

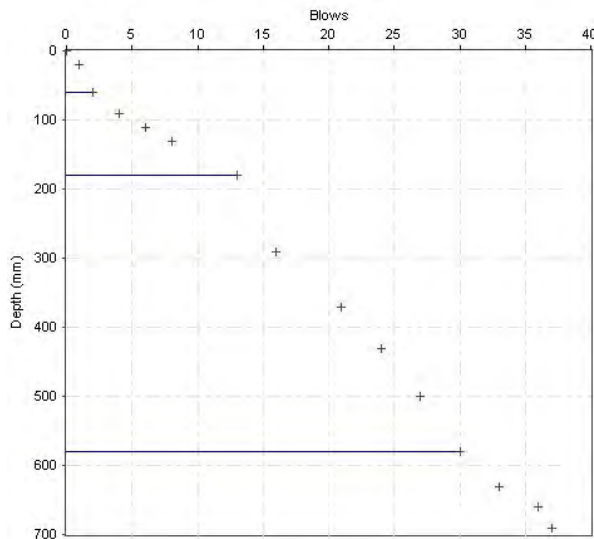
DCP Layer Strength Analysis Report

Project Name: Scours Lane

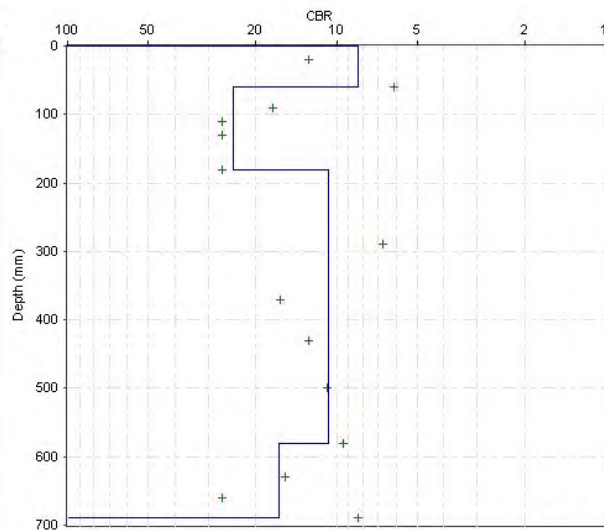
Chainage (km):
 Direction: WS04 - DCP07
 Location/Offset: Lay-by / other
 Cone Angle: 60 degrees
 Zero Error (mm): 10
 Test Date: 24/09/2024

Surface Type: Unpaved
 Thickness (mm): 0
 Base Type:
 Thickness (mm):
 Surface Moisture: Unknown
 Moisture adjustment factor: Not adjusted

Layer Boundaries: Chainage 0.600



Layer Boundaries Chart



CBR Chart

Layer Properties

No.	Penetration Rate (mm/blow)	CBR (%)	Thickness (mm)	Depth to layer bottom (mm)	Position	Strength Coefficient	SN	SNC	SNP
1	30.00	8	60	60	Base	0.02	0.05	0.05	0.05
2	10.91	24	120	180	Base	0.06	0.28	0.28	0.28
3	23.53	11	400	580	Base	0.03	0.46	0.46	0.46
4	15.71	16	110	690	Base	0.04	0.19	0.19	0.19

Pavement Strength

Layer	Layer Contribution		
	SN	SNC	SNP
Surface	--	--	--
Base	0.98	0.98	0.98
Sub-Base	--	--	--
Subgrade	--	--	--
Pavement Strength	0.98	0.98	0.98

CBR Relationship:

TRL equation: $\log_{10}(\text{CBR}) = 2.48 - 1.057 \times \log_{10}(\text{Strength})$

Report produced by

Penetration Data Report

Project Name: Scours Lane

Chainage (km):		Surface Type:	Unpaved
Direction:	WS04 - DCP08	Thickness (mm):	0
Location/Offset:	Lay-by / other	Base Type:	
Cone Angle:	60 degrees	Thickness (mm):	
Zero Error (mm):	20	Surface Moisture:	Unknown
Test Date:	24/09/2024	Moisture adjustment factor:	Not adjusted

No.	Blows	Cumulative Blows	Penetration Depth (mm)	Penetration Rate (mm/blow)	No.	Blows	Cumulative Blows	Penetration Depth (mm)	Penetration Rate (mm/blow)
1	0	0	20	0.00					
2	1	1	40	20.00					
3	1	2	60	20.00					
4	1	3	70	10.00					
5	1	4	90	20.00					
6	1	5	100	10.00					
7	1	6	110	10.00					
8	2	8	150	20.00					
9	2	10	190	20.00					
10	2	12	230	20.00					
11	2	14	270	20.00					
12	2	16	300	15.00					
13	2	18	330	15.00					
14	2	20	380	25.00					
15	2	22	440	30.00					
16	2	24	470	15.00					
17	2	26	500	15.00					

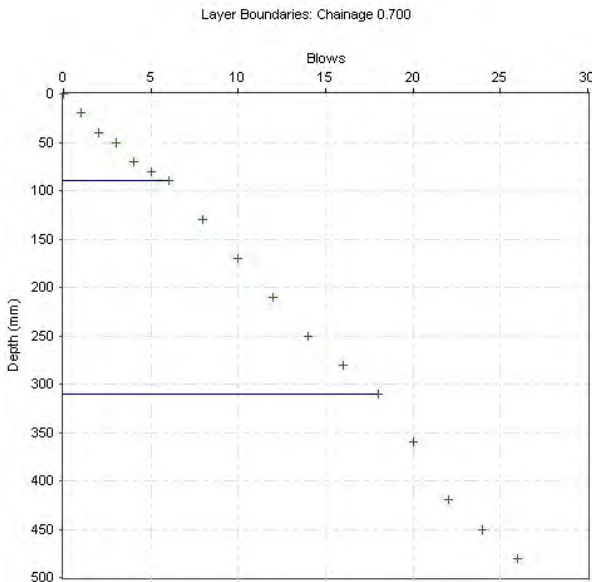
Remarks: Test carried out at 0.50m bgl

DCP Layer Strength Analysis Report

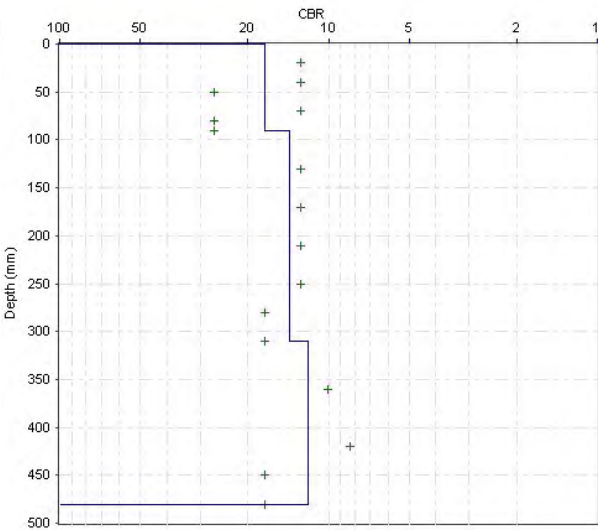
Project Name: Scours Lane

Chainage (km):
Direction: WS04 - DCP08
Location/Offset: Lay-by / other
Cone Angle: 60 degrees
Zero Error (mm): 20
Test Date: 24/09/2024

Surface Type: Unpaved
Thickness (mm): 0
Base Type:
Thickness (mm):
Surface Moisture: Unknown
Moisture adjustment factor: Not adjusted



Layer Boundaries Chart



CBR Chart

Layer Properties

No.	Penetration Rate (mm/blow)	CBR (%)	Thickness (mm)	Depth to layer bottom (mm)	Position	Strength Coefficient	SN	SNC	SNP
1	15.00	17	90	90	Base	0.04	0.16	0.16	0.16
2	18.33	14	220	310	Base	0.04	0.32	0.32	0.32
3	21.25	12	170	480	Base	0.03	0.21	0.21	0.21

Pavement Strength

Layer	Layer Contribution		
	SN	SNC	SNP
Surface	--	--	--
Base	0.69	0.69	0.69
Sub-Base	--	--	--
Subgrade	--	--	--
Pavement Strength	0.69	0.69	0.69

CBR Relationship:

TRL equation: $\log_{10}(\text{CBR}) = 2.48 - 1.057 \times \log_{10}(\text{Strength})$

Report produced by

Penetration Data Report

Project Name: Scours Lane

Chainage (km):
 Direction: WS06 - DCP09
 Location/Offset: Lay-by / other
 Cone Angle: 60 degrees
 Zero Error (mm): 0
 Test Date: 24/09/2024

Surface Type: Unpaved
 Thickness (mm): 0
 Base Type:
 Thickness (mm):
 Surface Moisture: Unknown
 Moisture adjustment factor: Not adjusted

No.	Blows	Cumulative Blows	Penetration Depth (mm)	Penetration Rate (mm/blow)	No.	Blows	Cumulative Blows	Penetration Depth (mm)	Penetration Rate (mm/blow)
1	0	0	0	0.00	26	1	25	540	20.00
2	1	1	20	20.00	27	1	26	570	30.00
3	1	2	30	10.00	28	1	27	600	30.00
4	1	3	40	10.00					
5	1	4	60	20.00					
6	1	5	90	30.00					
7	1	6	110	20.00					
8	1	7	160	50.00					
9	1	8	180	20.00					
10	1	9	210	30.00					
11	1	10	230	20.00					
12	1	11	250	20.00					
13	1	12	280	30.00					
14	1	13	310	30.00					
15	1	14	330	20.00					
16	1	15	350	20.00					
17	1	16	360	10.00					
18	1	17	380	20.00					
19	1	18	400	20.00					
20	1	19	420	20.00					
21	1	20	430	10.00					
22	1	21	450	20.00					
23	1	22	480	30.00					
24	1	23	510	30.00					
25	1	24	520	10.00					

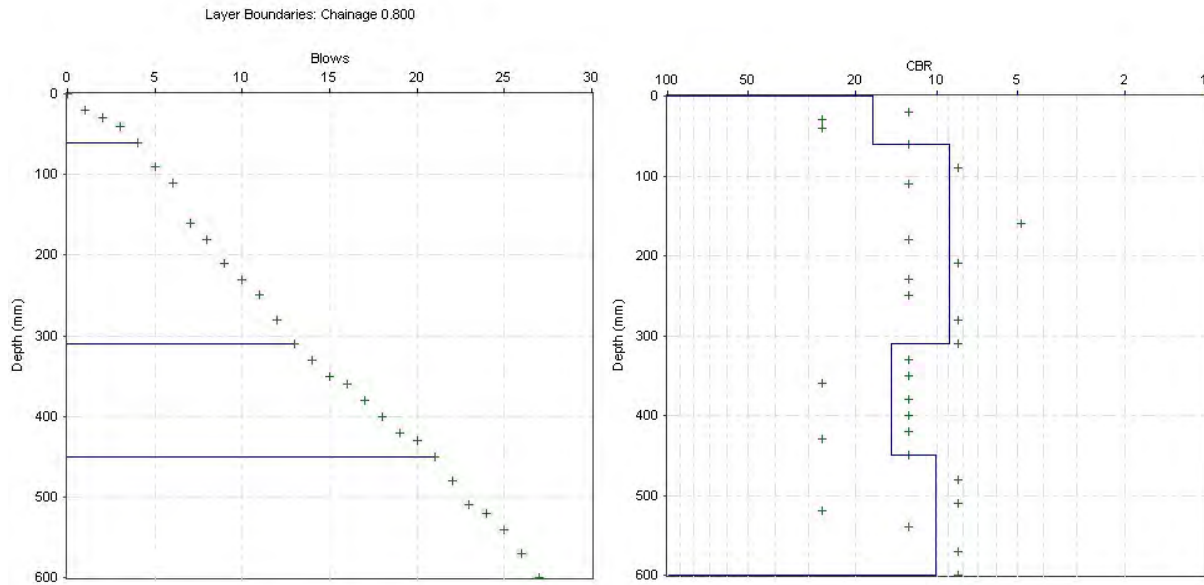
Remarks: Test carried out at 0.30m bgl

DCP Layer Strength Analysis Report

Project Name: Scours Lane

Chainage (km):
 Direction: WS06 - DCP09
 Location/Offset: Lay-by / other
 Cone Angle: 60 degrees
 Zero Error (mm): 0
 Test Date: 24/09/2024

Surface Type: Unpaved
 Thickness (mm): 0
 Base Type:
 Thickness (mm):
 Surface Moisture: Unknown
 Moisture adjustment factor: Not adjusted



Layer Boundaries Chart

CBR Chart

Layer Properties

No.	Penetration Rate (mm/blow)	CBR (%)	Thickness (mm)	Depth to layer bottom (mm)	Position	Strength Coefficient	SN	SNC	SNP
1	15.00	17	60	60	Base	0.04	0.11	0.11	0.11
2	27.78	9	250	310	Base	0.02	0.24	0.24	0.24
3	17.50	15	140	450	Base	0.04	0.21	0.21	0.21
4	25.00	10	150	600	Base	0.03	0.16	0.16	0.16

Pavement Strength

Layer	Layer Contribution		
	SN	SNC	SNP
Surface	--	--	--
Base	0.72	0.72	0.72
Sub-Base	--	--	--
Subgrade	--	--	--
Pavement Strength	0.72	0.72	0.72

CBR Relationship:

TRL equation: $\log_{10}(\text{CBR}) = 2.48 - 1.057 \times \log_{10}(\text{Strength})$

Report produced by

Penetration Data Report

Project Name: Scours Lane

Chainage (km):

Direction: WS06 - DCP10

Location/Offset: Lay-by / other

Cone Angle: 60 degrees

Zero Error (mm): 0

Test Date: 24/09/2024

Surface Type: Unpaved

Thickness (mm): 0

Base Type:

Thickness (mm):

Surface Moisture: Unknown

Moisture adjustment factor: Not adjusted

No.	Blows	Cumulative Blows	Penetration Depth (mm)	Penetration Rate (mm/blow)	No.	Blows	Cumulative Blows	Penetration Depth (mm)	Penetration Rate (mm/blow)
1	0	0	0	0.00					
2	1	1	20	20.00					
3	1	2	30	10.00					
4	1	3	40	10.00					
5	1	4	70	30.00					
6	1	5	90	20.00					
7	1	6	130	40.00					
8	1	7	150	20.00					
9	1	8	180	30.00					
10	1	9	230	50.00					
11	1	10	260	30.00					
12	1	11	290	30.00					
13	2	13	350	30.00					
14	1	14	390	40.00					
15	1	15	420	30.00					
16	1	16	460	40.00					
17	1	17	490	30.00					

Remarks: Test carried out at 0.50m bgl

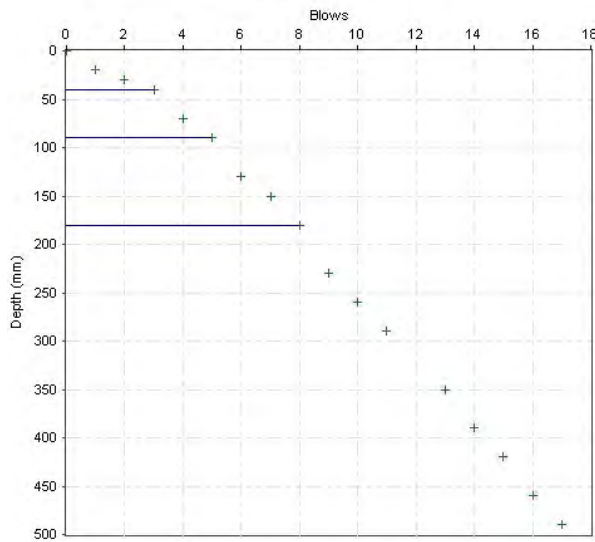
DCP Layer Strength Analysis Report

Project Name: Scours Lane

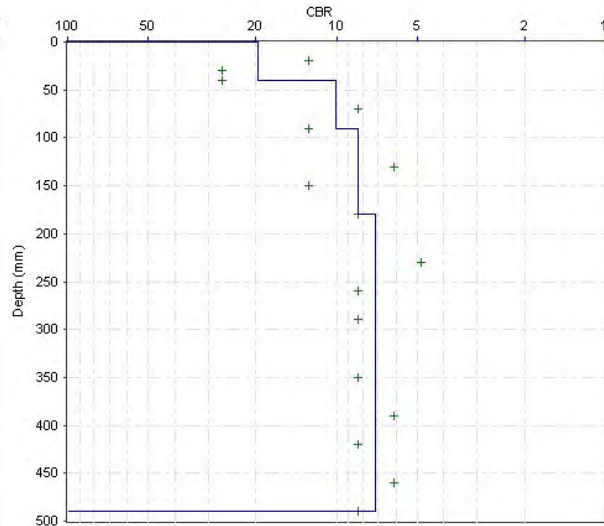
Chainage (km):
 Direction: WS06 - DCP10
 Location/Offset: Lay-by / other
 Cone Angle: 60 degrees
 Zero Error (mm): 0
 Test Date: 24/09/2024

Surface Type: Unpaved
 Thickness (mm): 0
 Base Type:
 Thickness (mm):
 Surface Moisture: Unknown
 Moisture adjustment factor: Not adjusted

Layer Boundaries: Chainage 0.900



Layer Boundaries Chart



CBR Chart

Layer Properties

No.	Penetration Rate (mm/blow)	CBR (%)	Thickness (mm)	Depth to layer bottom (mm)	Position	Strength Coefficient	SN	SNC	SNP
1	13.33	20	40	40	Base	0.05	0.08	0.08	0.08
2	25.00	10	50	90	Base	0.03	0.05	0.05	0.05
3	30.00	8	90	180	Base	0.02	0.08	0.08	0.08
4	34.44	7	310	490	Base	0.02	0.24	0.24	0.24

Pavement Strength

Layer	Layer Contribution		
	SN	SNC	SNP
Surface	--	--	--
Base	0.46	0.46	0.46
Sub-Base	--	--	--
Subgrade	--	--	--
Pavement Strength	0.46	0.46	0.46

CBR Relationship:

TRL equation: $\log_{10}(\text{CBR}) = 2.48 - 1.057 \times \log_{10}(\text{Strength})$

Report produced by



Appendix D Gas and Groundwater Monitoring Results



A2 Site Investigation

Project Number
Project Name
Borehole Number
Borehole Depth (m)

53924
Scours Lane
BH01
20.00

Install Depth (m) 7.60
Plain (m) 0.00 to 5.20
Slotted (m) 5.20 to 7.60

1st Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	0.30	18.90	0.00	0.00	0.70	Silted bottom
Date	07/10/2024	60	0.00	0.00	0.00	0.20	19.30	0.00	0.00	1.20	
Atmospheric Pressure (mb)	996.00	90	0.00	0.00	0.00	0.20	19.50	0.00	0.00	1.30	
Weather Conditions	Rainy	120	0.00	0.00	0.00	0.20	19.50	0.00	0.00	1.40	
Water Level (mbgl)	3.84	150	0.00	0.00	0.00	0.20	19.50	0.00	0.00	1.30	
Base of Well (mbgl)	7.39	180	0.00	0.00	0.00	0.20	19.50	0.00	0.00	1.30	
2nd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	0.40	19.70	0.00	0.00	0.00	
Date	14/10/2024	60	0.00	0.00	0.00	0.40	19.90	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1005.00	90	0.00	0.00	0.00	0.40	19.90	0.00	0.00	0.20	
Weather Conditions	Overcast	120	0.00	0.00	0.00	0.40	19.90	0.00	0.00	0.40	
Water Level (mbgl)	3.80	150	0.00	0.00	0.00	0.40	19.90	0.00	0.00	0.50	
Base of Well (mbgl)	7.42	180	0.00	0.00	0.00	0.40	19.90	0.00	0.00	0.50	
3rd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	0.70	19.00	0.00	0.00	0.40	
Date	21/10/2024	60	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.50	
Atmospheric Pressure (mb)	1015.00	90	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.50	
Weather Conditions	Overcast	120	0.00	0.00	0.00	0.70	19.10	0.00	0.00	0.60	
Water Level (mbgl)	3.81	150	0.00	0.00	0.00	0.60	19.00	0.00	0.00	0.60	
Base of Well (mbgl)	7.43	180	0.00	0.00	0.00	0.60	18.90	0.00	0.00	0.60	
4th Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.10	0.00	0.00	0.50	18.90	0.00	0.00	0.00	
Date	28/10/2024	60	0.10	0.00	0.00	0.00	20.30	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1015.00	90	0.10	0.00	0.00	0.00	20.20	0.00	0.00	0.10	
Weather Conditions	Overcast	120	0.10	0.00	0.00	0.00	20.40	0.00	0.00	0.10	
Water Level (mbgl)	3.88	150	0.10	0.00	0.00	0.00	20.40	0.00	0.00	0.10	
Base of Well (mbgl)	7.41	180	0.10	0.00	0.00	0.00	20.40	0.00	0.00	0.10	

Instrument	Model	S/N	Calibration date
Gas Analyser	GFM436	13456	17/06/2025
PID	GDC10412	595-005157	06/06/2025
Dip Meter	DIP-100	5569	N/A



A2 Site Investigation

Project Number
Project Name
Borehole Number
Borehole Depth (m)

53924
Scours Lane
WS01
3.00

Install Depth (m) 1.70
Plain (m) 0.00 to 0.50
Slotted (m) 0.50 to 1.70

1st Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	5.50	12.00	0.00	0.00	0.50	
Date	07/10/2024	60	0.00	0.00	0.00	5.80	11.80	0.00	0.00	0.50	
Atmospheric Pressure (mb)	996.00	90	0.00	0.00	0.00	5.80	11.80	0.00	0.00	0.50	
Weather Conditions	Sunny	120	0.00	0.00	0.00	5.50	11.70	0.00	0.00	0.50	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	5.90	11.90	0.00	0.00	0.50	
Base of Well (mbgl)	1.63	180	0.00	0.00	0.00	5.70	11.80	0.00	0.00	0.50	
2nd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.60	13.70	0.00	0.00	0.00	
Date	14/10/2024	60	0.00	0.00	0.00	5.40	13.40	0.00	0.00	0.00	
Atmospheric Pressure (mb)	1007.00	90	0.00	0.00	0.00	5.50	13.40	0.00	0.00	0.00	
Weather Conditions	Rainy	120	0.00	0.00	0.00	5.70	13.30	0.00	0.00	0.00	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	4.40	13.30	0.00	0.00	0.00	
Base of Well (mbgl)	1.63	180	0.00	0.00	0.00	4.60	13.50	0.00	0.00	0.00	
3rd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	7.60	11.60	0.00	0.00	0.60	
Date	21/10/2024	60	0.00	0.00	0.00	6.60	11.90	0.00	0.00	0.60	
Atmospheric Pressure (mb)	1016.00	90	0.00	0.00	0.00	6.20	11.80	0.00	0.00	0.70	
Weather Conditions	Overcast	120	0.00	0.00	0.00	6.10	11.80	0.00	0.00	0.90	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	5.70	11.20	0.00	0.00	0.90	
Base of Well (mbgl)	1.62	180	0.00	0.00	0.00	6.20	11.80	0.00	0.00	0.90	
4th Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.60	14.80	0.00	0.00	0.60	
Date	28/10/2024	60	0.00	0.00	0.00	4.80	14.00	0.00	0.00	0.70	
Atmospheric Pressure (mb)	1016.00	90	0.00	0.00	0.00	5.10	14.30	0.00	0.00	0.70	
Weather Conditions	Overcast	120	0.00	0.00	0.00	5.00	14.10	0.00	0.00	0.70	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	5.00	14.10	0.00	0.00	0.70	
Base of Well (mbgl)	1.63	180	0.00	0.00	0.00	5.00	14.10	0.00	0.00	0.70	

Instrument	Model	S/N	Calibration date
Gas Analyser	GFM436	13456	17/06/2025
PID	GDC10412	595-005157	06/06/2025
Dip Meter	DIP-100	5569	N/A



A2 Site Investigation

Project Number
Project Name
Borehole Number
Borehole Depth (m)

53924
Scours Lane
WS02
3.00

Install Depth (m) 2.00
Plain (m) 0.00 to 0.50
Slotted (m) 0.50 to 1.50

1st Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	1.60	16.00	0.00	0.00	0.70	Silted bottom
Date	07/10/2024	60	0.00	0.00	0.00	1.60	15.90	0.00	0.00	0.80	
Atmospheric Pressure (mb)	996.00	90	0.00	0.00	0.00	1.60	15.80	0.00	0.00	0.70	
Weather Conditions	Overcast	120	0.00	0.00	0.00	1.60	15.80	0.00	0.00	0.70	
Water Level (mbgl)	1.27	150	0.00	0.00	0.00	1.60	15.80	0.00	0.00	0.70	
Base of Well (mbgl)	2.01	180	0.00	0.00	0.00	1.60	15.80	0.00	0.00	0.70	
2nd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	2.00	15.50	0.00	0.00	0.10	Silted bottom
Date	14/10/2024	60	0.00	0.00	0.00	2.00	15.70	0.00	0.00	0.10	
Atmospheric Pressure (mb)	1007.00	90	0.00	0.00	0.00	2.10	15.40	0.00	0.00	0.00	
Weather Conditions	Rainy	120	0.00	0.00	0.00	2.10	15.40	0.00	0.00	0.00	
Water Level (mbgl)	1.28	150	0.00	0.00	0.00	2.00	15.50	0.00	0.00	0.00	
Base of Well (mbgl)	2.01	180	0.00	0.00	0.00	2.00	15.50	0.00	0.00	0.00	
3rd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	2.50	13.90	0.00	0.00	1.10	Silted bottom
Date	21/10/2024	60	0.00	0.00	0.00	2.50	13.70	0.00	0.00	1.10	
Atmospheric Pressure (mb)	1016.00	90	0.00	0.00	0.00	2.50	13.70	0.00	0.00	1.10	
Weather Conditions	Overcast	120	0.00	0.00	0.00	2.50	13.70	0.00	0.00	1.10	
Water Level (mbgl)	1.22	150	0.00	0.00	0.00	2.40	13.70	0.00	0.00	1.10	
Base of Well (mbgl)	2.01	180	0.00	0.00	0.00	2.40	13.60	0.00	0.00	1.10	
4th Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	3.00	14.20	0.00	0.00	0.00	Silted bottom
Date	28/10/2024	60	0.00	0.00	0.00	3.20	13.90	0.00	0.00	0.00	
Atmospheric Pressure (mb)	1016.00	90	0.00	0.00	0.00	3.10	14.10	0.00	0.00	0.00	
Weather Conditions	Overcast	120	0.00	0.00	0.00	3.10	14.10	0.00	0.00	0.00	
Water Level (mbgl)	1.29	150	0.00	0.00	0.00	3.10	14.10	0.00	0.00	0.00	
Base of Well (mbgl)	2.00	180	0.00	0.00	0.00	3.10	14.00	0.00	0.00	0.00	

Instrument	Model	S/N	Calibration date
Gas Analyser	GFM436	13456	17/06/2025
PID	GDC10412	595-005157	06/06/2025
Dip Meter	DIP-100	5569	N/A



A2 Site Investigation

Project Number
Project Name
Borehole Number
Borehole Depth (m)

53924
Scours Lane
WS03
3.00

Install Depth (m) 2.50
Plain (m) 0.00 to 0.50
Slotted (m) 0.50 to 2.50

1st Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.90	14.00	0.00	0.00	1.40	
Date	07/10/2024	60	0.00	0.00	0.00	5.00	14.10	0.00	0.00	1.50	
Atmospheric Pressure (mb)	995.00	90	0.00	0.00	0.00	4.90	14.10	0.00	0.00	1.70	
Weather Conditions	Sunny	120	0.00	0.00	0.00	4.90	14.10	0.00	0.00	1.70	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	4.90	14.10	0.00	0.00	1.70	
Base of Well (mbgl)	1.97	180	0.00	0.00	0.00	4.90	14.10	0.00	0.00	1.70	
2nd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	6.20	12.10	0.00	10.00	0.20	
Date	14/10/2024	60	0.00	0.00	0.00	6.30	12.00	0.00	0.00	0.20	
Atmospheric Pressure (mb)	1005.00	90	0.00	0.00	0.00	5.30	11.90	0.00	10.00	0.20	
Weather Conditions	Rainy	120	0.00	0.00	0.00	9.80	12.20	0.00	0.00	0.20	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	6.00	12.20	0.00	0.00	0.20	
Base of Well (mbgl)	1.98	180	0.00	0.00	0.00	6.00	12.30	0.00	0.00	0.20	
3rd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	5.70	12.50	0.00	0.00	0.40	
Date	21/10/2024	60	0.00	0.00	0.00	5.30	12.40	0.00	0.00	0.40	
Atmospheric Pressure (mb)	1015.00	90	0.00	0.00	0.00	5.20	12.50	0.00	0.00	0.40	
Weather Conditions	Overcast	120	0.00	0.00	0.00	5.60	12.50	0.00	0.00	0.30	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	5.70	12.50	0.00	0.00	0.30	
Base of Well (mbgl)	1.98	180	0.00	0.00	0.00	5.70	12.50	0.00	0.00	0.30	
4th Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.60	15.00	0.00	0.00	2.40	
Date	28/10/2024	60	0.00	0.00	0.00	4.70	14.80	0.00	0.00	2.70	
Atmospheric Pressure (mb)	1015.00	90	0.00	0.00	0.00	4.70	14.80	0.00	0.00	2.80	
Weather Conditions	Overcast	120	0.00	0.00	0.00	4.70	14.80	0.00	0.00	2.80	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	4.70	14.80	0.00	0.00	2.80	
Base of Well (mbgl)	1.97	180	0.00	0.00	0.00	4.70	14.80	0.00	0.00	2.80	

Instrument	Model	S/N	Calibration date
Gas Analyser	GFM436	13456	17/06/2025
PID	GDC10412	595-005157	06/06/2025
Dip Meter	DIP-100	5569	N/A



A2 Site Investigation

Project Number
Project Name
Borehole Number
Borehole Depth (m)

53924
Scours Lane
WS04
3.00

Install Depth (m) 3.00
Plain (m) 0.00 to 1.00
Slotted (m) 1.00 to 3.00

1st Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.70	10.20	0.00	0.00	1.20	
Date	07/10/2024	60	0.00	0.00	0.00	4.70	9.90	0.00	0.00	1.30	
Atmospheric Pressure (mb)	996.00	90	0.00	0.00	0.00	4.70	9.90	0.00	0.00	1.40	
Weather Conditions	Rainy	120	0.00	0.00	0.00	4.70	9.90	0.00	0.00	1.70	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	4.70	9.90	0.00	0.00	1.80	
Base of Well (mbgl)	3.05	180	0.00	0.00	0.00	4.70	9.90	0.00	0.00	1.90	
2nd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.90	9.70	0.00	0.00	0.40	
Date	14/10/2024	60	0.00	0.00	0.00	4.90	9.50	0.00	0.00	0.50	
Atmospheric Pressure (mb)	1005.00	90	0.00	0.00	0.00	4.90	9.50	0.00	0.00	0.50	
Weather Conditions	Overcast	120	0.00	0.00	0.00	4.90	9.50	0.00	0.00	0.50	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	4.90	9.50	0.00	0.00	0.50	
Base of Well (mbgl)	3.05	180	0.00	0.00	0.00	4.90	9.50	0.00	0.00	0.50	
3rd Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.60	10.40	0.00	0.00	0.50	
Date	21/10/2024	60	0.00	0.00	0.00	4.60	10.20	0.00	0.00	0.50	
Atmospheric Pressure (mb)	1016.00	90	0.00	0.00	0.00	4.50	10.10	0.00	0.00	0.50	
Weather Conditions	Overcast	120	0.00	0.00	0.00	4.60	10.10	0.00	0.00	0.50	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	4.60	10.10	0.00	0.00	0.50	
Base of Well (mbgl)	3.05	180	0.00	0.00	0.00	4.60	10.10	0.00	0.00	0.50	
4th Visit		Time (s)	Flow (l/h)	Methane Content		Carbon Dioxide (% v/v)	Oxygen (% v/v)	H ₂ S (ppm)	CO (ppm)	VOC (ppm)	Comments
				(% v/v)	(% LEL)						
Engineer	AR	30	0.00	0.00	0.00	4.70	11.60	0.00	0.00	2.40	
Date	28/10/2024	60	0.00	0.00	0.00	4.70	11.40	0.00	0.00	2.90	
Atmospheric Pressure (mb)	1015.00	90	0.00	0.00	0.00	4.70	11.40	0.00	0.00	3.00	
Weather Conditions	Overcast	120	0.00	0.00	0.00	4.70	11.40	0.00	0.00	3.00	
Water Level (mbgl)	Dry	150	0.00	0.00	0.00	4.80	11.30	0.00	0.00	3.00	
Base of Well (mbgl)	3.05	180	0.00	0.00	0.00	4.70	11.40	0.00	0.00	3.00	

Instrument	Model	S/N	Calibration date
Gas Analyser	GFM436	13456	17/06/2025
PID	GDC10412	595-005157	06/06/2025
Dip Meter	DIP-100	5569	N/A

Project Name:	Scours Lane
Project Number:	53924
Date of Sampling:	07/10/2024
Engineer Name:	AR
Weather:	Rainy
Atmospheric Pressure:	996

A2 Site Investigation

Instrument	Model	S/N	Calibration date
Easy Load II Peristaltic Pump	GT-EL2cb	6365	NA
YSI Professional Plus Quattro	Plus Quattro	22H102053	05/10/2024

BH01							Comments
Water Level (m)	Well Depth (m)	Water Collum (m)	Free Phase	Sampling Depth (m)	Start sampling	13:50	
3.84	7.39	3.55	No	7.2	End sampling	14:04	
Purging time	Temp (°C)	Pressure (mmHg)	Dissolved Oxygen (mg/L)	Conductivity (µs/cm)	ORP (mV)	pH (pH Units)	
01:00	13.7	747.6	3.51	511	223.4	7.65	
02:00	13.5	747.6	2.1	582	229.6	7.52	
03:00	14.1	747.4	1.05	582	238.3	7.38	
04:00	13.8	747.4	1.08	514	238.1	7.41	
05:00	13.6	747.4	2.19	592	243	7.35	
06:00	13.7	747.4	2.39	599	247.4	7.32	
07:00	13.7	747.5	2.37	583	249.9	7.31	
08:00	13.7	747.4	2.38	585	246.1	7.31	
09:00							

Project Name:	Scours Lane
Project Number:	53924
Date of Sampling:	07/10/2024
Engineer Name:	AR
Weather:	Rainy
Atmospheric Pressure:	996

A2 Site Investigation

Instrument	Model	S/N	Calibration date
Easy Load II Peristaltic Pump	GT-EL2cb	6365	NA
YSI Professional Plus Quattro	Plus Quattro	22H102053	05/10/2024

BH01							Comments
Water Level (m)	Well Depth (m)	Water Collum (m)	Free Phase	Sampling Depth (m)	Start sampling	13:50	
3.84	7.39	3.55	No	7.2	End sampling	14:04	
Purging time	Temp (°C)	Pressure (mmHg)	Dissolved Oxygen (mg/L)	Conductivity (µs/cm)	ORP (mV)	pH (pH Units)	
01:00	13.7	747.6	3.51	511	223.4	7.65	
02:00	13.5	747.6	2.1	582	229.6	7.52	
03:00	14.1	747.4	1.05	582	238.3	7.38	
04:00	13.8	747.4	1.08	514	238.1	7.41	
05:00	13.6	747.4	2.19	592	243	7.35	
06:00	13.7	747.4	2.39	599	247.4	7.32	
07:00	13.7	747.5	2.37	583	249.9	7.31	
08:00	13.7	747.4	2.38	585	246.1	7.31	
09:00							



Appendix E Geotechnical Laboratory Testing Results



TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,
cl 5.3.14, 5.5, Fall Cone Method, 1 Pt Test, BS 1377-2:2022,
cl 5.3, 6

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



4041

Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QL

Contact: Will Thistleton
Site Address: Scours Lane

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

Client Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 10/10/2024
Sampled By: Not Given

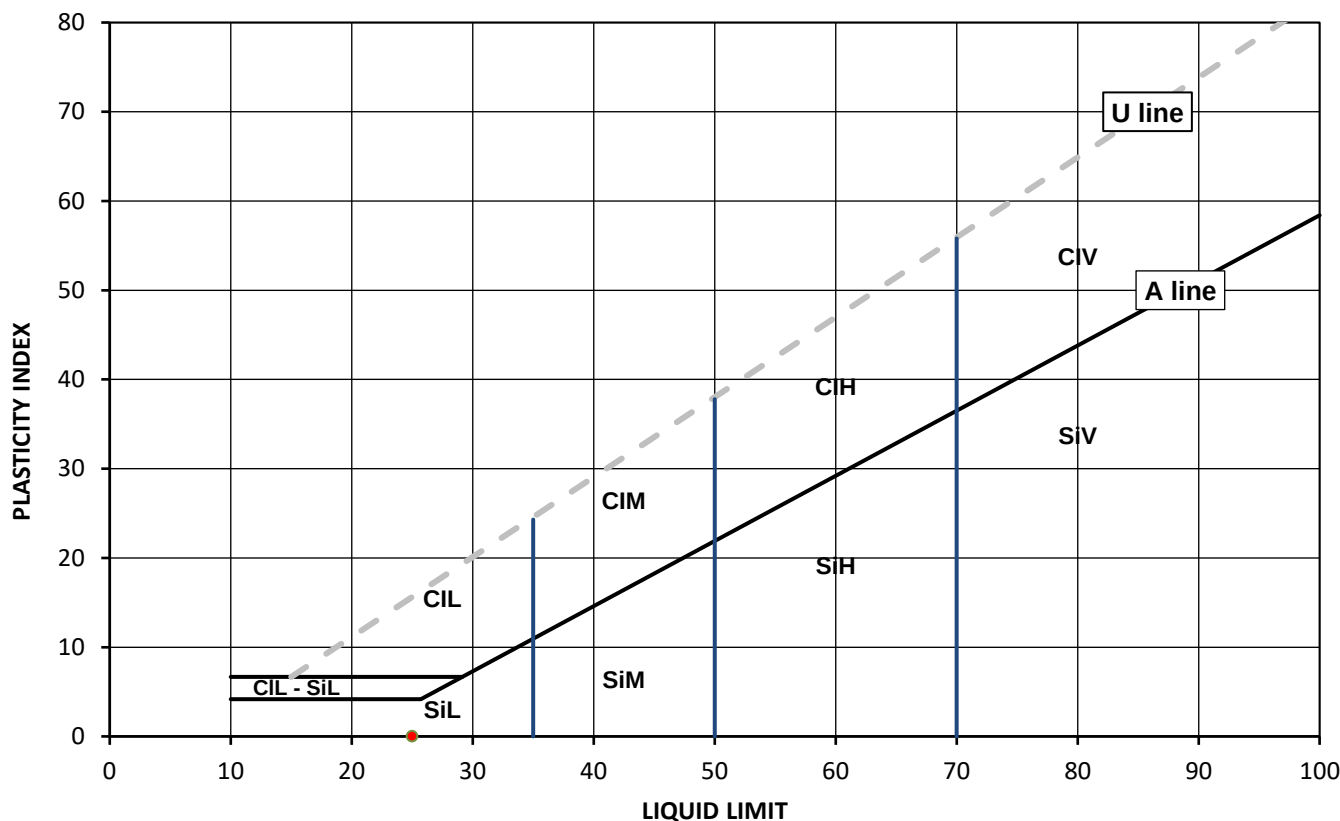
Test Results:

Laboratory Reference: 335256
Hole No.: BH01
Sample Reference: Not Given
Sample Description: Yellowish brown gravelly slightly clayey SAND

Depth Top [m]: 6.00
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after washing to remove >0.425 mm;
Cone Type: 80g/30deg

As Received Water Content [W] %	Corrected Liquid Limit [WL] %	Correlation Factor	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity index [IL] % #	Consistency index [IC] % #	% Passing 425µm BS Test Sieve
9.0	25	1.030	NP	NP	N/A	N/A	41



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

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

Note: Water Content by BS EN 17892-1:2014+A1:2022, BS 1377-2:2022; Correlation Factor by Clayton C.R.I and Jukes A.W (1978); # Non accredited

Remarks: Not enough the material to carry out 4 Point Atterberg test/A 1-point test was performed. N/P-non plastic

Signed:

Monika Siewior

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,
cl 5.2 and 6

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



Environmental Science

4041

Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QL

Contact: Will Thistleton
Site Address: Scours Lane

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

Client Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 08/10/2024
Sampled By: Not Given

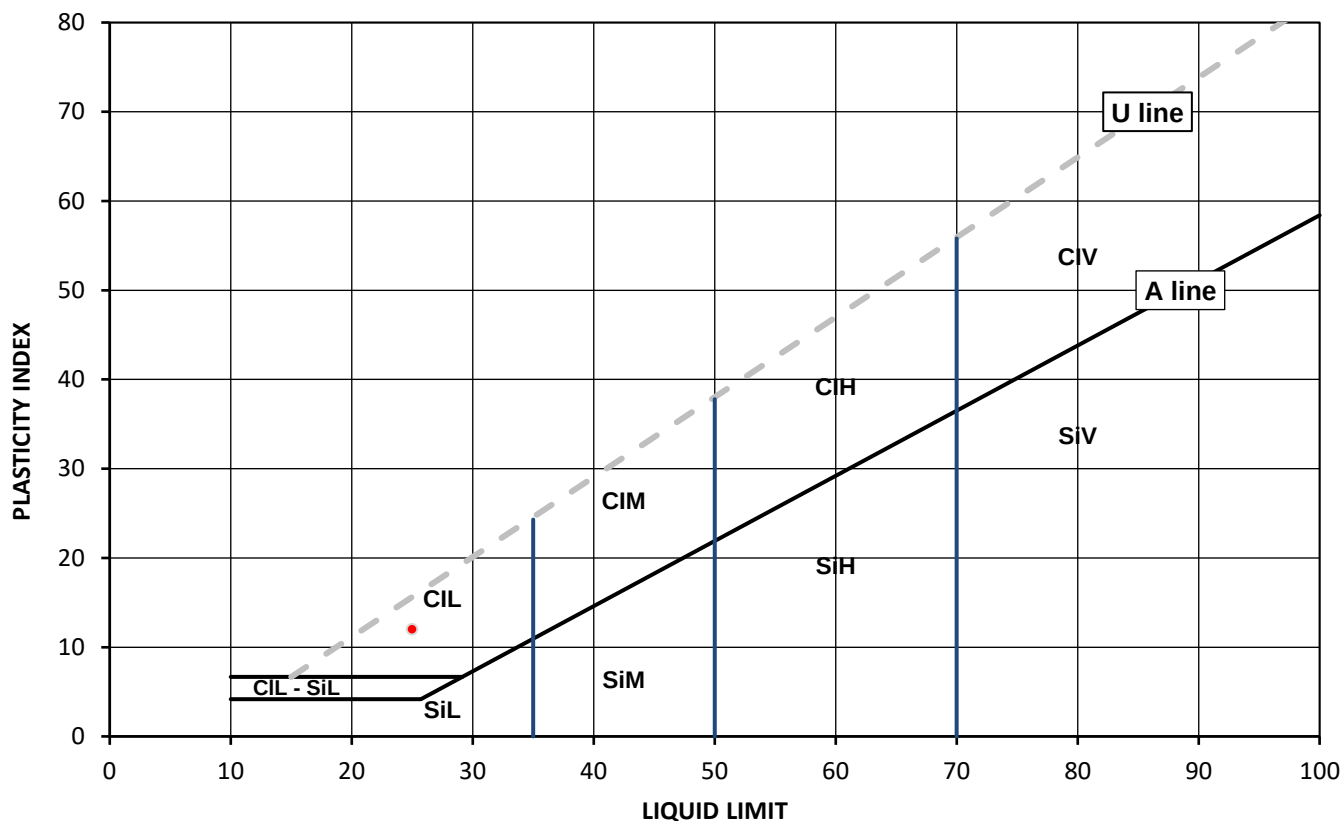
Test Results:

Laboratory Reference: 335263
Hole No.: WS01
Sample Reference: Not Given
Sample Description: Brown slightly gravelly very sandy CLAY

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

Sample Preparation: Tested after >0.425mm removed by hand; The water content in the sample was increased
Cone Type: 80g/30deg

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
18.0	25	13	12	0.42	0.58	86



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

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

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

Signed:

Monika Siewior

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,
cl 5.2 and 6

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



Environmental Science

4041

Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QL

Contact: Will Thistleton
Site Address: Scours Lane

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

Client Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 08/10/2024
Sampled By: Not Given

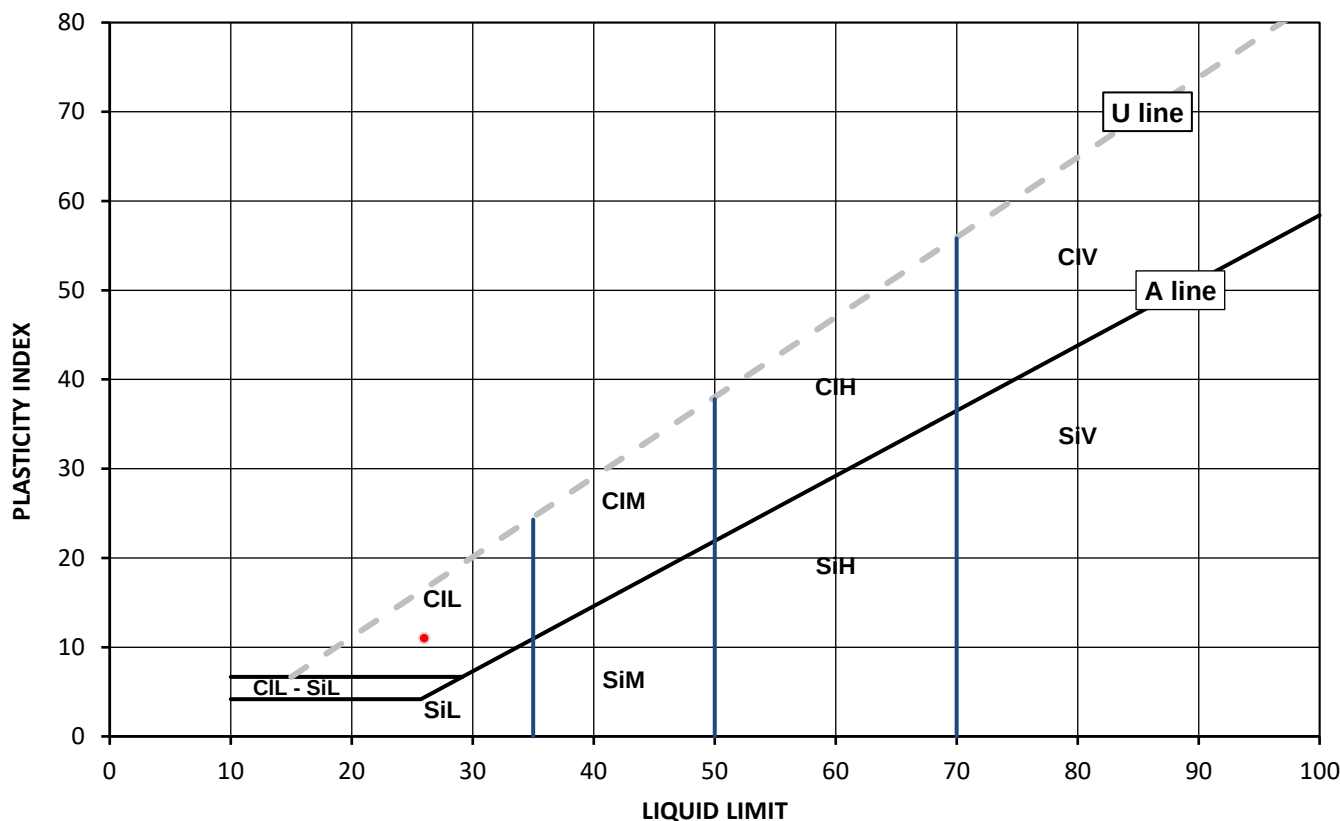
Test Results:

Laboratory Reference: 335265
Hole No.: WS03
Sample Reference: Not Given
Sample Description: Brown slightly gravelly very sandy CLAY

Depth Top [m]: 2.20
Depth Base [m]: Not Given
Sample Type: D

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased
Cone Type: 80g/30deg

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
16.6	26	15	11	0.18	0.82	88



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

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

Note: Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2:2022; # Non accredited

Remarks:

Signed:

Monika Siewior

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

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



Environmental Science

4041

Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road,
Hadleigh,
Benfleet, SS7 2QL
Contact: Will Thistleton
Site Address: Scours Lane

BS EN ISO 17892-12:2018+A2:2022, cl 5.3.14, 5.5, Fall Cone Method, 1 Pt Test, BS 1377-2:2022, cl 5.3, 6. BS EN ISO 17892-12:2018+A2:2022 cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6. Correlation Factor by Clayton C.R.I and Jukes A.W (1978). W by BS EN ISO 17892-1:2014+A1:2022.

Client Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 08/10/2024
Sampled By: Not Given

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

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	W	Liquid & Plastic Limit								Density		
		Reference	Depth Top	Depth Base	Type				% Passing 425um	WL*	Correlation Factor	Wp	Ip	Cone type	Sample Preparation	bulk	dry	PD	
			m	m					%	%		%	%		Mg/m3	Mg/m3	Mg/m3		
335256	BH01	Not Given	6.00	Not Given	D	Yellowish brown gravelly slightly clayey SAND	Atterberg 1 Point	9.0	41	25	1.030	NP	NP	80g/30 deg	WR				
335263	WS01	Not Given	2.00	Not Given	D	Brown slightly gravelly very sandy CLAY	Atterberg 4 Point	18.0	86	25	-	13	12	80g/30 deg	R / I				
335265	WS03	Not Given	2.20	Not Given	D	Brown slightly gravelly very sandy CLAY	Atterberg 4 Point	16.6	88	26	-	15	11	80g/30 deg	WR / I				

Note: # Non accredited; NP - Non plastic; N - Tested in natural condition, R - Tested after >0,425mm removed by hand, WR - Tested after washing to remove >425mm; I - The water content in the sample was increased , D - The water content in the sample was decreased; * - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments:

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Signed:

Monika Siewior

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd



SUMMARY REPORT
DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022, clause 4.1

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



Environmental Science

4041
Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QL
Contact: Will Thistleton
Site Address: Scours Lane
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 08/10 - 10/10/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC											
		Reference	Depth Top m	Depth Base m	Type														
335256	BH01	Not Given	6.00	Not Given	D	Yellowish brown gravelly slightly clayey SAND		9.0											
335263	WS01	Not Given	2.00	Not Given	D	Brown slightly gravelly very sandy CLAY		18.0											
335265	WS03	Not Given	2.20	Not Given	D	Brown slightly gravelly very sandy CLAY		16.6											

Comments:

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Signed:

Monika Siewior

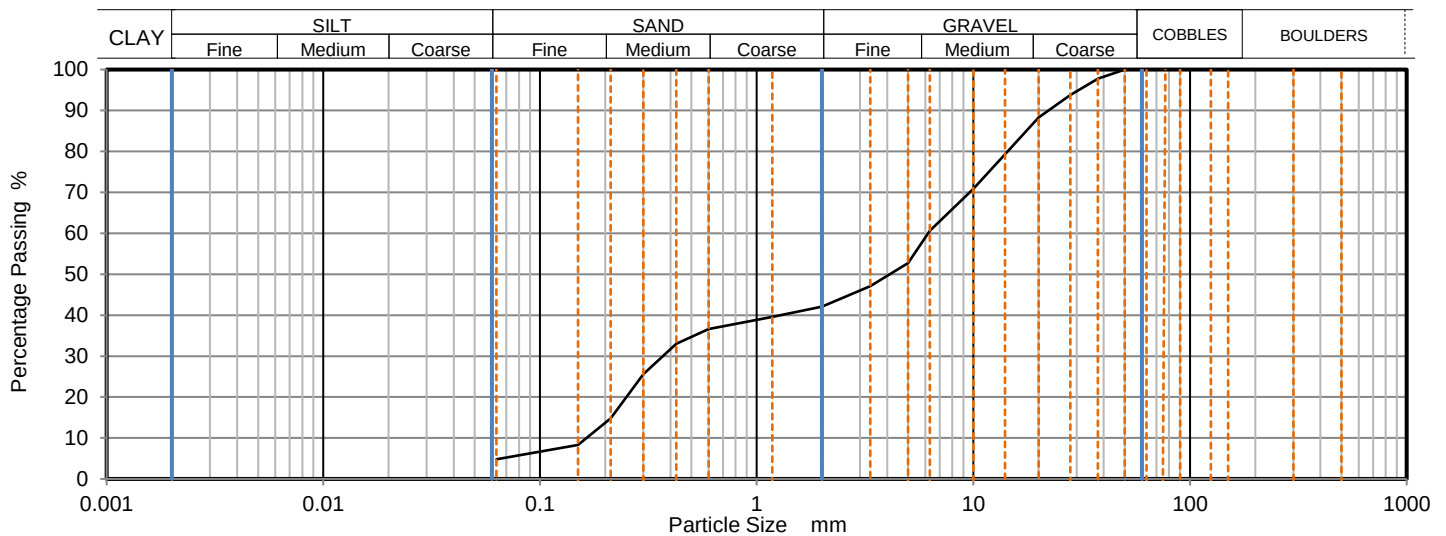
Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd



4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QLContact: Will Thistleton
Site Address: Scours LaneClient Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 09/10/2024
Sampled By: Not Given

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

Test Results:Laboratory Reference: 335255
Hole No.: BH01
Sample Reference: Not Given
Sample Description: Yellowish brown very sandy clayey GRAVEL
Sample Preparation: Sample was whole tested, oven dried at 107.7 °C and broken down by hand.Depth Top [m]: 5.00
Depth Base [m]: 5.40
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	98		
28	94		
20	88		
14	79		
10	71		
6.3	61		
5	53		
3.35	47		
2	42		
1.18	40		
0.6	37		
0.425	33		
0.3	26		
0.212	15		
0.15	8		
0.063	5		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	58.00
Sand	37.00
Fines <0.063 mm	5.00

Grading Analysis	
D100	mm 50
D60	mm 6.19
D30	mm 0.369
D10	mm 0.164
Uniformity Coefficient	38
Curvature Coefficient	0.13

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

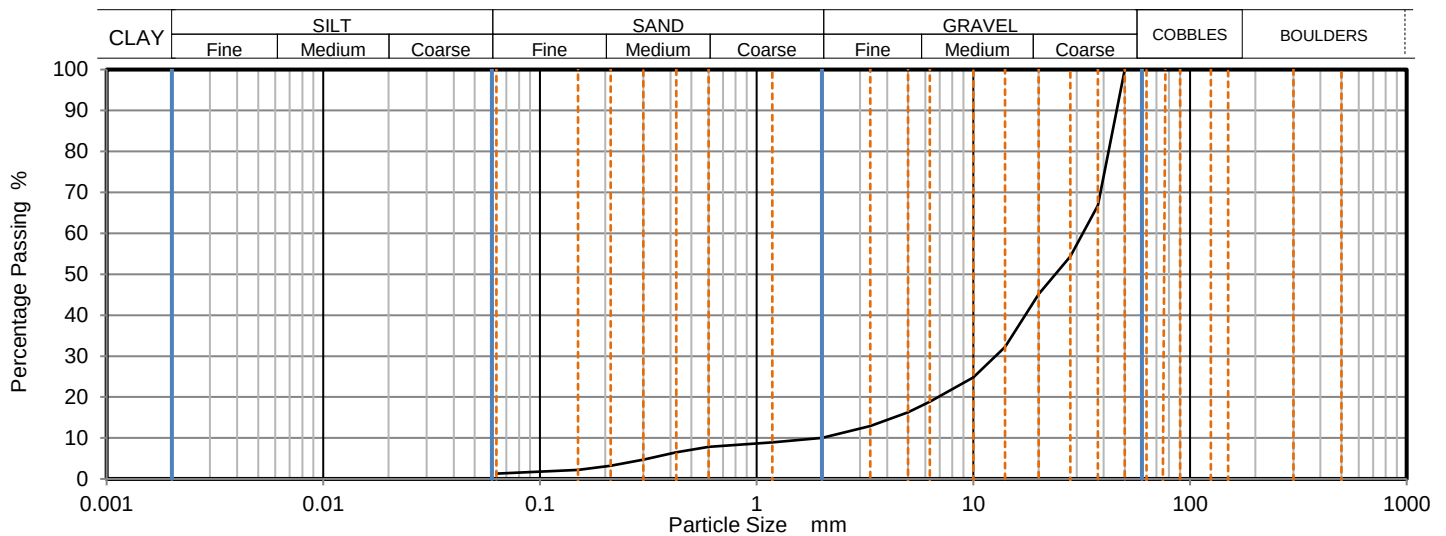
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4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QLContact: Will Thistleton
Site Address: Scours LaneClient Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 10/10/2024
Sampled By: Not Given

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

Test Results:Laboratory Reference: 335261
Hole No.: BH01
Sample Reference: Not Given
Sample Description: Yellowish brown sandy GRAVEL
Sample Preparation: Sample was whole tested, oven dried at 106.0 °C and broken down by hand.Depth Top [m]: 7.50
Depth Base [m]: Not Given
Sample Type: D

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	67		
28	54		
20	45		
14	32		
10	25		
6.3	19		
5	16		
3.35	13		
2	10		
1.18	9		
0.6	8		
0.425	7		
0.3	5		
0.212	3		
0.15	2		
0.063	1		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	90.00
Sand	9.00
Fines <0.063 mm	1.00

Grading Analysis	
D100	mm 50
D60	mm 32
D30	mm 12.7
D10	mm 1.96
Uniformity Coefficient	16
Curvature Coefficient	2.6

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks: The material submitted - fails to meet the minimum mass requirements as stated in BS EN ISO 17892-4:2016 Table 1.

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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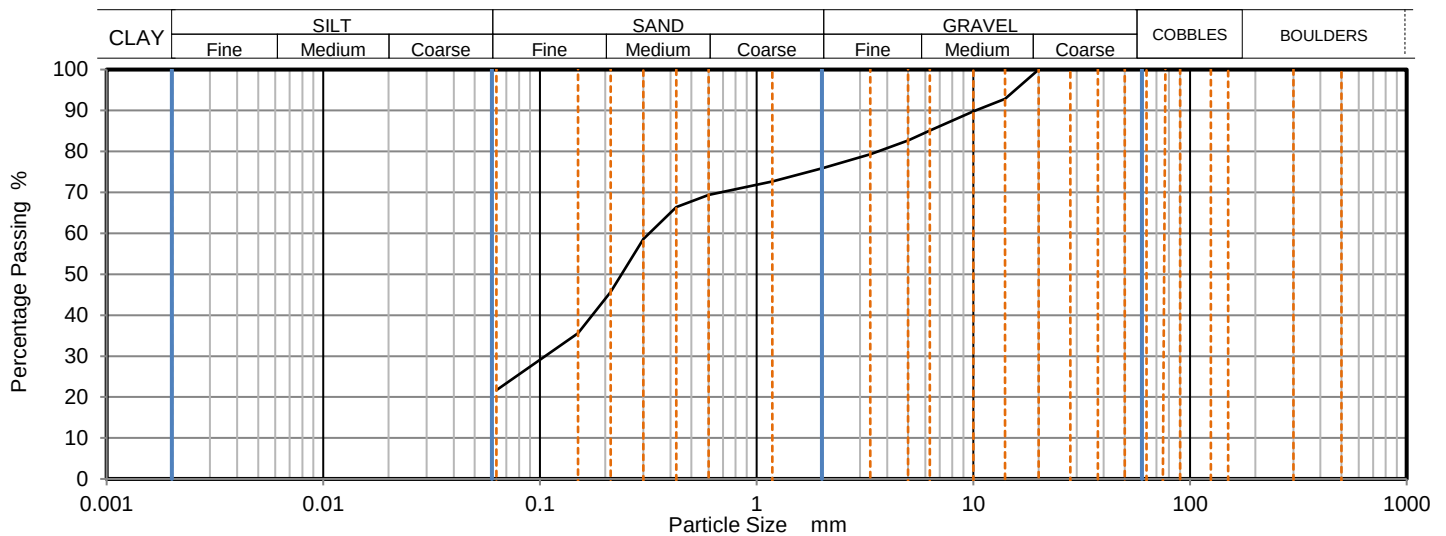
4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QLContact: Will Thistleton
Site Address: Scours LaneClient Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 08/10/2024
Sampled By: Not Given

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

Test Results:Laboratory Reference: 335264
Hole No.: WS02
Sample Reference: Not Given
Sample Description: Brown very gravelly very clayey SAND
Sample Preparation: Sample was quartered, oven dried at 108.3 °C and broken down by hand.Depth Top [m]: 2.50
Depth Base [m]: 3.00
Sample Type: D

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	93		
10	90		
6.3	85		
5	83		
3.35	79		
2	76		
1.18	73		
0.6	69		
0.425	66		
0.3	59		
0.212	46		
0.15	36		
0.063	22		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	24.00
Sand	54.00
Fines <0.063 mm	22.00

Grading Analysis	
D100	mm 20
D60	mm 0.319
D30	mm 0.106
D10	mm
Uniformity Coefficient	5.1
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:**Signed:**Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION WATER CONTENT OF CHALK

Tested in Accordance with: BS EN ISO 17892-2:2014, clause 5.2 and BS 1377: Part 2:2022, clause 4.2

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



Environmental Science

4041
Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh,
Benfleet, SS7 2QL
Contact: Will Thistleton
Site Address: Scours Lane
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 10/10/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m								
335257	BH01	Not Given	9.00	Not Given	D	White CHALK		20.7	2.06	1.73	19.1	
335262	BH01	Not Given	17.00	17.45	D	White CHALK with fragments of flintstone		26.5	1.98	1.57	25.7	

Note: SWC - Saturation Water Content; WC - Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022 clause 4.1

Comments:

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Signed:

Monika Siewior

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd



SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

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



Environmental Science

4041
Client: A2 Site Investigation Limited
Client Address: Broom House 39-43 London Road, Hadleigh, Benfleet, SS7 2QL
Contact: Will Thistleton
Site Address: Scours Lane
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 53924
Job Number: 24-045284-1
Date Sampled: 24/09/2024
Date Received: 26/09/2024
Date Tested: 15/10/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
335258	BH01	Not Given	10.50	Not Given	D	White CHALK	WC = 21.3%	1	I	U	YES	50.3	81.5	54.0	43.0	1.4	66.8	0.31	0.36
335259	BH01	Not Given	15.00	Not Given	D	White CHALK	WC = 20.5%	1	I	U	YES	44.8	74.3	55.0	50.0	1.2	68.8	0.25	0.29
335260	BH01	Not Given	18.00	Not Given	D	White CHALK	WC = 25.5%	1	I	U	YES	51.1	71.5	45.0	32.0	1.0	54.0	0.33	0.34

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random; Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P; Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed: Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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Appendix F Geoenvironmental Laboratory Testing Results



A2 Site Investigation Limited
Broom House 39-43 London Road
Hadleigh
Benfleet
SS7 2QL

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

e: george.clifton@a2-si.com
fernando.afonso@a2-si.com
nicolasimonini@campbellreith.com

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-044332

Project / Site name:	53924	Samples received on:	26/09/2024
Your job number:	SCOURS LANE	Samples instructed on / Analysis started on:	26/09/2024
Your order number:	PO3964-I2-01	Analysis completed by:	07/10/2024
Report Issue Number:	1	Report issued on:	07/10/2024
Samples Analysed:	9 soil samples		

Signed: _____

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

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

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

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

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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

Analytical Report Number: 24-044332

Project / Site name: 53924

Your Order No: PO3964-12-01

Lab Sample Number				329417	329418	329419	329420	329421
Sample Reference				BH01	BH01	BH01	BH01	BH01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	3.00	6.00	9.00	15.00
Date Sampled				23/09/2024	23/09/2024	23/09/2024	23/09/2024	24/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Stone Content	%	0.1	NONE	11.9	8.7	36.2	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	9.6	9.4	17	16
Total mass of sample received	kg	0.1	NONE	0.8	0.5	0.5	0.6	0.6

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SCA	-	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	9.5	8.1	8.7	9	9
Total Sulphate as SO ₄	%	0.005	MCERTS	-	0.033	0.021	0.026	0.03
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	130	47	19	30	35
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0642	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	64.2	23.7	9.72	15	17.2
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	1.6	2.7	3.2	3.8
Total Sulphur	mg/kg	50	MCERTS	-	130	120	100	130
Total Sulphur	%	0.005	MCERTS	-	0.013	0.012	0.01	0.013
Organic Matter (automated)	%	0.1	MCERTS	1.8	-	-	-	-
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.011	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	-	-	-	-
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	3.6	< 2.0	< 2.0	< 2.0
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	2	< 2.0	< 2.0	< 2.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.55	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.64	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	7.3	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	7.6	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	34	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	16	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	41	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	43	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	21	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	21	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	22	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	12	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	21	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	9.1	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.2	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	11	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	270	-	-	-	-
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Analytical Report Number: 24-044332

Project / Site name: 53924

Your Order No: PO3964-12-01

Lab Sample Number	329417				329418	329419	329420	329421
Sample Reference	BH01				BH01	BH01	BH01	BH01
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.00				3.00	6.00	9.00	15.00
Date Sampled	23/09/2024				23/09/2024	23/09/2024	23/09/2024	24/09/2024
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	-	-	-	-
Barium (aqua regia extractable)	mg/kg	1	MCERTS	190	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	-	-	-	-
Chromium (III)	mg/kg	1	NONE	21	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	61	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	40	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	95	-	-	-	-

Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	2.7	< 2.5	< 2.5	< 2.5
Magnesium (water soluble)	mg/kg	5	NONE	-	5.5	< 5.0	< 5.0	< 5.0

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 13	-	-	-	-
TPHCWG - Aliphatic >EC35 - EC40 _{EH_CU_1D_AL}	mg/kg	10	NONE	< 10	-	-	-	-
TPHCWG - Aliphatic >EC5 - EC40 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	13	-	-	-	-

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	-	-	-	-
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	2.3	-	-	-	-
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	31	-	-	-	-
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	130	-	-	-	-
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	190	-	-	-	-
TPHCWG - Aromatic >EC35 - EC40 _{EH_CU_1D_AR}	mg/kg	10	NONE	29	-	-	-	-
TPHCWG - Aromatic >EC5 - EC40 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	380	-	-	-	-

TPH Total >EC5 - EC40 _{EH_CU+HS_1D_TOTAL}	mg/kg	10	NONE	400	-	-	-	-
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VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	-	-	-	-
Benzene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
Toluene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	-



Analytical Report Number: 24-044332
 Project / Site name: 53924
 Your Order No: PO3964-12-01

Lab Sample Number				329417	329418	329419	329420	329421
Sample Reference				BH01	BH01	BH01	BH01	BH01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	3.00	6.00	9.00	15.00
Date Sampled				23/09/2024	23/09/2024	23/09/2024	23/09/2024	24/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-044332

Project / Site name: 53924

Your Order No: PO3964-12-01

Lab Sample Number	329422	329423	329424	329425
Sample Reference	WS01	WS02	WS03	WS04
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	2.50	1.50	0.50	0.60
Date Sampled	24/09/2024	24/09/2024	24/09/2024	24/09/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	14	38.6	45	12.6
Moisture Content	%	0.01	NONE	14	9.9	6	14
Total mass of sample received	kg	0.1	NONE	0.8	0.8	0.8	0.8

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	SCA	SCA

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.6	8.4	8.4	8.5
Total Sulphate as SO ₄	%	0.005	MCERTS	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	18	19	24	55
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.00897	0.00924	0.012	0.0274
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	8.97	9.24	12	27.4
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-	-
Total Sulphur	%	0.005	MCERTS	-	-	-	-
Organic Matter (automated)	%	0.1	MCERTS	0.8	0.3	1.6	4.6
Fraction Organic Carbon (FOC) Automated	N/A	0.001	MCERTS	0.0046	0.0017	0.0093	0.026
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.5	0.2	0.9	2.6
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	0.17
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	0.3
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.1	0.18
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	0.31
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.1	4.2
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.36	1.1
Fluoranthene	mg/kg	0.05	MCERTS	0.09	0.07	2.2	7.6
Pyrene	mg/kg	0.05	MCERTS	0.06	< 0.05	2	6.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	< 0.05	1.1	3.7
Chrysene	mg/kg	0.05	MCERTS	0.07	< 0.05	1.3	3.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	1.5	4.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.77	2.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.3	4.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.78	2.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.18	0.42
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.93	2.6

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	13.8	44.3
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Analytical Report Number: 24-044332

Project / Site name: 53924

Your Order No: PO3964-12-01

Lab Sample Number	329422	329423	329424	329425
Sample Reference	WS01	WS02	WS03	WS04
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	2.50	1.50	0.50	0.60
Date Sampled	24/09/2024	24/09/2024	24/09/2024	24/09/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	11	17	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	59	34	81	120
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.91	0.54	0.82	0.71
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.3	0.6	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.3	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	26	16	20	18
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	16	20	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	6	26	30
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	9.9	78	76
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.77	0.55	1.1	1.1
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	12	19	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46	34	38	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	33	95	100

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

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC35 - EC40 _{EH_CU_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC40 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	< 10	11
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	20	33
TPHCWG - Aromatic >EC35 - EC40 _{EH_CU_1D_AR}	mg/kg	10	NONE	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC40 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	< 10	20	43

TPH Total >EC5 - EC40 _{EH_CU+HS_1D_TOTAL}	mg/kg	10	NONE	< 10	< 10	20	43
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VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0



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 Project / Site name: 53924
 Your Order No: PO3964-12-01

Lab Sample Number				329422	329423	329424	329425
Sample Reference				WS01	WS02	WS03	WS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.50	1.50	0.50	0.60
Date Sampled				24/09/2024	24/09/2024	24/09/2024	24/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status				

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-044332

Project / Site name: 53924

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
329417	BH01	None Supplied	1	Brown silt / sediment with stones ⁹
329418	BH01	None Supplied	3	Brown clay and sand with stones
329419	BH01	None Supplied	6	Brown sand with stones
329420	BH01	None Supplied	9	Beige clay and sand with chalk
329421	BH01	None Supplied	15	Beige clay and sand with chalk
329422	WS01	None Supplied	2.5	Brown clay and sand with stones and chalk
329423	WS02	None Supplied	1.5	Brown sand with stones
329424	WS03	None Supplied	0.5	Brown loam and sand with stones and vegetation
329425	WS04	None Supplied	0.6	Brown loam and sand with stones and vegetation