. Drilled in 146mm diameter casing. Drilling flush used during rotary coring encountered loss from fractures below 5.5m. Initial groundwater encountered at the base of the hand dug pit at 1.3m. On completion groundwater was recorded at 3.2m and rising to 2.2m after 30 minutes. Two monitoring wells installed to 20m and 2m, comprising 17m plain pipe over 3m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

AGS



Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH103

Sheet 2 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518011 - 131785

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.37

Scale
1:20

Client: West Sussex County Council

Dates: 29/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		3.50 - 5.00		83	83	68	4.60	52.77		Horizontal fracture at 4.0m.	5
										Horizontal fracture at 4.13m.	
										Horizontal fracture at 4.34m.	
										Horizontal fracture at 4.44m.	
		5.00 - 6.50	C							Very weak greenish clayey SILTSTONE.	
										Horizontal fracture at 4.68m.	
										Horizontal fracture at 4.73m.	
		5.00 - 6.50		100	100	70	5.70	51.67		Weak to moderately strong dark grey silty MUDSTONE.	
							6.00	51.37			6
										Weak greenish clayey SILTSTONE.	
		6.50 - 8.00	C				6.40	50.97		Weak light grey coarse grained SANDSTONE.	7
										Horizontal fracture at 6.6m.	
										Horizontal fracture at 6.66m.	
		6.50 - 8.00		100	93	73				Horizontal fracture at 7.13m.	
										Horizontal fracture at 7.3m.	
										Horizontal fracture at 7.48m.	
		8.00 - 9.50	C				7.75	49.62		Horizontal fracture at 7.74m.	8
										Weak light grey silty clayey fine grained SANDSTONE with occasional coal deposits.	
										Horizontal fracture at 7.92m.	

Continued on next sheet

Remarks

Hand dug pit to 1.3m followed by rotary coring to full depth. Drilled in 146mm diameter casing. Drilling flush used during rotary coring encountered loss from fractures below 5.5m. Initial groundwater encountered at the base of the hand dug pit at 1.3m. On completion groundwater was recorded at 3.2m and rising to 2.2m after 30 minutes. Two monitoring wells installed to 20m and 2m, comprising 17m plain pipe over 3m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.





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The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH103

Sheet 3 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518011 - 131785

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.37

Scale
1:20

Client: West Sussex County Council

Dates: 29/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
BH103		8.00 - 9.50	C	100	66	32	8.40	48.97		Horizontal fracture at 8.05m.	9
										Weak grey laminated fine grain SANDSTONE. Horizontal fracture at 8.45m.	
										Horizontal fracture at 8.75m.	
										Horizontal fracture at 8.95m.	
										Horizontal fracture at 9.2m.	
										Horizontal fracture at 9.65m.	
		9.50 - 11.00	C							Horizontal fracture at 10.05m.	10
										Horizontal fracture at 10.5m.	
										Horizontal fracture at 10.9m.	
										Weak dark grey silty MUDSTONE.	
										Horizontal fracture at 11.2m.	
										Horizontal fracture at 11.5m.	
		11.00 - 12.50	C				10.95	46.42		Horizontal fracture at 11.82m.	11
										Very weak to weak dark grey clayey	
		11.00 - 12.50	C	100	68	68	11.90	45.47			12

Continued on next sheet

Remarks

Hand dug pit to 1.3m followed by rotary coring to full depth. Drilled in 146mm diameter casing. Drilling flush used during rotary coring encountered loss from fractures below 5.5m. Initial groundwater encountered at the base of the hand dug pit at 1.3m. On completion groundwater was recorded at 3.2m and rising to 2.2m after 30 minutes. Two monitoring wells installed to 20m and 2m, comprising 17m plain pipe over 3m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.



Rotary Core Log

Borehole No. _____

BH103

Sheet 4 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518011 - 131785

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.37

Scale
1:20

Client: West Sussex County Council

Dates: 29/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description			
				TCR	SCR	RQD							
		12.50 - 14.00	C				12.60	44.77	xxxxxx Horizontal fracture at 11.96m. xxxxxx Horizontal fracture at 12.08m. xxxxxx Horizontal fracture at 12.17m. xxxxxx Horizontal fracture at 12.23m. xxxxxx Horizontal fracture at 12.41m.	SILTSTONE.			
		12.50 - 14.00		100	96	96					Weak dark grey silty MUDSTONE.		
											Horizontal fracture at 12.9m.		
											Horizontal fracture at 13.16m.		
											Horizontal fracture at 13.7m.		
		14.00 - 15.50	C						14.80	42.57		Horizontal fracture at 14.15m.	
		14.00 - 15.50		100	93	69							Weak dark grey laminated clayey fine grain SANDSTONE.
													Horizontal fracture at 14.8m.
							Horizontal fracture at 14.97m.						
							Horizontal fracture at 15.3m.						
15.50 - 17.00	C				16.00	41.37							
Continued on next sheet													

Remarks

Hand dug pit to 1.3m followed by rotary coring to full depth. Drilled in 146mm diameter casing. Drilling flush used during rotary coring encountered loss from fractures below 5.5m. Initial groundwater encountered at the base of the hand dug pit at 1.3m. On completion groundwater was recorded at 3.2m and rising to 2.2m after 30 minutes. Two monitoring wells installed to 20m and 2m, comprising 17m plain pipe over 3m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

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Rotary Core Log

Borehole No.

BH103

Sheet 5 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518011 - 131785

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

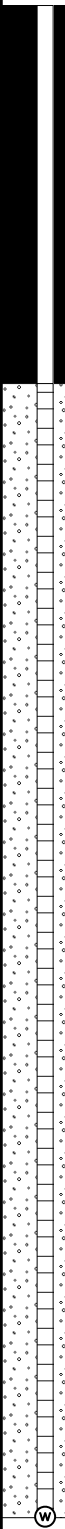
Level: 57.37

Scale
1:20

Client: West Sussex County Council

Dates: 29/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		15.50 - 17.00		100	93	93				Weak dark grey silty MUDSTONE. <u>Horizontal fracture at 16.0m.</u>	
										<u>Horizontal fracture at 16.55m.</u>	
										<u>Horizontal fracture at 16.55m.</u>	
										<u>Horizontal fracture at 16.65m.</u>	
		17.00 - 18.00	C								17
										<u>Horizontal fracture at 17.33m.</u>	
		17.00 - 18.00		100	1	92				<u>Horizontal fracture at 17.53m.</u>	
		18.00 - 19.50	C							<u>Horizontal fracture at 17.96m.</u>	18
		18.00 - 19.50		96	93	86					
							19.30	38.07		Weak dark grey silty slightly sandy MUDSTONE. <u>Horizontal fracture at 19.35m.</u> <u>Horizontal fracture at 19.4m.</u>	
		19.50 - 20.00	C								
		19.50 - 20.00		100	1	100				<u>Horizontal fracture at 19.75m.</u>	
										Continued on next sheet	20

Remarks

Hand dug pit to 1.3m followed by rotary coring to full depth. Drilled in 146mm diameter casing. Drilling flush used during rotary coring encountered loss from fractures below 5.5m. Initial groundwater encountered at the base of the hand dug pit at 1.3m. On completion groundwater was recorded at 3.2m and rising to 2.2m after 30 minutes. Two monitoring wells installed to 20m and 2m, comprising 17m plain pipe over 3m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.



Leap Environmental Ltd
The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Rotary Core Log

Borehole No.

BH103

Sheet 6 of 6

Project Name: Novartis

Project No.
LP2441

Co-ords: 518011 - 131785

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 57.37

Scale
1:20

Client: West Sussex County Council

Dates: 29/01/2021 - 29/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / Fl	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							20.30	37.07		End of borehole at 20.30 m	
											21
											22
											23
											24

Remarks

Hand dug pit to 1.3m followed by rotary coring to full depth. Drilled in 146mm diameter casing. Drilling flush used during rotary coring encountered loss from fractures below 5.5m. Initial groundwater encountered at the base of the hand dug pit at 1.3m. On completion groundwater was recorded at 3.2m and rising to 2.2m after 30 minutes. Two monitoring wells installed to 20m and 2m, comprising 17m plain pipe over 3m of slotted pipe and 1m plain over 1m slotted. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.



Rotary Core Log

Borehole No.

BH104

Sheet 1 of 5

Project Name: Novartis

Project No.
LP2441

Co-ords: 517882 - 131721

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

Level: 56.42

Scale
1:20

Client: West Sussex County Council

Dates: 14/01/2021 - 15/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							0.50	55.92		Reworked yellow brown silty CLAY.	
		1.20 - 1.50	D							Stiff yellow brown grey mottled silty CLAY.	1
		1.50 - 2.10	D				1.80	54.62		Hand Pen at 1.4m =216kPa Hand Pen at 1.7m =183kPa	
		2.10 - 3.60	C				2.50	53.92		Extremely weak orangish brown grey clayey silty SANDSTONE becoming more clayey with depth. Horizontal fracture at 2.15m. Horizontal fracture at 2.25m. Horizontal fracture at 2.35m. Vertical fracture from 2.4m to 2.5m.	2
		2.10 - 3.60		100	86	55				Extremely weak brown to dark grey clayey slightly sandy SILTSTONE. Horizontal fracture at 2.70m. Horizontal fracture at 2.77m. Horizontal fracture at 2.90m. Horizontal fracture at 2.95m. Horizontal fracture at 2.99m. Horizontal fracture at 3.04m. Horizontal fracture at 3.45m.	3
		3.60 - 5.10	C				3.70	52.72		Extremely weak dark grey laminated slightly sandy silty MUDSTONE. Horizontal fracture at 3.70m.	4
										Continued on next sheet	

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 2.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Initial groundwater strike encountered at around 16m and rising to 13.7m 45 minutes after completion of drilling. A monitoring well installed to 16m comprising 10m plain pipe over 6m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

Rotary Core Log

Borehole No. _____

BH104

Sheet 2 of 5

Project Name: Novartis

Project No.
LP2441

Co-ords: 517882 - 131721

Hole Type	RC
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Location: Parsonage Road, Horsham, RH12 4AN

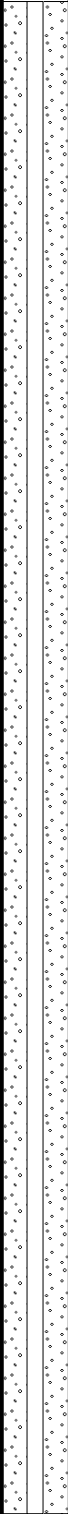
Level: 56.42

Scale
1:20

Client: West Sussex County Council

Dates: 14/01/2021 - 15/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description																					
				TCR	SCR	RQD																									
		3.60 - 5.10	C	100	90	82	4.55	51.87		Extremely weak dark grey laminated clayey silty medium grain SANDSTONE <u>Horizontal fracture at 4.70m.</u> <u>Horizontal fracture at 4.80m.</u> <u>Horizontal fracture at 4.87m.</u> <u>Horizontal fracture at 5.00m.</u>																					
									5.10 - 6.60			Extremely weak dark grey clayey SILTSTONE. <u>Horizontal fracture at 5.21m.</u> <u>Horizontal fracture at 5.27m.</u> <u>Horizontal fracture at 5.43m.</u> <u>Horizontal fracture at 5.80m.</u>																			
													5.10 - 6.60	93	86	56	5.95	50.47	 Extremely weak grey silty MUDSTONE. <u>Horizontal fracture at 5.96m.</u>												
																			6.20	50.22	 Very weak dark grey clayey SILTSTONE. <u>Horizontal fracture at 6.20m.</u>										
																					6.60 - 8.10	C	6.75	49.67	 Very weak grey silty MUDSTONE. <u>Horizontal fracture at 6.77m.</u>						
																									7.00	49.42	 Very weak greenish dark grey clayey SILTSTONE. <u>Horizontal fracture at 7.05m.</u>				
																											6.60 - 8.10	98	96	91	7.30	49.12	Weak light grey coarse grained SANDSTONE with occasional coal deposits. Horizontal fracture at 7.50m.

Continued on next sheet

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 2.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Initial groundwater strike encountered at around 16m and rising to 13.7m 45 minutes after completion of drilling. A monitoring well installed to 16m comprising 10m plain pipe over 6m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

AGS

Rotary Core Log

Borehole No.

BH104

Sheet 3 of 5

Project Name: Novartis

Project No.
LP2441

Co-ords: 517882 - 131721

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

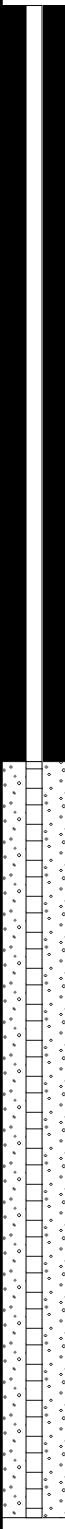
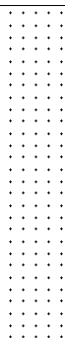
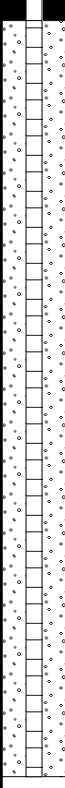
Level: 56.42

Scale
1:20

Client: West Sussex County Council

Dates: 14/01/2021 - 15/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		8.10 - 9.60	C				8.90	47.52		Horizontal fracture at 8.30m.	9
		8.10 - 9.60	C	100	96	96				Horizontal fracture at 8.75m. Sub-horizontal fracture from 8.87m to 8.9m. Weak dark grey laminated clayey medium grain SANDSTONE.	
		9.60 - 11.10	C				9.85	46.57		Sub-horizontal fracture from 9.3m to 9.39m. Horizontal fracture at 9.40m. Horizontal fracture at 9.42m.	
		9.60 - 11.10	C	100	96	94				Horizontal fracture at 9.69m. Horizontal fracture at 9.84m. Weak light to dark grey laminated fine to medium grain SANDSTONE.	
		11.10 - 12.60	C							Horizontal fracture at 10.3m.	10
		11.10 - 12.60	C	95	93	86				Horizontal fracture at 11.05m. Horizontal fracture at 11.27m.	
		11.10 - 12.60	C							Horizontal fracture at 11.76m. Horizontal fracture at 11.9m.	
		11.10 - 12.60	C								

Continued on next sheet

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 2.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Initial groundwater strike encountered at around 16m and rising to 13.7m 45 minutes after completion of drilling. A monitoring well installed to 16m comprising 10m plain pipe over 6m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

AGS

Rotary Core Log

Borehole No.

BH104

Sheet 4 of 5

Project Name: Novartis

Project No.
LP2441

Co-ords: 517882 - 131721

Hole Type
RC

Location: Parsonage Road, Horsham, RH12 4AN

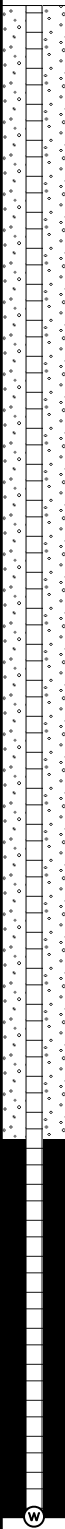
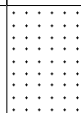
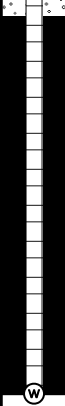
Level: 56.42

Scale
1:20

Client: West Sussex County Council

Dates: 14/01/2021 - 15/01/2021

Logged By
OA

Well	Water Strikes	Depth (m)	Type / FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		12.60 - 14.10	C				12.30	44.12		Horizontal fracture at 12.13m.	13
										Very weak to weak dark grey clayey SILTSTONE. Horizontal fracture at 12.35m.	
							12.80	43.62		Weak dark grey silty MUDSTONE. Horizontal fracture at 12.97m.	13
		12.60 - 14.10		95	94	79	13.45	42.97		Horizontal fracture at 13.37m.	
										Very weak to weak greenish dark grey clayey SILTSTONE. Horizontal fracture at 13.8m.	14
										Horizontal fracture at 13.93m.	
		14.10 - 15.60	C				14.15	42.27		Horizontal fracture at 14.05m.	14
							14.40	42.02		Very weak to weak dark grey clayey SILTSTONE. Horizontal fracture at 14.4m.	
		14.10 - 15.60		98	94	94	14.90	41.52		Horizontal fracture at 14.86m.	15
										Weak dark grey silty MUDSTONE. Horizontal fracture at 15.03m.	
		15.60 - 17.10	C							Horizontal fracture at 15.65m.	15
										Horizontal fracture at 15.8m.	
							15.95	40.47		Continued on next sheet	16

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 2.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Initial groundwater strike encountered at around 16m and rising to 13.7m 45 minutes after completion of drilling. A monitoring well installed to 16m comprising 10m plain pipe over 6m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

Rotary Core Log

Borehole No. _____

BH104

Sheet 5 of 5

Project Name: Novartis

Project No.
LP2441

Co-ords: 517882 - 131721

Hole Type	RC
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Location: Parsonage Road, Horsham, RH12 4AN

Level: 56.42

Scale
1:20

Client: West Sussex County Council

Dates: 14/01/2021 - 15/01/2021

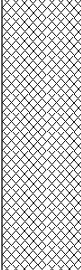
Logged By
OA

[illegible]

Remarks

Hand dug pit to 1.2m followed by dynamic sampling to 2.5m and rotary coring to full depth. Drilled in 146mm diameter casing with flush used during rotary coring. Initial groundwater strike encountered at around 16m and rising to 13.7m 45 minutes after completion of drilling. A monitoring well installed to 16m comprising 10m plain pipe over 6m of slotted pipe. The installation was completed with a steel raised cover. SPT hammer energy ratio 81%.

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TP202 Sheet 1 of 1	
Project Name: Novartis Additional SI				Project No. LP2575		Co-ords: 518036 - 131694 Level: 56.54		Date 26/05/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): 2.5 		Scale 1:25	
Client: West Sussex County Council						Depth 1.20		Logged OA	
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.80 0.80	ES	PID=0	0.90	55.64		Grey MADE GROUND comprising sandy gravel of coarse subangular to subrounded dark grey crystalline rock.		
				1.20	55.34		Grey clayey SILT.		
							----- End of pit at 1.20 m -----		
Remarks: Groundwater seepage encountered at 0.3m. Pinkish reflective sheen visible at surface of water. Immediate trial pit wall collapse occurred during excavation.									
Stability:									





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The Atrium, Curtis Road
Dorking, Surrey RH4 1XA
Tel: 01306 646510
www.leapenvironmental.com

Trial Pit Log

Trialpit No

TP203

Sheet 1 of 1

Project Name: Novartis Additional SI

Project No.
LP2575

Co-ords: 517975 - 131529
Level: 56.98

Date
26/05/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions
(m):

2.5

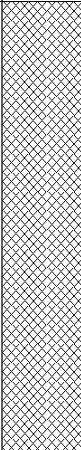
Depth
1.50

0.7

Scale
1:25

Logged
OA

Client: West Sussex County Council

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	1.40 1.40	ES	PID=0	1.50	55.48		Greyish brown sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic, vinyl, polythene and scrap metal.	1
							End of pit at 1.50 m	2
								3
								4
								5

Remarks: Groundwater seepage encountered at 1.2m. Trial pit remained stable. No further progress due to water obscured obstruction encountered.

Stability:

AGS

Trial Pit Log

Trialpit No

TP204

Sheet 1 of 1

Project Name: Novartis Additional SI

Project No.
LP2575

Co-ords:	517981 - 131512
Level:	57.07

Date
26/05/2021

Location: Parsonage Road, Horsham, RH12 4AN

Dimensions

2.5

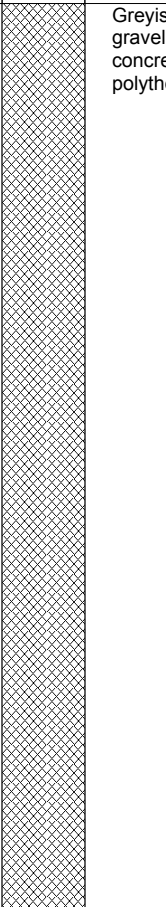
0.7

Depth
3.00

Scale
1:25

Logged
OA

Client: West Sussex County Council

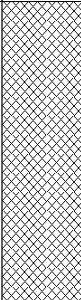
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	2.80 2.80	ES	PID=0	3.00	54.06		Greyish brown sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse concrete, brick and occasional fragments of plastic, vinyl, polythene and scrap metal.
							End of pit at 3.00 m

Remarks:	Groundwater seepage encountered at 1.4m. Trial pit remained stable. No further progress below 3.0m due to water obscured obstruction encountered.
----------	---

Stability:

AGS

 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TT205 Sheet 1 of 1	
Project Name: Novartis Additional SI				Project No. LP2575		Co-ords: 517854 - 131686 Level: 55.78		Date 25/05/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 1.50 0.7 10		Scale 1:25 Logged OA	
Client: West Sussex County Council									

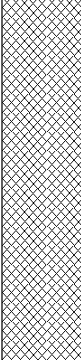
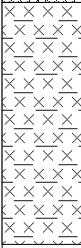
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	1.10 1.10	ES	PID=0	1.00	54.78		Grey MADE GROUND comprising sandy gravel of coarse subangular to subrounded dark grey crystalline rock.	1
				1.20	54.58		Black stained CLAY.	
				1.50	54.28		Brown grey silty CLAY.	
							End of pit at 1.50 m	2
								3
								4
								5

Remarks: Groundwater seepage encountered at 1.0m. Trial trench remained stable.

Stability:



 Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA Tel: 01306 646510 www.leapenvironmental.com				Trial Pit Log				Trialpit No TT206 Sheet 1 of 1	
Project Name: Novartis Additional SI				Project No. LP2575		Co-ords: 517878 - 131666 Level: 55.87		Date 25/05/2021	
Location: Parsonage Road, Horsham, RH12 4AN						Dimensions (m): Depth 2.00 0.7 10		Scale 1:25 Logged OA	
Client: West Sussex County Council									

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.75 0.75	ES	PID=0				Grey sandy gravelly MADE GROUND fill with gravel of subangular to subrounded fine to coarse crystalline rock, concrete, brick and occasional rebar, metal scrap, plastic and cables.	1
				1.20	54.66		Grey clayey SILT.	
				2.00	53.86		End of pit at 2.00 m	2
								3
								4
								5

Remarks: Groundwater seepage encountered at 1.0m. Trial trench remained stable.

Stability:

AGS