TRIAL PIT RECORD

TP No. **TP01** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 25/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C

Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.30			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble and low boulder content. Gravel is angular to subrounded fine to coarse of brick, sandstone and concrete. Cobbles are angular of brick. Boulders are angular of concrete up to 35cm in diameter.	0.90	149.79		
				Moderately weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble and low boulder content. Cobbles are angular of sandstone. Boulders are angular of sandstone up to 30cm in diameter.				
				End of trial pit at 3.20m	3.20	147.49		

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Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 150.69

Easting: 412521.58

Northing: 415529.48

Fig No. TP01

TRIAL PIT RECORD

TP No. **TP02** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 25/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
				MADE GROUND: Black ASPHALT.				
					0.20	151.51		
ES	0.30			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subrounded fine to coarse of brick, sandstone and concrete. Cobbles are angular of brick and concrete with occasional fragments of glass.				
					0.60	151.11		
				MADE GROUND: Dark greyish brown clayey gravelly fine to coarse SAND with high cobble and medium boulder content. Gravel is angular to subangular fine to coarse of sandstone, brick and mudstone. Cobbles are angular of brick. Boulders are angular of sandstone up to 30cm in diameter with occasional pockets of soft dark greyish brown slightly gravelly sandy clay.				
ES	1.00		1					
D	1.20							
					1.50	150.21		
				Moderately weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble and boulder content. Cobbles are angular of sandstone. Boulders are angular of sandstone up to 35cm in diameter.				
ES	2.00		2					
				From 2.60m bgl: Becomes medium strong.				
			3					
			4					
				End of trial pit at 4.10m	4.10	147.61		
			5					

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Hydraulic breaker utilised to break out rock from 2.60m bgl. 4. Trial pit took approximately 90 minutes to complete. 5. Backfilled with arisings upon completion.

GL (m AOD) 151.71

Easting: 412536.31

Northing: 415489.96

Fig No. TP02

TRIAL PIT RECORD

TP No. **TP03** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 25/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
D	0.10			MADE GROUND: Black ASPHALT.				
					0.30	151.67		
ES	0.50			MADE GROUND: Dark brown very gravelly fine to coarse SAND with low cobble and low boulder content. Gravel is angular to subrounded fine to coarse of brick, sandstone and concrete. Cobbles are angular of brick. Boulders are angular of concrete up to 30cm in diameter.				
			1					
				Redundant drain encased in concrete recovered at 1.30m bgl.				
					1.40	150.57		
ES	1.50			MADE GROUND: Dark grey to black clayey gravelly fine to coarse SAND. Gravel is angular to subrounded fine to medium of sandstone, brick, ash and mudstone.				
			2					
					2.30	149.67		
				Moderately weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.				
			3					
				From 3.60m bgl: Becomes medium strong.				
			4					
				End of trial pit at 4.35m	4.35	147.62		
			5					

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Hydraulic breaker utilised to break out rock from 3.60m bgl. 4. Trial pit took approximately 74 minutes to complete. 5. Backfilled with arisings upon completion.

GL (m AOD) 151.97

Easting: 412547.65

Northing: 415482.31

Fig No. TP03

TRIAL PIT RECORD

TP No. **TP04** Sheet 1 of 2

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 25/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.10			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subrounded fine to coarse of brick, sandstone and concrete. Cobbles are angular of brick and concrete with occasional fragments of glass and wood.				
					0.40	152.31		
ES	0.50			MADE GROUND: Black ASPHALT.				
					0.60	152.11		
				MADE GROUND: Orangish brown sandy angular to subangular fine to coarse GRAVEL of sandstone, mudstone and brick.				
ES	1.00		1					
					1.40	151.31		
				MADE GROUND: Dark grey to black slightly gravelly clayey fine to coarse SAND. Gravel is angular to subrounded fine to medium of sandstone, brick, ash and mudstone with slight hydrocarbon odour.				
ES	1.60							
D	2.00		2					
					2.50	150.21		
				Weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.				
ES	3.00		3					
			4	*From 4.00m bgl: Becomes moderately weak to medium strong.*				
			5					

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Hydraulic breaker utilised to break out rock from 4.00m bgl. 4. Trial pit took approximately 95 minutes to complete. 5. Backfilled with arisings upon completion.

GL (m AOD) 152.71

Easting: 412553.16

Northing: 415473.06

Fig No. TP04

TRIAL PIT RECORD

TP No. **TP04** Sheet 2 of 2

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 25/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C

Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
				Weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.	5.10	147.61		
				End of trial pit at 5.10m				

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Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Hydraulic breaker utilised to break out rock from 4.00m bgl. 4. Trial pit took approximately 95 minutes to complete. 5. Backfilled with arisings upon completion.

GL (m AOD) 152.71

Easting: 412553.16

Northing: 415473.06

Fig No. TP04

TRIAL PIT RECORD

TP No. **TP05** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.50			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble and boulder content. Gravel is angular to subrounded fine to coarse of brick, sandstone, concrete and occasional asphalt. Cobbles are angular of brick. Boulders are angular of sandstone and concrete up to 35cm in diameter.				
				From 0.50m bgl: Intact brick wall encountered at south-western corner of pit.				
				Moderately weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble and boulder content. Cobbles are angular of sandstone. Boulders are angular of sandstone up to 40cm in diameter.	2.90	149.16		
				End of trial pit at 4.10m	4.10	147.96		

1 2 3 4 5

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 152.06

Easting: 412562.20

Northing: 415470.57

Fig No. TP05

TRIAL PIT RECORD

TP No. **TP06** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.30			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subangular fine to coarse of brick, concrete, sandstone and asphalt. Cobbles are angular of brick and concrete with occasional fragments of wood.				
ES	0.90			*From 0.85 to 0.95m bgl: Layer of MADE GROUND: Black ASPHALT in north-western corner of pit.*	0.95	149.19		
			1	Weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.				
			2					
				End of trial pit at 2.90m	2.90	147.24		
			3					
			4					
			5					

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 150.14

Easting: 412558.76

Northing: 415494.91

Fig No. TP06

TRIAL PIT RECORD

TP No. **TP07** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.60			MADE GROUND: Dark brown very gravelly fine to coarse SAND with high cobble and low boulder content. Gravel is angular to subrounded fine to coarse of brick, limestone, sandstone, concrete and rare asphalt. Cobbles are angular of brick. Boulders are angular of sandstone up to 80cm in diameter.	1.30	148.34		
				Moderately weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble and low boulder content. Cobbles are angular of sandstone. Boulders are angular of sandstone up to 25 cm in diameter.				
				End of trial pit at 3.00m	3.00	146.64		

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Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 149.64

Easting: 412541.52

Northing: 415518.94

Fig No. TP07

TRIAL PIT RECORD

TP No. **TP08** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.10			MADE GROUND: Grass over dark brown sandy gravelly TOPSOIL. Gravel is angular to subrounded fine to medium of brick and sandstone with many rootlets.				
				MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble and low boulder content. Gravel is angular to subrounded fine to coarse of brick, concrete and sandstone. Cobbles are angular of brick. Boulders are angular of sandstone up to 40cm in diameter.	0.30	149.93		
ES	0.90							
			1		1.10	149.13		
				Weak yellowish brown SANDSTONE. Recovered as angular to subrounded fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.				
			2					
			3					
				End of trial pit at 3.50m	3.50	146.73		
			4					
			5					

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 150.23

Easting: 412515.61

Northing: 415542.42

Fig No. TP08

TRIAL PIT RECORD

TP No. **TP09** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.20			MADE GROUND: Grass over dark brown slightly clayey sandy gravelly TOPSOIL. Gravel is angular to subangular fine to medium of brick and sandstone with many rootlets.				
ES	0.50			MADE GROUND: Dark brown very gravelly fine to coarse SAND with high cobble and medium boulder content. Gravel is angular to subrounded fine to coarse of brick, concrete and sandstone. Cobbles are angular of brick. Boulders are angular of sandstone up to 60cm in diameter.	0.40	148.77		
ES	1.20			Moderately weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.	1.05	148.12		
				End of trial pit at 3.30m	3.30	145.87		

1 2 3 4 5

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 149.17

Easting: 412516.21

Northing: 415555.96

Fig No. TP09

TRIAL PIT RECORD

TP No. **TP10** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 25/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C

Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.20			MADE GROUND: Dark brown very gravelly fine to coarse SAND with high cobble content. Gravel is angular to subrounded fine to coarse of brick, concrete, sandstone and limestone. Cobbles are angular of brick and sandstone with frequent fragments of wood.	0.80	148.46		
ES	1.00			Weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.				
				End of trial pit at 3.00m	3.00	146.26		

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 149.26

Easting: 412532.98

Northing: 415534.84

Fig No. TP10

TRIAL PIT RECORD

TP No. **TP11** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.20			MADE GROUND: Dark brown slightly clayey gravelly fine to coarse SAND with low cobble content. Gravel is angular to subrounded fine to coarse of brick, sandstone, mudstone and limestone. Cobbles are angular of brick and sandstone.				
				Weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble content. Cobbles are angular of sandstone.	0.60	147.62		
				End of trial pit at 3.00m	3.00	145.22		

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Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 148.22

Easting: 412544.59

Northing: 415540.83

Fig No. TP11

TRIAL PIT RECORD

TP No. **TP12** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.40			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subangular fine to coarse of brick, concrete, sandstone and asphalt. Cobbles are angular of brick and concrete with occasional fragments of glass	0.80	148.32		
ES	1.00			Moderately weak yellowish brown SANDSTONE. Recovered as angular to subangular fine to coarse sandy gravel with medium cobble and low boulder content. Cobbles are angular of sandstone. Boulders are angular of sandstone up to 40cm in diameter.				
				End of trial pit at 3.00m	3.00	146.12		

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 149.12

Easting: 412570.61

Northing: 415506.18

Fig No. TP12

TRIAL PIT RECORD

TP No. **TP13** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.20			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subrounded fine to coarse of brick, concrete, sandstone and asphalt. Cobbles are angular of brick and sandstone.	0.65	147.53		
				Moderately weak yellowish brown SANDSTONE. Recovered as angular to subrounded fine to coarse sandy gravel with medium cobble and boulder content. Cobbles are angular of sandstone. Boulders are angular of sandstone up to 30cm in diameter.				
				End of trial pit at 2.80m	2.80	145.38		

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Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 148.18

Easting: 412585.43

Northing: 415507.27

Fig No. TP13

TRIAL PIT RECORD

TP No. **TP14** Sheet 1 of 1

Site: Blackmoorfoot Road, Huddersfield

Contract No: C9083

Client: Lidl Great Britain Ltd.

Date: 26/08/2021

Method: Kobelco SK270SRLC-5 with 900mm toothed bucket.

Scale: 1:25

Logged By: J.C | Checked By: AMG

SAMPLE DETAILS				STRATA RECORD				
Type	Depth From - To(m)	Vane Results (kN/m2) {}{ppm}	Ground -water	Description	Depth (m)	Level (m AOD)	Legend	Backfill
ES	0.30			MADE GROUND: Dark brown very gravelly fine to coarse SAND with medium cobble content. Gravel is angular to subangular fine to coarse of brick, concrete, sandstone and asphalt. Cobbles are angular of brick.				
ES	0.75			*From 0.70 to 0.80m bgl: Layer of MADE GROUND: Black ASPHALT in south western corner of pit.*	0.80	148.47		
				Moderately weak yellowish brown SANDSTONE. Recovered as angular to subrounded fine to coarse sandy gravel with medium cobble and boulder content. Cobbles are angular of sandstone. Boulders are angular of sandstone up to 30cm in diameter.				
				End of trial pit at 2.90m	2.90	146.37		

Remarks and Groundwater Observations

1. Trial pit remained dry and stable. 2. Terminated in competent strata. 3. Backfilled with arisings upon completion.

GL (m AOD) 149.27

Easting: 412586.92

Northing: 415487.35

Fig No. TP14

APPENDIX C

LABORATORY ANALYSIS RESULTS

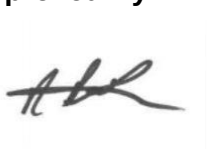
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	21-30245-1
Initial Date of Issue:	10-Sep-2021
Client	Sirius Geotechnical Ltd
Client Address:	4250 (Downstairs) Thorpe Park Park Approach Leeds West Yorkshire LS15 8GB
Contact(s):	Adrian Grant Jack Clarke
Project	C9083 Blackmoorfoot Road

Quotation No.:		**Date Received:**	01-Sep-2021
Order No.:	21590/C9083/JC	**Date Instructed:**	01-Sep-2021
No. of Samples:	20		
Turnaround (Wkdays):	7	**Results Due:**	09-Sep-2021
Date Approved:	10-Sep-2021		

Approved By:



Details: Rachel Robertson, Deputy Technical Manager

Results - Miscellaneous Solid

Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd			**Chemtest Job No.:**		21-30245	21-30245	21-30245
Quotation No.:			**Chemtest Sample ID.:**		1270483	1270488	1270498
			Sample Location:		TP04	TP06	TP14
			Sample Type:		MISCSOLID	MISCSOLID	MISCSOLID
			Top Depth (m):		0.5	0.90	0.75
			Date Sampled:		25-Aug-2021	26-Aug-2021	26-Aug-2021
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Chromatogram (TPH)	N			N/A	See Attached	See Attached	See Attached
Diesel Present	N	2670		N/A	False	False	False
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	190	290	160
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	6900	7600	7200
Total Petroleum Hydrocarbons	N	2680	mg/kg	10	7100	7900	7300
Naphthalene	N	2700	mg/kg	0.10	< 0.10	< 0.10	0.12
Acenaphthylene	N	2700	mg/kg	0.10	< 0.10	< 0.10	0.46
Acenaphthene	N	2700	mg/kg	0.10	< 0.10	< 0.10	1.2
Fluorene	N	2700	mg/kg	0.10	< 0.10	< 0.10	0.60
Phenanthrene	N	2700	mg/kg	0.10	< 0.10	10	1.5
Anthracene	N	2700	mg/kg	0.10	< 0.10	6.3	1.8
Fluoranthene	N	2700	mg/kg	0.10	< 0.10	57	20
Pyrene	N	2700	mg/kg	0.10	< 0.10	61	25
Benzo[a]anthracene	N	2700	mg/kg	0.10	< 0.10	25	8.1
Chrysene	N	2700	mg/kg	0.10	< 0.10	22	7.7
Benzo[b]fluoranthene	N	2700	mg/kg	0.10	< 0.10	38	18
Benzo[k]fluoranthene	N	2700	mg/kg	0.10	< 0.10	18	8.6
Benzo[a]pyrene	N	2700	mg/kg	0.10	< 0.10	32	15
Indeno(1,2,3-c,d)Pyrene	N	2700	mg/kg	0.10	< 0.10	17	9.5
Dibenz(a,h)Anthracene	N	2700	mg/kg	0.10	< 0.10	4.4	3.6
Benzo[g,h,i]perylene	N	2700	mg/kg	0.10	< 0.10	16	6.6
Coronene	N	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 17 PAH's	N	2700	mg/kg	2.0	< 2.0	310	130
N-Nitrosodimethylamine	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Phenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Isophorone	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50

Results - Miscellaneous Solid

Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd		**Chemtest Job No.:**			21-30245	21-30245	21-30245
Quotation No.:		**Chemtest Sample ID.:**			1270483	1270488	1270498
			Sample Location:		TP04	TP06	TP14
			Sample Type:		MISCSOLID	MISCSOLID	MISCSOLID
			Top Depth (m):		0.5	0.90	0.75
			Date Sampled:		25-Aug-2021	26-Aug-2021	26-Aug-2021
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
1,2,4-Trichlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Naphthalene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene	N	2790	mg/kg	0.50	< 0.50	0.73	< 0.50
Dimethylphthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Acenaphthene	N	2790	mg/kg	0.50	< 0.50	9.4	< 0.50
3-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran	N	2790	mg/kg	0.50	< 0.50	2.4	< 0.50
4-Chlorophenylphenylether	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Fluorene	N	2790	mg/kg	0.50	< 0.50	7.3	< 0.50
Diethyl Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Azobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Phenanthrene	N	2790	mg/kg	0.50	< 0.50	46	1.7
Anthracene	N	2790	mg/kg	0.50	< 0.50	21	< 0.50
Carbazole	N	2790	mg/kg	0.50	< 0.50	0.95	< 0.50
Di-N-Butyl Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Fluoranthene	N	2790	mg/kg	0.50	< 0.50	140	3.2
Pyrene	N	2790	mg/kg	0.50	< 0.50	120	2.9
Butylbenzyl Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene	N	2790	mg/kg	0.50	< 0.50	54	1.8
Chrysene	N	2790	mg/kg	0.50	< 0.50	48	1.7
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate	N	2790	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene	N	2790	mg/kg	0.50	< 0.50	61	2.1

Results - Miscellaneous Solid

Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd			**Chemtest Job No.:**		21-30245	21-30245	21-30245
Quotation No.:			**Chemtest Sample ID.:**		1270483	1270488	1270498
			Sample Location:		TP04	TP06	TP14
			Sample Type:		MISCSOLID	MISCSOLID	MISCSOLID
			Top Depth (m):		0.5	0.90	0.75
			Date Sampled:		25-Aug-2021	26-Aug-2021	26-Aug-2021
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Benzo[k]fluoranthene	N	2790	mg/kg	0.50	< 0.50	23	0.78
Benzo[a]pyrene	N	2790	mg/kg	0.50	< 0.50	56	1.6
Indeno(1,2,3-c,d)Pyrene	N	2790	mg/kg	0.50	< 0.50	23	0.92
Dibenz(a,h)Anthracene	N	2790	mg/kg	0.50	< 0.50	6.0	< 0.50
Benzo[g,h,i]perylene	N	2790	mg/kg	0.50	< 0.50	28	0.99
Moisture	N		%	0.10	< 0.10	< 0.10	< 0.10
Interpretive Report	N			N/A	See Below	See Below	See Below
SVOC TIC	N	2790	mg/kg	N/A	None Detected	None Detected	None Detected

Sample 1270483 does not contain coal tar contamination. Dibenzothiophene, a biomarker present in coal tar has not been detected by SVOC analysis. This, in conjunction with the low PAH contamination, confirms the absence of coal tar in this sample.

Sample 1270488 is inconclusive for contain coal tar contamination. Dibenzothiophene, a biomarker present in coal tar has not been detected by SVOC analysis. This, in conjunction with the elevated PAH contamination, means we cannot confirm the absence of coal tar in this sample.

Sample 1270498 does not contain coal tar contamination. Dibenzothiophene, a biomarker present in coal tar has not been detected by SVOC analysis. This, in conjunction with the low PAH contamination, confirms the absence of coal tar in this sample.

Results - Soil

Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd		**Chemtest Job No.:**			21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245
Quotation No.:		**Chemtest Sample ID.:**			1270479	1270480	1270481	1270482	1270484	1270485	1270486	1270487
		Sample Location:			TP01	TP02	TP02	TP03	TP04	TP04	TP05	TP06
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.30	2.00	1.00	0.5	1.00	1.60	0.50	0.30
		Date Sampled:			25-Aug-2021	25-Aug-2021	25-Aug-2021	25-Aug-2021	25-Aug-2021	25-Aug-2021	26-Aug-2021	26-Aug-2021
		Asbestos Lab:			DURHAM				DURHAM		DURHAM	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
ACM Type	U	2192		N/A	-				-		-	
Asbestos Identification	U	2192		N/A	No Asbestos Detected				No Asbestos Detected		No Asbestos Detected	
Moisture	N	2030	%	0.020	6.9	5.3	10	7.3	7.8	9.7	6.7	5.6
Soil Colour	N	2040		N/A	Brown	Brown	Black	Brown	Brown	Black	Brown	Brown
Other Material	N	2040		N/A	Stones and Wood	Stones	Stones	Stones	Stones	None	Stones and Roots	Stones
Soil Texture	N	2040		N/A	Loam	Sand	Loam	Gravel	Gravel	Loam	Loam	Loam
pH	M	2010		4.0	8.1	8.6		9.4	8.8		9.4	9.6
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	1.5	0.017		0.036	0.024		0.94	0.10
Calorific Value	N	2140	MJ/kg	0.10			0.80			1.0		
Sulphate (Total)	M	2430	%	0.010	0.32	0.033		< 0.010	0.032		0.44	0.20
Arsenic	M	2450	mg/kg	1.0	36	3.6		3.5	4.3		13	12
Cadmium	M	2450	mg/kg	0.10	0.59	< 0.10		0.26	0.30		0.30	0.32
Chromium	M	2450	mg/kg	1.0	40	12		40	44		24	24
Copper	M	2450	mg/kg	0.50	130	9.4		16	13		22	22
Mercury	M	2450	mg/kg	0.10	0.40	< 0.10		< 0.10	< 0.10		0.21	0.30
Nickel	M	2450	mg/kg	0.50	33	9.4		36	39		23	22
Lead	M	2450	mg/kg	0.50	390	17		24	16		120	90
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20		< 0.20	< 0.20		< 0.20	< 0.20
Zinc	M	2450	mg/kg	0.50	250	25		64	60		92	84
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	2.6	1.1		0.99	0.48		1.6	1.9
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	18	< 1.0	
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	9.6	< 1.0	
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	4.6	< 1.0			< 1.0	58	130	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0			< 5.0	85	130	
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	5.0	< 1.0			< 1.0	< 1.0	< 1.0	
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	71	< 1.0			< 1.0	< 1.0	< 1.0	
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	63	< 1.0			< 1.0	< 1.0	< 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	130	< 1.0			< 1.0	21	6.1	
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	580	< 1.0			< 1.0	120	260	

Results - Soil

Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd		**Chemtest Job No.:**			21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245
Quotation No.:		**Chemtest Sample ID.:**			1270479	1270480	1270481	1270482	1270484	1270485	1270486	1270487
			Sample Location:		TP01	TP02	TP02	TP03	TP04	TP04	TP05	TP06
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.30	2.00	1.00	0.5	1.00	1.60	0.50	0.30
			Date Sampled:		25-Aug-2021	25-Aug-2021	25-Aug-2021	25-Aug-2021	25-Aug-2021	25-Aug-2021	26-Aug-2021	26-Aug-2021
			Asbestos Lab:		DURHAM				DURHAM		DURHAM	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	850	< 5.0			< 5.0	140	270	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	860	< 10			< 10	230	400	
Naphthalene	M	2700	mg/kg	0.10	2.9	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	0.91	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	0.59	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	0.65	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	4.0	< 0.10		< 0.10	< 0.10		1.9	3.2
Anthracene	M	2700	mg/kg	0.10	1.3	< 0.10		< 0.10	< 0.10		0.82	1.8
Fluoranthene	M	2700	mg/kg	0.10	7.7	0.39		< 0.10	< 0.10		4.5	15
Pyrene	M	2700	mg/kg	0.10	8.2	0.45		< 0.10	< 0.10		5.5	16
Benzo[a]anthracene	M	2700	mg/kg	0.10	4.8	0.25		< 0.10	< 0.10		2.8	6.7
Chrysene	M	2700	mg/kg	0.10	4.9	0.20		< 0.10	< 0.10		2.7	5.9
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	6.4	< 0.10		< 0.10	< 0.10		3.4	8.9
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	3.5	< 0.10		< 0.10	< 0.10		1.6	4.3
Benzo[a]pyrene	M	2700	mg/kg	0.10	4.8	< 0.10		< 0.10	< 0.10		3.0	7.4
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	3.2	< 0.10		< 0.10	< 0.10		2.0	4.6
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	1.1	< 0.10		< 0.10	< 0.10		1.3	1.5
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	2.7	< 0.10		< 0.10	< 0.10		1.7	4.0
Total Of 16 PAH's	M	2700	mg/kg	2.0	58	< 2.0		< 2.0	< 2.0		31	79
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0			< 1.0	< 1.0	< 1.0	
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10

Results - Soil

Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd		**Chemtest Job No.:**			21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245
Quotation No.:		**Chemtest Sample ID.:**			1270489	1270490	1270491	1270492	1270493	1270494	1270495	1270496
		Sample Location:			TP07	TP08	TP09	TP09	TP10	TP11	TP12	TP13
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.60	0.10	0.20	1.20	0.20	0.20	1.00	0.20
		Date Sampled:			26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021
		Asbestos Lab:				DURHAM	DURHAM		DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
ACM Type	U	2192		N/A		-	-		-	-	-	-
Asbestos Identification	U	2192		N/A		No Asbestos Detected	No Asbestos Detected		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	3.9	13	6.3	5.5	7.7	5.6	4.8	5.7
Soil Colour	N	2040		N/A	Brown	Brown	Black	Brown	Grey	Brown	Brown	Black
Other Material	N	2040		N/A	Stones	Roots and Stones	Roots and Stones	Stones	Stones	Stones and Roots	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Loam	Loam	Sand	Loam	Loam	Sand	Loam
pH	M	2010		4.0	8.8	8.4	8.2	8.7	8.8	8.6	9.2	8.8
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.13	< 0.010	0.031	< 0.010	0.039	0.021	< 0.010	0.12
Calorific Value	N	2140	MJ/kg	0.10								
Sulphate (Total)	M	2430	%	0.010	0.13	0.21	0.12	< 0.010	0.24	0.041	< 0.010	0.11
Arsenic	M	2450	mg/kg	1.0	21	32	37	2.0	30	12	2.7	13
Cadmium	M	2450	mg/kg	0.10	0.33	0.37	0.38	< 0.10	0.33	0.11	< 0.10	0.69
Chromium	M	2450	mg/kg	1.0	18	19	21	16	22	8.7	18	24
Copper	M	2450	mg/kg	0.50	39	61	80	9.8	70	21	8.6	27
Mercury	M	2450	mg/kg	0.10	0.47	0.60	0.77	< 0.10	1.1	0.76	< 0.10	0.35
Nickel	M	2450	mg/kg	0.50	17	24	25	13	20	8.0	11	16
Lead	M	2450	mg/kg	0.50	100	200	230	11	370	51	8.0	73
Selenium	M	2450	mg/kg	0.20	0.25	0.65	0.70	< 0.20	< 0.20	0.23	< 0.20	< 0.20
Zinc	M	2450	mg/kg	0.50	75	310	170	46	700	30	25	65
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	4.3	6.8	4.5	0.31	5.0	1.5	0.27	2.5
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0		< 1.0	< 1.0		2.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0		< 1.0	< 1.0		8.9	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0		25	37		32	< 1.0	5.9	54
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0		16	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0		25	37		59	< 5.0	5.9	54
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0		< 1.0	< 1.0		30	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0		14	< 1.0		190	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0		21	< 1.0		210	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0		72	7.1		390	< 1.0	10	25
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0		370	74		1500	< 1.0	280	360

Results - Soil

Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd		**Chemtest Job No.:**			21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245	21-30245
Quotation No.:		**Chemtest Sample ID.:**			1270489	1270490	1270491	1270492	1270493	1270494	1270495	1270496
			Sample Location:		TP07	TP08	TP09	TP09	TP10	TP11	TP12	TP13
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.60	0.10	0.20	1.20	0.20	0.20	1.00	0.20
			Date Sampled:		26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021	26-Aug-2021
			Asbestos Lab:			DURHAM	DURHAM		DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0		480	81		2300	< 5.0	290	390
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0		510	120		2400	< 10	290	440
Naphthalene	M	2700	mg/kg	0.10	< 0.10	15	< 0.10	< 0.10	13	< 0.10	< 0.10	0.20
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	1.4	< 0.10	< 0.10	1.2	< 0.10	< 0.10	0.60
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	4.0	< 0.10	< 0.10	1.9	< 0.10	< 0.10	0.29
Fluorene	M	2700	mg/kg	0.10	< 0.10	3.2	< 0.10	< 0.10	1.6	< 0.10	< 0.10	0.25
Phenanthrene	M	2700	mg/kg	0.10	2.9	18	2.5	0.73	13	< 0.10	2.1	2.5
Anthracene	M	2700	mg/kg	0.10	0.98	4.0	0.47	0.15	2.7	< 0.10	1.3	0.98
Fluoranthene	M	2700	mg/kg	0.10	6.2	19	4.9	1.3	16	0.98	7.0	11
Pyrene	M	2700	mg/kg	0.10	5.8	20	4.6	1.1	16	0.75	4.6	8.7
Benzo[a]anthracene	M	2700	mg/kg	0.10	3.4	7.8	2.5	0.48	8.7	0.42	1.8	4.5
Chrysene	M	2700	mg/kg	0.10	3.2	10	2.6	0.91	9.5	0.40	2.2	5.0
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	3.9	11	2.8	0.74	9.1	< 0.10	2.0	6.3
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	2.2	4.3	1.5	0.62	4.1	< 0.10	1.1	3.0
Benzo[a]pyrene	M	2700	mg/kg	0.10	4.3	7.3	2.4	0.48	6.4	< 0.10	1.4	4.8
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	2.4	3.9	1.3	< 0.10	3.5	< 0.10	0.96	3.7
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	1.5	2.0	0.55	< 0.10	1.4	< 0.10	0.48	1.5
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	3.1	4.4	1.7	< 0.10	3.7	< 0.10	0.79	3.1
Total Of 16 PAH's	M	2700	mg/kg	2.0	40	140	28	6.5	110	2.6	26	56
Benzene	M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Toluene	M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: C9083 Blackmoorfoot Road

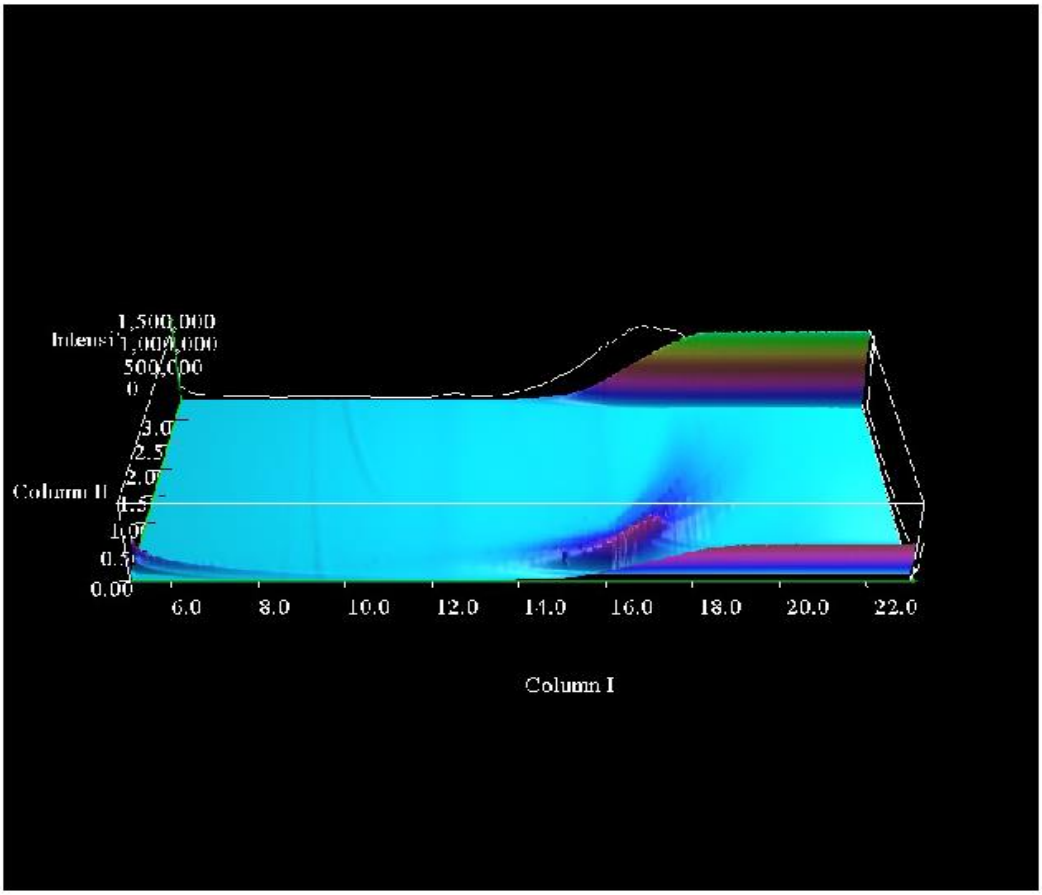
Client: Sirius Geotechnical Ltd			**Chemtest Job No.:**		21-30245
Quotation No.:			**Chemtest Sample ID.:**		1270497
			Sample Location:		TP14
			Sample Type:		SOIL
			Top Depth (m):		0.30
			Date Sampled:		26-Aug-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	4.5
Soil Colour	N	2040		N/A	Grey
Other Material	N	2040		N/A	Stones
Soil Texture	N	2040		N/A	Loam
pH	M	2010		4.0	9.4
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.46
Calorific Value	N	2140	MJ/kg	0.10	
Sulphate (Total)	M	2430	%	0.010	0.18
Arsenic	M	2450	mg/kg	1.0	12
Cadmium	M	2450	mg/kg	0.10	0.25
Chromium	M	2450	mg/kg	1.0	21
Copper	M	2450	mg/kg	0.50	26
Mercury	M	2450	mg/kg	0.10	0.49
Nickel	M	2450	mg/kg	0.50	19
Lead	M	2450	mg/kg	0.50	130
Selenium	M	2450	mg/kg	0.20	< 0.20
Zinc	M	2450	mg/kg	0.50	69
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	1.7
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	37
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	37
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	25
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	330

Results - Soil

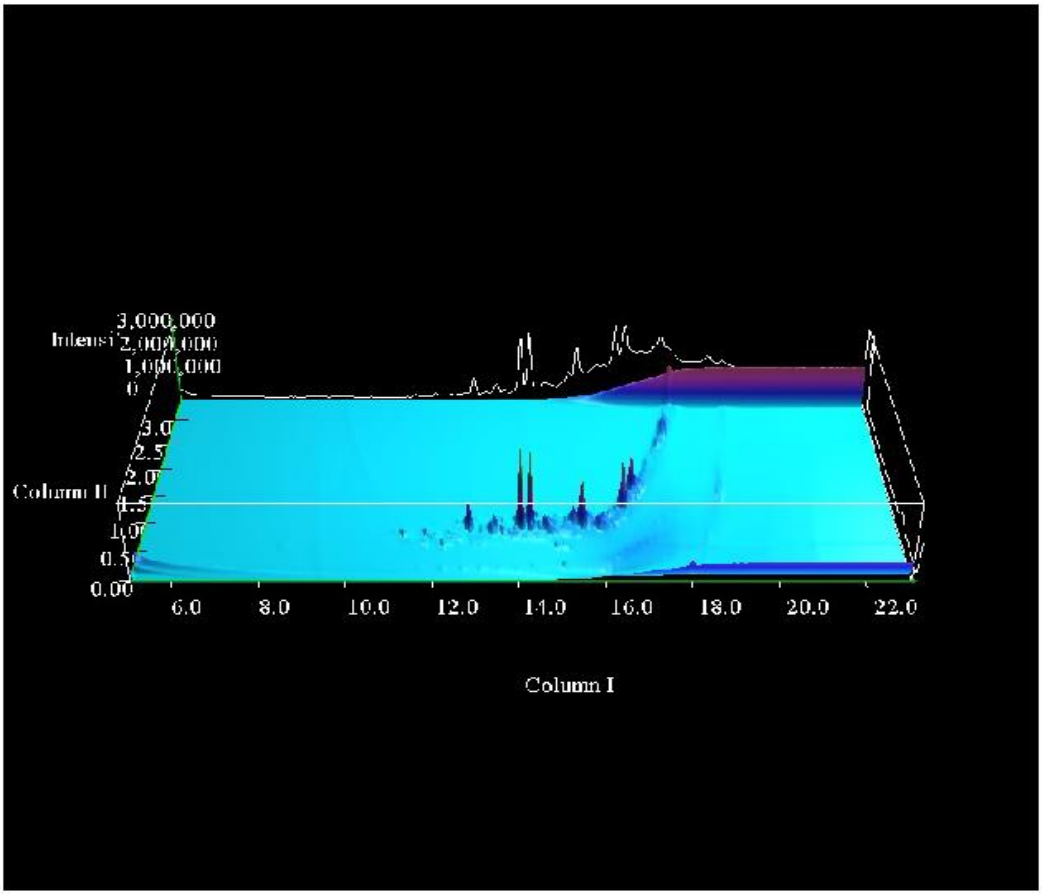
Project: C9083 Blackmoorfoot Road

Client: Sirius Geotechnical Ltd			**Chemtest Job No.:**		21-30245
Quotation No.:			**Chemtest Sample ID.:**		1270497
			Sample Location:		TP14
			Sample Type:		SOIL
			Top Depth (m):		0.30
			Date Sampled:		26-Aug-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	350
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	390
Naphthalene	M	2700	mg/kg	0.10	0.25
Acenaphthylene	M	2700	mg/kg	0.10	0.61
Acenaphthene	M	2700	mg/kg	0.10	0.28
Fluorene	M	2700	mg/kg	0.10	0.31
Phenanthrene	M	2700	mg/kg	0.10	2.4
Anthracene	M	2700	mg/kg	0.10	1.3
Fluoranthene	M	2700	mg/kg	0.10	15
Pyrene	M	2700	mg/kg	0.10	13
Benzo[a]anthracene	M	2700	mg/kg	0.10	6.2
Chrysene	M	2700	mg/kg	0.10	6.6
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	7.6
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	3.4
Benzo[a]pyrene	M	2700	mg/kg	0.10	6.0
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	4.6
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	2.0
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	3.1
Total Of 16 PAH's	M	2700	mg/kg	2.0	73
Benzene	M	2760	µg/kg	1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0
Total Phenols	M	2920	mg/kg	0.10	< 0.10

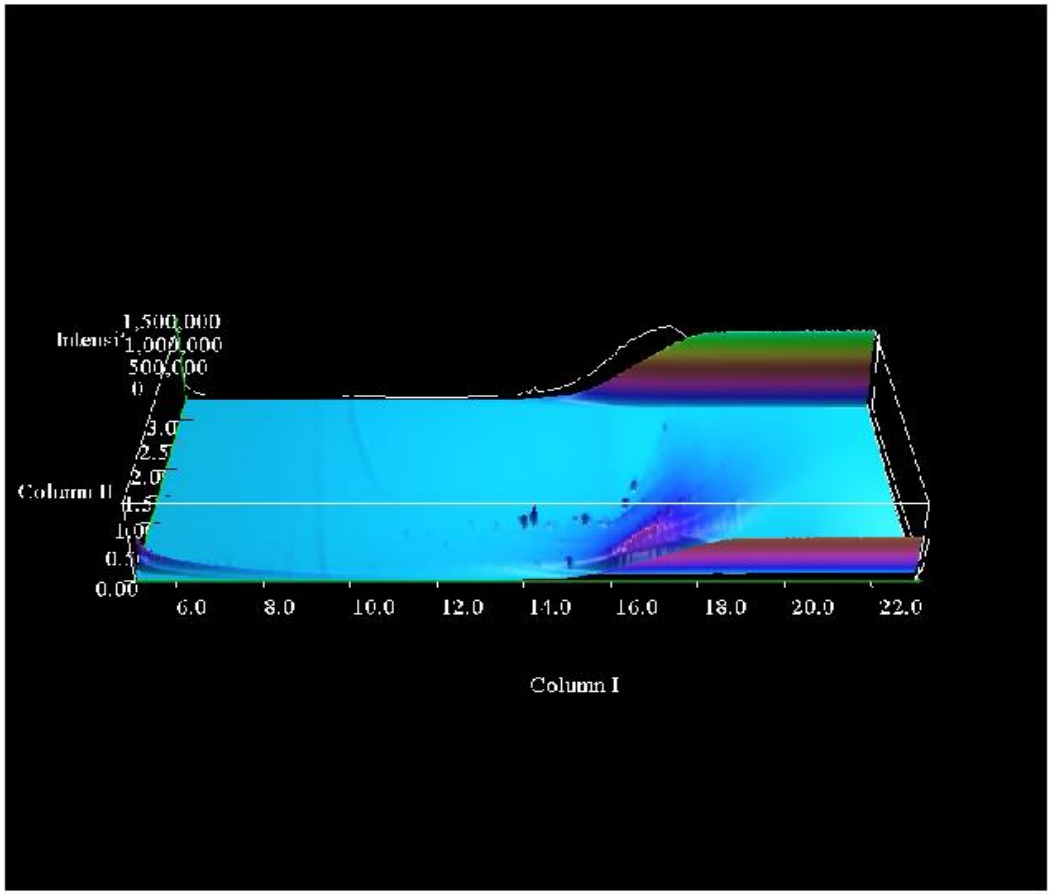
TPH Chromatogram on Misc Sample: 1270483



TPH Chromatogram on Misc Sample: 1270488



TPH Chromatogram on Misc Sample: 1270498



TPH Interpretation

Job	Sample	Matrix	Location	Sample Ref	Sample ID	Sample Depth (m)	Gasoline / Diesel Present	TPH Interpretation
21-30245	1270483	M	TP04			0.5	No	Heavy Oil
21-30245	1270488	M	TP06			0.90	No	PAH
21-30245	1270498	M	TP14			0.75	No	PAH and Heavy Oil

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2140	Calorific Value	Calorific Value	Bomb Calorimeter
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2790	Semi-Volatile Organic Compounds (SVOCs) in Soils by GC-MS	Semi-volatile organic compounds(cf. USEPA Method 8270)	Acetone/Hexane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

APPENDIX D

QUALITATIVE RISK ASSESSMENT METHODOLOGY

Qualitative Risk Assessment Methodology

The approach adopted by Sirius for the qualitative assessment of risk is based upon that given in Annex 4 of NHBC-Environment Agency-CIEH "Guidance for the Safe Development of Housing on Land Affected by Contamination" (2008) and is consistent with other current guidance.

The risk posed by viable contaminant linkages is based upon the consideration of both:

a) the magnitude of the potential consequence (i.e. its severity); and,

b) the probability (likelihood) of that consequence being realised.

The classifications used in this report for consequence and probability are given in Tables 1 and 2, respectively. The derived risk classifications are defined in Table 3.

Where there is no viable contaminant linkage there is no potential risk.

Table 1. Classification of Consequence

Classification	Definition
Severe	Contaminant concentrations at the receptor that are likely to result in "significant harm" to human health (as defined in Part 2A of the Environmental Protection Act 1990). Major pollution of controlled waters that could have persistent and/or extensive effects on water quality, for example fish kills, closure of an abstraction, or substantial deterioration in quality of the receiving water body. Major impact on receptor amenity value or major damage to agriculture or commerce. Major damage to an ecosystem that is likely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long-term maintenance of the population. Catastrophic damage to crops, buildings or property.
Medium	Elevated concentrations at the receptor that might result in "significant harm" to human health (as defined in Part 2A of the Environmental Protection Act 1990). A pollution incident that has significant effect on water quality or abstraction potential. An incident that has a marked effect on receptor amenity value, agriculture or commerce. Damage to an ecosystem that may result in a substantial adverse change in its functioning or harm to a species of special interest that may endanger the long-term maintenance of the population. Significant damage to crops, buildings or property.

Classification	Definition
Mild	Potential human health impact at the receptor point but unlikely to be classified as "significant harm" (as defined in Part 2A of the Environmental Protection Act 1990). Pollution of water that will have a small or short-lived effect on water quality and marginal effects on its amenity or resource value or its use in agriculture or commerce. Minor or short-lived damage to ecosystems, which is unlikely to result in a substantial adverse change Minor damage to crops, buildings or property
Minor	No potential measurable detrimental human health impacts at the receptor point. Impact on water that will have no or minimal effect on water quality or use. No or minor and easily repairable effects on buildings, structures and services.

Table 2. Classification of Probability

Classification	Definition
High	An impact is already occurring or is very likely in the short-term and almost inevitable over the long-term.
Medium	It is probable that an event would occur. This is not inevitable but possible in the short-term and likely over the long-term.
Low	Circumstances are possible under which an event could occur. However, it is by no means certain that an event will take place, even over the long-term.
Unlikely	Circumstances are such that it is improbable that an event would occur even over the very long-term.

Table 3. Risk Classification

	Consequence			
Probability	***Severe***	***Medium***	***Mild***	***Minor***
High	Very High	High	Moderate	Low
Medium	High	Moderate	Low to Moderate	Low
Low	Moderate	Low to Moderate	Low	Very Low
Unlikely	Low to Moderate	Low	Very Low	Negligible

Table 4 provides a context for interpretation of the risk classification categories. The definitions provided are based on those given in CIRIA (2001) "Contaminated Land Risk Assessment. A Guide to Good Practice", Report C552.

Table 4. Interpretation of Risk Classification Categories

Risk Classification	Definition
Very High	There is a high probability that severe harm to one or more identified receptors could occur or there is evidence that this is already happening. This risk is likely to result in a substantial liability. Urgent investigation and remediation are likely to be required.
High	Harm is likely to be caused to one or more identified receptors. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required and remedial works may be necessary in the short-term and are likely over the longer term.
Moderate	It is possible that harm could be caused to one or more identified receptors. However, it is relatively unlikely that such harm would be severe. Investigation is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low	It is possible that harm could be caused to one or more identified receptors but it is likely that this harm, if realised, would normally be mild. No further investigation is considered necessary to assess risk or environmental liability but investigations could be undertaken if desired to confirm 'baseline' conditions for the purposes of liability management. Remedial works are unlikely to be required.
Very Low	There is a low probability that harm could be caused to one or more identified receptors. In the event of such harm being realised, it is likely to be mild, at worst. No further investigation is considered necessary to assess risk or environmental liability but investigations could be undertaken if desired to confirm 'baseline' conditions for the purposes of liability management. Remedial works are very unlikely to be required.
Negligible	It is unlikely that harm could be caused to one or more identified receptors. In the event of harm being realised, it is likely to be minor. No further investigation is considered necessary to assess risk or environmental liability. Remedial works are not expected.

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