

Plate 346 TP702 Spoil



Plate 347 TP703 Spoil

Tetra Tech
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Environmental Consultancy
Ground Technologies & Investigation

Project :-
Goat Mill Road GI

Merthyr Tydfil County Borough Council

Project No.:	784-B077402



Plate 348 TP704 Pit 0.00-0.60m



Plate 349 TP704 Spoil

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Environmental Consultancy
Ground Technologies & Investigation

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Merthyr Tydfil County Borough Council

Project No.:	784-B077402



Plate 350 TP705 Pit 0.00-0.60m



Plate 351 TP705 Pit 0.00-0.60m

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Merthyr Tydfil County Borough Council

Project No.:	784-B077402



Plate 352 TP705 Spoil



Plate 353 TP706 Pit 0.00-0.60m

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Environmental Consultancy
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Merthyr Tydfil County Borough Council

Project No.:	784-B077402



Plate 354 TP706 Pit 0.00-0.60m



Plate 355 TP706 Spoil

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Plate 356 TP801 (no photo available)

Plate 357 TP801 (no photo available)

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APPENDIX A: REPORT CONDITIONS

APPENDIX A – REPORT CONDITIONS

GROUND INVESTIGATION

This report is produced solely for the benefit of Merthyr Tydfil County Borough Council and their agents and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of future changes in the condition of the site.

This report is based on a visual site inspection, reference to accessible referenced historical records, information supplied by those parties referenced in the text and preliminary discussions with local and Statutory Authorities. Some of the opinions are based on unconfirmed data and information and are presented as the best that can be obtained without further extensive research. Where ground contamination is suspected but no physical site test results are available to confirm this, the report must be regarded as initial advice only, and further assessment should be undertaken prior to activities related to the site. Where test results undertaken by others have been made available these can only be regarded as a limited sample. The possibility of the presence of contaminants, perhaps in higher concentrations, elsewhere on the site cannot be discounted.

Whilst confident in the findings detailed within this report because there are no exact UK definitions of these matters, being subject to risk analysis, we are unable to give categoric assurances that they will be accepted by Authorities or Funds etc. without question as such bodies often have unpublished, more stringent objectives. This report is prepared for the proposed uses stated in the report and should not be used in a different context without reference to Tetra Tech. In time improved practices or amended legislation may necessitate a re-assessment.

The assessment of ground conditions within this report is based upon the findings of the study undertaken. We have interpreted the ground conditions in between locations on the assumption that conditions do not vary significantly. However, no investigation can inspect every part of the site and therefore changes or variances in the physical and chemical site conditions as described in this report cannot be discounted.

The report is limited to those aspects of land contamination specifically reported on and is necessarily restricted and no liability is accepted for any other aspect especially concerning gradual or sudden pollution incidents. The opinions expressed cannot be absolute due to the limitations of time and resources imposed by the agreed brief and the possibility of unrecorded previous use and abuse of the site and adjacent sites. The report concentrates on the site as defined in the report and provides an opinion on surrounding sites. If migrating pollution or contamination (past or present) exists further extensive research will be required before the effects can be better determined.

APPENDIX B: EXPLORATORY HOLE LOGS

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306316.89 Northing: 207170.30

Level: 280.35mAOD Depth: 3.50m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH101

Sheet 1 of 1

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 12/03/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.90	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.90	3.50	Dynamic Windowless Sampling	Klemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
1.20	300
3.50	101

Casing

Depth(m)	Diam (mm)
9.00	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
17/03	00:00	3.50	1.50	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Dark greyish black gravelly sandy SILT with occasional rootlets.		0.05	280.30			0.20 - 0.50	B1						
MGR						0.30	ES1						PID 0.30m, 0.0ppm
Firm to hard brown slightly sandy very gravelly CLAY. Sand is fine to coarse. Gravel is angular fine to coarse mudstone. (GLACIAL TILL) TILL						0.50 - 0.90	B2						
						0.60	ES2						PID 0.60m, 0.0ppm
						0.90	ES3						PID 0.90m, 0.0ppm
													SPT(C) 1.50m, N=50 (8,12/50 for 190mm)
No Recovery		2.50	277.85										SPT(C) 2.50m, 41 (9,14/41 for 75mm)
EOH at 3.50m - Terminated due to obstructing boulder		3.50	276.85										

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
1.50	2.50	101	60
2.50	3.50	101	0

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306314.31 Northing: 207163.08

Level: 280.41mAOD Depth: 15.50m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH101A

Sheet 1 of 2

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 24/03/2026

Finish Date: 25/03/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
1.20	3.20	Dynamic Windowless Sampling	Fraste	Apex Drilling Services
3.20	3.50	Rotary Open Hole	Klemm	Apex Drilling Services
3.50	7.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
7.20	7.50	Rotary Open Hole	Klemm	Apex Drilling Services
7.50	8.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
8.20	9.00	Rotary Open Hole	Klemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
1.20	300
13.20	101
15.50	102

Casing

Depth(m)	Diam (mm)
2.50	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
25/03	17:00	15.50	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Dark greyish brown slightly sandy gravelly silty CLAY with medium cobble content. Sand is fine to coarse. Gravel is angular fine to coarse mudstone. Cobbles are angular mudstone. (GLACIAL TILL) TILL													
Firm brown very sandy gravelly CLAY with medium to high cobble content. Gravel is subrounded to well rounded fine to coarse siltstone and sandstone. Cobbles are subrounded to well rounded (to 100mm) of siltstone and sandstone. (GLACIAL TILL) TILL		1.50	278.91										
Stiff to very stiff brown locally mottled orange sandy gravelly CLAY with high cobble content. Gravel is subangular to subrounded fine to coarse siltstone, sandstone, limestone with occasional mudstone and rare coal fragments. Cobbles are subangular to subrounded (to 150mm) limestone and siltstone. Sand is fine to medium. (GLACIAL TILL)		1.90	278.51										
TILL													
Open holed from 3.20 to 3.50m bgl													
													SPT(C) 3.50m, 50 (25 for 75mm/50 for 150mm)
						4.00	ES1						PID 4.00m, 0.0ppm
													SPT(C) 4.50m, 51 (10,12/51 for 210mm)
													SPT(C) 6.00m, 50 (25 for 120mm/50 for 185mm)
						6.50	ES2						PID 6.50m, 0.0ppm
Open holed from 7.20 to 7.50m bgl													
													SPT(C) 7.50m, N=50 (6,17/50 for 225mm)
						8.00	ES3						PID 8.00m, 0.0ppm
Open holed from 8.20 to 9.00m bgl													
						9.00 - 10.20	B						
						10.00	ES4						PID 10.00m, 0.0ppm

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
2.50	3.20	101	70
3.50	4.50	101	100
4.50	6.00	101	90
6.00	7.20	101	100
7.50	8.20	101	100
9.00	10.20	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number

784-B077402

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306314.31	Northing:	207163.08
Level:	280.41mAOD	Depth:	15.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH101A**

Sheet 2 of 2

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
9.00	10.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	1.20	300	2.50	165	25/03	17:00	15.50	-	
10.20	10.50	Rotary Open hole	Klemm	Apex Drilling Services	13.20	101							
10.50	13.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	15.50	102							
13.20	15.50	Rotary Core	Klemm	Apex Drilling Services									

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 24/03/2026
Finish Date: 25/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Stiff to very stiff brown locally mottled orange sandy gravelly CLAY with high cobble content. Gravel is subangular to subrounded fine to coarse siltstone, sandstone, limestone with occasional mudstone and rare coal fragments. Cobbles are subangular to subrounded (to 150mm) limestone and siltstone. Sand is fine to medium. (GLACIAL TILL)													
TILL													
Open holed from 10.20 to 10.50m bgl. *Cuttings*													
Grey MUDSTONE. Recovered as stiff thickly laminated (0-10 deg) greyish brown gravelly CLAY. Gravel is subangular fine to medium occasionally coarse ordered litherelics of moderately weak silt/ mudstone with orange surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM		12.70	267.71			13.00	ES5						PID 13.00m, 0.0ppm
Limited recovery recovered as MUDSTONE BOULDER (SOUTH WALES LOWER COAL MEASURES) SWLCM		13.30	267.11										
EOH at 15.50m - Terminated due to a boulder which was obstructive to advancing casing into the borehole		15.50	264.91										

11 12 13 14 15 16 17 18 19 20

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
10.50	12.00	101	92
12.00	13.30	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306315.00 Northing: 207163.00

Level: 280.52mAOD Depth: 30.60m

Logger: DD Type: RC

Inclination: 90°

Status

FINAL

Borehole Number

BH101B

Sheet 1 of 4

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 27/03/2026

Finish Date: 02/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.40	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.40	7.90	Rotary Core	Klemm	Apex Drilling Services
7.90	12.40	Rotary Open Hole	Klemm	Apex Drilling Services
12.40	30.60	Rotary Core	Klemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.40	300
30.60	102

Casing

Depth(m)	Diam (mm)
3.00	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
27/03	17:00	7.90	3.00	
30/03	17:00	12.90	-	
31/03	17:00	19.60	-	
01/04	17:00	28.00	-	
02/04	17:00	30.60	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Dark greyish brown slightly sandy gravelly silty CLAY with medium cobble content. Sand is fine to coarse. Gravel is angular fine to coarse mudstone. Cobbles are angular mudstone. (TOPSOIL)													
MGR		0.40	280.12			0.40 - 1.90	B1						
Limited recovery. Core recovered as GRAVEL AND COBBLES. Gravel is subangular to subrounded fine to coarse siltstone, limestone and sandstone. Cobbles are subangular to subrounded locally rinded limestone and sandstone. [Fines lost through flush] (GLACIAL TILL)						1.00	D1	0.40 1.90		47	3	0	
TILL													
From 0.50m to 0.70m bgl firm brown slightly gravelly slightly sandy clay with medium cobble content. Sand is fine to medium.								1.90 3.40		27	0	0	
								3.40 4.90		13	0	0	
Firm brown slightly gravelly slightly sandy CLAY with medium to high cobble content. Gravel is angular to subangular fine to coarse siltstone, limestone, sandstone, mudstone and quartz. Sand is fine to medium. Cobbles are subangular to subrounded sandstone. (GLACIAL TILL)		4.90	275.62			4.90 - 6.40	B2						
TILL						5.50	D2	4.90 6.40		67	0	0	
Limited recovery. Core recovered as GRAVELS of coarse subangular sandstone and limestone with occasional subangular coarse gravel of limestone. [Fines lost through flush] (GLACIAL TILL)		6.70	273.82										
TILL								6.40 7.90		60	0	0	
No recovery		7.90	272.62										

Observations / Remarks

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2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306315.00 Northing: 207163.00

Level: 280.52mAOD Depth: 30.60m

Logger: DD Type: RC

Inclination: 90°

Status

FINAL

Borehole Number

BH101B

Sheet 2 of 4

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 27/03/2026

Finish Date: 02/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.40	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.40	7.90	Rotary Core	Klemm	Apex Drilling Services
7.90	12.40	Rotary Open Hole	Klemm	Apex Drilling Services
12.40	30.60	Rotary Core	Klemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.40	300
30.60	102

Casing

Depth(m)	Diam (mm)
3.00	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
27/03	17:00	7.90	3.00	
30/03	17:00	12.90	-	
31/03	17:00	19.60	-	
01/04	17:00	28.00	-	
02/04	17:00	30.60	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
No recovery								7.90 12.40		0	0	0	
Brown subangular to subrounded COBBLES of limestone and sandstone. (GLACIAL TILL) TILL		12.40	268.12			12.50	D3						
						13.50 - 15.00	B3						
Stiff very thinly bedded (0 to 5 degrees) dark grey gravelly CLAY. Gravel is angular to tabular fine to coarse ordered lithorelicts of moderately weak carbonaceous mudstone. (SOUTH WALES LOWER COAL MEASURES) SWLCM		14.70	265.82					15.00 15.30		100	0	0	
						15.20	D4						
Moderately weak very thinly bedded (0 to 5 degrees) grey MUDSTONE with occasional thick laminations of extremely to very weak mudstone. Discontinuities: 1) 0 to 5 degrees along bedding, very closely spaced, planar locally undulating, smooth. 2) 80 degrees, planar, smooth. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 15.90m to 16.40m bgl extremely weak partially weathered to clay.*		15.30	265.22					15.30 16.80		100	17	0	
						16.70 - 16.80	C1						
From 16.80m to 17.35m bgl very weak locally weathered to clay.													
Medium strong to strong very thinly bedded locally thickly laminated (0 to 30 degrees) light grey SILTSTONE with occasional laminations of light grey fine grained sandstone. Discontinuities: 1) 0 to 30 degrees along bedding, closely to medium spaced, planar to undulating, smooth with reddish brown surface staining. 2) 70 to 80 degrees, medium spaced, planar to curved, rough with reddish brown and orange surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 17.75m to 18.05m bgl moderately weak closely spaced, 2no 70 degrees, undulating to carved, rough discontinuity with reddish brown staining and light orange discolouration.*		17.35	263.17					16.80 18.50		88	29	24	
						17.90 - 18.05	C2						
								18.50 19.60		100	64	23	
						19.80 - 20.00	C3						

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306315.00 Northing: 207163.00

Level: 280.52mAOD Depth: 30.60m

Logger: DD Type: RC

Inclination: 90°

Status

FINAL

Borehole Number

BH101B

Sheet 3 of 4

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 27/03/2026

Finish Date: 02/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.40	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.40	7.90	Rotary Core	Klemm	Apex Drilling Services
7.90	12.40	Rotary Open Hole	Klemm	Apex Drilling Services
12.40	30.60	Rotary Core	Klemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.40	300
30.60	102

Casing

Depth(m)	Diam (mm)
3.00	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
27/03	17:00	7.90	3.00	
30/03	17:00	12.90	-	
31/03	17:00	19.60	-	
01/04	17:00	28.00	-	
02/04	17:00	30.60	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong to strong very thinly bedded locally thickly laminated (0 to 30 degrees) light grey SILTSTONE with occasional laminations of light grey fine grained sandstone. Discontinuities: 1) 0 to 30 degrees along bedding, closely to medium spaced, planar to undulating, smooth with reddish brown surface staining. 2) 70 to 80 degrees, medium spaced, planar to curved, rough with reddish brown and orange surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM								19.60 21.10		100	40	23	
From 20.20m to 21.10m bgl 2no 80 degrees, planar, smooth discontinuity with reddish brown surface staining and traces of calcite.		20.80	259.72										
Moderately weak very thinly interbedded (0 to 5 degrees) grey SILTSTONE and MUDSTONE with closely spaced very thin beds of extremely weak mudstone. Discontinuities: 1) 0 to 5 degrees along bedding, closely spaced, planar, smooth with reddish brown surface staining. 2) 80 to 90 degrees. (SOUTH WALES LOWER COAL MEASURES) SWLCM								21.10 22.60		100	17	0	
From 21.10m to 21.60m bgl extremely weak partially weathered to clay.						22.30 - 22.40	C4						
From 22.40m to 24.10m bgl 2no planar, smooth with reddish brown surface staining.								22.60 24.10		100	17	0	
From 23.00m to 23.15m bgl extremely weak partially weathered to clay.													
From 24.10m to 24.90m bgl dark grey slightly carbonaceous.						24.50 - 24.60	C5	24.10 25.60		100	17	7	
From 24.70m to 26.85m bgl 1 to 2no 80 to 90 degrees, planar, smooth discontinuity with reddish brown surface staining.													
From 26.85m to 27.15m bgl medium strong.						26.85 - 27.15	C6	25.60 27.15		100	39	29	
								27.15 28.00		94	71	0	
						28.30 - 28.40	C7	28.00 28.80		75	56	13	
								28.80 29.20		100	100	63	
Strong to very strong thinly bedded (0 to 5 degrees) light grey medium grained SANDSTONE. Discontinuities are 0 to 5 degrees, closely to medium spaced, planar, smooth. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		29.20	251.32			29.55 - 29.85	C8	29.20 30.60		93	82	71	
From 29.35m to 29.45m bgl extremely weak mudstone. Partially weathered to clay with 2no 70 degrees discontinuity. *From 29.85m to 29.93m bgl extremely weak mudstone. Partially weathered to clay.*													

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306315.00 Northing: 207163.00

Level: 280.52mAOD Depth: 30.60m

Logger: DD Type: RC

Inclination: 90°

Status

FINAL

Borehole Number

BH101B

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 27/03/2026

Finish Date: 02/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.40	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.40	7.90	Rotary Core	Klemm	Apex Drilling Services
7.90	12.40	Rotary Open Hole	Klemm	Apex Drilling Services
12.40	30.60	Rotary Core	Klemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.40	300
30.60	102

Casing

Depth(m)	Diam (mm)
3.00	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
27/03	17:00	7.90	3.00	
30/03	17:00	12.90	-	
31/03	17:00	19.60	-	
01/04	17:00	28.00	-	
02/04	17:00	30.60	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong to very strong thinly bedded (0 to 5 degrees) light grey medium grained SANDSTONE. Discontinuities are 0 to 5 degrees, closely to medium spaced, planar, smooth. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM													
		30.60	249.92										
EOH at 30.60m - Achieved target depth													

31 32 33 34 35 36 37 38 39 40

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306172.27 Northing: 207141.29

Level: 278.69mAOD Depth: 30.40m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH102

Sheet 1 of 4

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 10/03/2026

Finish Date: 08/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
1.20	15.80	Dynamic Windowless Sampling	Fraste	Apex Drilling Services
15.80	30.40	Rotary Core	Fraste	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
1.20	300
15.80	101
30.40	102

Casing

Depth(m)	Diam (mm)
13.50	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.70	-	
18/03	17:00	4.50	-	
02/04	17:00	22.90	13.50	
07/04	17:00	30.40	-	
08/04	17:00	30.40	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Soft to firm grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse concrete, slag, limestone, brick, siltstone and mudstone. MGR						0.00 - 1.50	B1						
						0.30 - 0.50	ES1						PID 0.20m, 0.0ppm
						1.00	D1						PID 1.00m, 0.0ppm 1
						1.00	ES2						
						1.50 - 3.50	B2						SPT(C) 1.50m, N=42 (3,3/5,9,11,17)
						2.00	ES3						PID 2.00m, 0.0ppm 2
													SPT(C) 2.50m, 50 (9,14/50 for 175mm)
						3.00	D2						3
						3.50 - 6.00	B3						SPT(C) 3.50m, N=50 (14,7/50 for 296mm)
						4.00	ES4						PID 4.00m, 0.0ppm 4
													SPT(C) 4.50m, 50 (25 for 97mm/50 for 140mm)
Evidence of blackish staining - no odour						5.00	D3						PID 5.00m, 7.8ppm 5
						5.00	ES						
						5.00	ES5						
													SPT(C) 5.50m, N=47 (10,10/11,12,12,12)
													6
Stiff to very stiff grey thinly laminated (0 to 15 degrees) very silty slightly sandy GRAVEL with reddish brown surface staining. Gravel is angular to subangular fine to coarse mixed lithorelicts including siltstone and mudstone. (WEATHERED SOUTH WALES LOWER COAL MEASURES) SWLCM		6.00	272.69			6.00 - 10.00	B4						
						6.50	ES6						PID 6.50m, 0.0ppm
													SPT(C) 7.00m, N=27 (3,6/7,6,8,6) 7
													8
													SPT(C) 8.50m, N=44 (13,12/15,15,8,6)
						9.00	ES7						PID 9.00m, 0.0ppm 9
From 9.30m to 13.10m bgl becoming gravelly with high cobble content. Cobbles are subangular to subrounded siltstone.													
						10.00 - 12.00	B5						SPT(C) 10.00m, N=19 (3,5/4,5,5,5) 10

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.
6. 1 No. Permeability test undertaken at 1.50m bgl with no change in head response.
7. 1 No. variable head permeability test undertaken at 13.50m bgl with result of 4×10−7 m/s. Result taken as permeability through base of borehole)

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
1.50	2.50	101	100
2.50	3.50	101	100
3.50	4.50	101	100
4.50	5.50	101	100
5.50	7.00	101	73
7.00	8.50	101	86
8.50	10.00	101	80
10.00	11.50	101	63

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details			
Easting:	306172.27	Northing:	207141.29
Level:	278.69mAOD	Depth:	30.40m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: BH102

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 08/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
1.20	15.80	Dynamic Windowless Sampling	Fraste	Apex Drilling Services
15.80	30.40	Rotary Core	Fraste	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
1.20	300
15.80	101
30.40	102

Casing

Depth(m)	Diam (mm)
13.50	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.70	-	
18/03	17:00	4.50	-	
02/04	17:00	22.90	13.50	
07/04	17:00	30.40	-	
08/04	17:00	30.40	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Stiff to very stiff grey thinly laminated (0 to 15 degrees) very silty slightly sandy GRAVEL with reddish brown surface staining. Gravel is angular to subangular fine to coarse mixed lithorelicts including siltstone and mudstone. (WEATHERED SOUTH WALES LOWER COAL MEASURES) SWLCM						11.00	ES8						PID 11.00m, 0.0ppm
													SPT(C) 11.50m, N=35 (7,7/5,11,10,9)
						12.00 - 15.00	B6						SPT(C) 12.00m, N=24 (2,3/4,6,6,8)
						13.00	D4						
													SPT(C) 13.50m, N=30 (2,7/7,8,8,7)
						14.00	ES9						PID 14.00m, 0.0ppm
						15.00 - 15.80	B7						SPT(C) 15.00m, N=28 (6,5/5,6,7,10)
Moderately weak grey to dark grey slightly carbonaceous MUDSTONE. Discontinuities are 0 to 5 degrees along bedding, very closely spaced, planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		15.80	262.89										SPT(C) 15.80m, 50 (25 for 51mm/50 for 19mm)
Firm to stiff greyish brown slightly gravelly slightly sandy CLAY. Gravel is angular to subangular tabular fine to coarse disordered lithorelicts of siltstone and mudstone. Weathering grade VI. (SOUTH WALES LOWER COAL MEASURES) SWLCM		16.20	262.49					15.80 17.00		100	0	0	
Very weak dark grey carbonaceous MUDSTONE locally weathered to clay. (SOUTH WALES LOWER COAL MEASURES) SWLCM		16.90 17.10	261.79 261.59										
Weak to moderately dark grey vitreous COAL with closely spaced (0 and 70 degrees), planar, smooth discontinuities. (SOUTH WALES LOWER COAL MEASURES) SWLCM		17.60	261.09					17.00 18.30		100	38	19	
Extremely to very weak thinly laminated (0 to 5 degrees) dark grey fissile carbonaceous MUDSTONE. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		18.20 18.40	260.49 260.29			18.40 - 18.48	C1						
Moderately weak to medium strong locally thinly bedded grey fossiliferous MUDSTONE with abundant plant remains. Discontinuities are 0 to 5 degrees along bedding, closely spaced, irregular, rough with frequent polishing. (Possible SEAT EARTH) (SOUTH WALES LOWER COAL MEASURES) SWLCM								18.30 19.80		93	13	0	
Medium strong thinly bedded (0 to 10 degrees) grey SILTSTONE. Discontinuities are 0 to 10 degrees along bedding, closely spaced, undulating, rough with a trace of coal. Weathering grade II. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 18.40m to 20.00m bgl discontinuities are very closely spaced with 2no 90 degrees joints. Partially non intact.*													

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.
6. 1 No. Permeability test undertaken at 1.50m bgl with no change in head response.
7. 1 No. variable head permeability test undertaken at 13.50m bgl with result of 4×10−7 m/s. Result taken as permeability through base of borehole)

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
11.50	12.00	101	100
12.00	13.50	101	80
13.50	15.00	101	93
15.00	15.80	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60

Project Number: 784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306172.27 Northing: 207141.29

Level: 278.69mAOD Depth: 30.40m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH102

Sheet 3 of 4

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 10/03/2026

Finish Date: 08/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
1.20	15.80	Dynamic Windowless Sampling	Fraste	Apex Drilling Services
15.80	30.40	Rotary Core	Fraste	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
1.20	300
15.80	101
30.40	102

Casing

Depth(m)	Diam (mm)
13.50	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.70	-	
18/03	17:00	4.50	-	
02/04	17:00	22.90	13.50	
07/04	17:00	30.40	-	
08/04	17:00	30.40	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong thinly bedded (0 to 10 degrees) grey SILTSTONE. Discontinuities are 0 to 10 degrees along bedding, closely spaced, undulating, rough with a trace of coal. Weathering grade II. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 20.10m to 20.20m bgl very weak.*						20.50 - 20.60	C2	19.80 21.30		93	53	30	
From 21.80m to 22.10m bgl 1no 80 to 90 degrees, planar, smooth discontinuity. Partially non intact.						22.30 - 22.50	C3	21.30 22.90		100	66	47	
From 22.90m to 23.30m bgl non intact. Recovered as clayey fine to medium gravel. *From 23.60m to 24.40m bgl 2 to 3no 80 to 90 degrees, planar, smooth discontinuity. Partially non intact.*						24.65 - 24.90	C4	22.90 24.40		100	37	27	
								24.40 25.90		100	93	47	
Strong to very strong very thinly bedded (0 to 30 degrees) grey slightly carbonaceous SILTSTONE with occasional thin laminations of sandstone. Discontinuities are 0 to 30 degrees along bedding, closely to medium spaced, planar to undulating, smooth. (SOUTH WALES LOWERS COAL MEASURES) SWLCM *From 26.10m to 26.28m bgl light grey fine to medium sandstone.* *From 26.90m to 27.05m bgl very weak, partially non intact.*		26.10	252.59					25.90 27.40		100	73	60	
From 27.40m to 27.70m bgl occasional very thin beds of extremely to very weak mudstone. *From 27.70m to 28.20m bgl moderately weak to medium strong closely spaced, 1no 80 to 90 degrees, rough discontinuity.*						28.50 - 28.75	C5	27.40 28.90		100	67	50	
From 29.90m to 30.40m bgl thinly interbedded (30 degrees) with fine sandstone.						30.00 - 30.40	C6	28.90 30.40		100	93	90	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.
6. 1 No. Permeability test undertaken at 1.50m bgl with no change in head response.
7. 1 No. variable head permeability test undertaken at 13.50m bgl with result of 4×10−7 m/s. Result taken as permeability through base of borehole)

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
AP3	60

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306172.27 Northing: 207141.29

Level: 278.69mAOD Depth: 30.40m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH102

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
1.20	15.80	Dynamic Windowless Sampling	Fraste	Apex Drilling Services
15.80	30.40	Rotary Core	Fraste	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
1.20	300
15.80	101
30.40	102

Casing

Depth(m)	Diam (mm)
13.50	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.70	-	
18/03	17:00	4.50	-	
02/04	17:00	22.90	13.50	
07/04	17:00	30.40	-	
08/04	17:00	30.40	-	

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 10/03/2026

Finish Date: 08/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong to very strong very thinly bedded (0 to 30 degrees) grey slightly carbonaceous SILTSTONE with occasional thin laminations of sandstone. Discontinuities are 0 to 30 degrees along bedding, closely to medium spaced, planar to undulating, smooth. (SOUTH WALES LOWERS COAL MEASURES) SWLCM		30.40	248.29										
EOH at 30.40m - Achieved target depth													

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.
6. 1 No. Permeability test undertaken at 1.50m bgl with no change in head response.
7. 1 No. variable head permeability test undertaken at 13.50m bgl with result of 4×10−7 m/s. Result taken as permeability through base of borehole)

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Sheet 1 of 8

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Brown slightly sandy slightly gravelly SILT with occasional rootlets. MGR		0.10	279.54			0.20 - 0.50 0.30	B1 ES1						PID 0.30m, 0.0ppm
MADE GROUND: Brown very silty slightly gravelly SAND. Gravels are angular fine to coarse of mudstone. Sand is fine to coarse. MGR *At 0.20m bgl boulder sandstone.* *At 0.40m bgl boulder sandstone.* *At 0.50m bgl boulder sandstone.*		0.55	279.10			0.50 0.55 - 2.50	ES2 B2						PID 0.50m, 0.0ppm
MADE GROUND: Firm brown locally mottled very sandy very gravelly CLAY. Sand is fine to coarse Gravel is subangular to subrounded fine to coarse siltstone, sandstone, limestone, clinker, slag and rare brick fragments. MGR													SPT(C) 1.50m, N=50 (12,12/50 for 225mm)
						2.00 2.00	D1 ES						PID 2.00m, 0.0ppm
Light brownish orange						2.50 - 5.60	B2						SPT(C) 3.00m, 50 (25 for 105mm/50 for 115mm)
						3.50	ES						PID 3.50m, 0.0ppm
													SPT(C) 4.50m, N=50 (14,10/50 for 225mm)
						5.00	ES						PID 5.00m, 0.0ppm
Firm to stiff greyish brown slightly sandy gravelly CLAY with high cobble content. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse siltstone, sandstone, limestone and mudstone. Cobbles are subangular to subrounded sandstone and limestone. (GLACIAL TILL) TILL *Open holed from 5.60 to 6.00m bgl* *No recovery due to cobble*		5.60	274.04					5.90 6.50		100	0	0	SPT(C) 6.00m, 50 (25 for 145mm/50 for 135mm)
Limited recovery. Core recovered as subangular COBBLES of sandstone, limestone and quartzite. (GLACIAL TILL) TILL		6.50	273.14					6.50 8.00		33	0	0	SPT(C) 6.50m, N=14 (1,3/2,3,4,5)
Stiff thickly laminated (0 to 10 degrees) light greyish brown mottled light orangish brown gravelly CLAY. Gravel is angular to subangular tabular fine to medium occasional coarse ordered lithorelicts of weak mudstone. Weathering grade V. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 8.50m to 8.70m bgl non intact.*		8.50	271.14					8.00 8.50		10	0	0	SPT(C) 8.00m, 50 (25 for 110mm/50 for 5mm)
Moderately weak to medium strong very thinly bedded (0 to 10 degrees) grey MUDSTONE. Discontinuities: 1) 0 to 10 degrees along bedding, very closely to closely spaced, planar locally undulating, smooth with orangish brown surface staining. 2) 45 degrees, medium to widely spaced, planar to stepped, smooth. 3) 90 degrees (2 to 3no), planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 9.50m to 10.30m bgl reddish brown surface staining and discoloration penetrating to 10mm on 90 degrees discontinuity.*		9.50	270.14					8.50 9.50		100	13	0	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
1.50	3.00	101	93
3.00	4.50	101	100
4.50	5.60	101	90
6.00	6.20	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
5.90	6.50	100	Grey	Water
6.50	8.00	100	Grey	Water
8.00	8.50	100	Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Sheet 2 of 8

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description

Moderately weak to medium strong very thinly bedded (0 to 10 degrees) grey MUDSTONE. Discontinuities: 1) 0 to 10 degrees along bedding, very closely to closely spaced, planar locally undulating, smooth with orangish brown surface staining. 2) 45 degrees, medium to widely spaced, planar to stepped, smooth. 3) 90 degrees (2 to 3no), planar, smooth.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

From 11.00m to 11.20m bgl non intact, possibly drilling.

From 11.40m to 11.60m bgl non intact. Extremely to very weak.

From 11.60m to 12.50m bgl light grey.

Weak to moderately weak grey MUDSTONE. Predominately non intact with very closely spaced, 0 to 10 degrees and locally discernible. Discontinuities are 45 to 90 degrees, closely spaced, planar, smooth with orange surface staining. Weathering grade IV.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

From 12.80m to 13.00m bgl extremely to very weak partially weathered to clay.

From 13.35m to 13.55m bgl extremely to very weak partially weathered to clay.

Moderately weak to medium strong very thinly bedded (0 to 10 degrees) grey slightly carbonaceous MUDSTONE with closely spaced very thin beds of extremely to very weak mudstone. Discontinuities: 1) 0 to 10 degrees along bedding, closely spaced, planar to undulating, smooth with orange surface staining. 2) 70 degrees, closely to medium spaced, undulating to stepped, rough with occasional orange surface staining. 3) 2no 90 degrees, planar, smooth orange surface staining.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

Strong to very strong thickly laminated to very thinly bedded and cross bedded (0 to 10 degrees) light grey fine grained SANDSTONE. Discontinuities are 0 to 10 degrees along bedding, closely spaced, planar to undulating, smooth.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

From 16.40m to 16.80m bgl interbedded with siltstone.

Strong very thinly bedded (0 to 15 degrees) grey SILTSTONE with occasional thin laminations of fine sandstone. Discontinuities are 0 to 15 degrees along bedding, closely to medium spaced, planar to undulating, smooth with light orangish brown discolouration.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

From 18.50m to 19.70m bgl non intact. 60 to 70 degrees, closely spaced, planar to curved, smooth and 90 degrees, planar, smooth discontinuity with reddish brown surface staining.

From 18.80m to 19.20m bgl limited recovery.

Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill
	12.20	267.44		
	14.00	265.64		
	15.80	263.85		
	16.80	262.85		
	20.00	259.64		

Samples, Tests and Rotary Coring

Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
		9.50 11.00		100	13	0	
11.90 - 12.05	C1	11.00 12.50		100	33	20	
		12.50 14.00		93	0	0	
14.60 - 14.70	C2	14.00 15.10		100	33	0	
		15.10 15.50		80	38	0	
16.60 - 16.75	C3	15.50 17.00		100	53	33	
18.00 - 18.20	C4	17.00 18.50		100	100	93	
		18.50 18.80		100	33	0	
19.85 - 19.95	C5	18.80 20.00		75	25	0	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
8.50	9.50	100	Grey	Water
9.50	11.00	100	Grey	Water
11.00	12.50	100	Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Sheet 3 of 8

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description

Very weak to weak very thinly bedded to thickly laminated (0 to 30 degrees) grey MUDSTONE with closely spaced beds of extremely weak fissile mudstone. Non intact with locally discernible 0 to 30 and 70 to 90 degrees, very closely spaced discontinuities with occasional reddish brown surface staining. Weathering grade III to IV.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

21.00 258.64

Limited recovery. Core recovered as subangular to subrounded COBBLES of moderately weak mudstone.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

21.50 258.14

Weak to moderately weak thinly bedded (0 to 10 degrees) grey to dark grey slightly carbonaceous MUDSTONE. Discontinuities: 1) 0 to 10 degrees along bedding, very closely to closely spaced, planar to undulating, smooth with occasional reddish brown surface staining. 2) 1 to 2no 80 to 90 degrees, planar, smooth with reddish brown surface staining.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

From 23.15m to 23.30m bgl extremely to very weak mudstone.

From 23.45m to 23.55m bgl extremely to very weak mudstone.

23.75 255.90

Limited recovery. Core recovered as subangular GRAVEL and COBBLES mudstone and coal.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

24.40 255.24

Moderately weak very thinly bedded (0 to 30 degrees) dark grey vitreous COAL.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

24.60 255.04

Strong thinly bedded (0 to 20 degrees) grey to dark grey carbonaceous SILTSTONE. Locally fossiliferous. Discontinuities are 0 to 20 degrees along bedding, closely spaced, planar to undulating, smooth and rough.
(SOUTH WALES LOWER COAL MEASURES)
SWLCM

From 25.30m to 25.40m bgl extremely weak fissile mudstone.

From 25.85m to 26.65m bgl 1no 80 degrees, undulating to stepped, rough discontinuity.

From 26.30m to 26.80m bgl light grey fine grained sandstone.

From 26.90m to 27.30m bgl 2no 80 degrees, planar, smooth discontinuity.

From 28.70m to 28.80m bgl extremely to very weak fissile mudstone.

From 29.00m to 29.30m bgl very thinly interbedded with extremely weak fissile mudstone.

30.00 249.64

Samples, Tests and Rotary Coring

Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
		20.00 21.00		100	100	0	
		21.00 21.50		13	0	0	
		21.50 22.25		80	0	0	
22.70 - 22.75	C6	22.25 23.00		100	13	0	
		23.00 23.75		93	0	0	
		23.75 24.50		33	25	0	
		24.50 25.25		100	87	47	
25.30 - 25.60	C7	25.25 26.00		100	73	53	
		26.00 27.50		100	60	33	
27.90 - 28.10	C8	27.50 29.00		100	90	63	
29.60 - 29.75	C9	29.00 30.00		100	85	40	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
12.50	14.00	100	Grey	Water
14.00	15.10	100	Grey	Water
15.10	15.50	100	Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
EOH at 30.00m - Achieved target depth													

31 32 33 34 35 36 37 38 39 40

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
15.50	17.00	100	Grey	Water
17.00	18.50	70	Grey	Water
18.50	18.80	50	Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Sheet 5 of 8

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description

Samples, Tests and Rotary Coring

Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results

41

42

43

44

45

46

47

48

49

50

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
18.80	20.00	0		Water
20.00	21.00	0		Water
21.00	21.50	0		Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Sheet 6 of 8

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description

Samples, Tests and Rotary Coring

Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results

51

52

53

54

55

56

57

58

59

60

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
21.50	22.25	0		Water
23.00	23.75	0		Water
23.75	24.50	0		Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Sheet 7 of 8

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description

Legend | Depth (m) | Reduced Level (mAOD) | Water Level (m) | Inst / Backfill

Samples, Tests and Rotary Coring

Depth (m) | Ref | Core Run | FI | TCR | SCR | RQD | Tests / Results

61

62

63

64

65

66

67

68

69

70

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
24.50	25.25	0		Water
25.25	26.00	0		Water
26.00	27.50	0		Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: Goat Mill Road

Location: Merthyr Tydfil

Client: Merthyr Tydfil County Borough Council

Location Details

Easting: 306270.61 Northing: 207136.45

Level: 279.64mAOD Depth: 30.00m

Logger: DD Type: DS+RC

Inclination: 90°

Status

FINAL

Borehole Number

BH103

Sheet 8 of 8

Scale: 1:50

Checked By: JC + DD

Approved By: NB

Start Date: 12/03/2026

Finish Date: 17/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.55	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.55	5.60	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
5.60	6.00	Rotary Open Hole	Klemm	Apex Drilling Services
6.00	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.20	30.00	Rotary Core	Flemm	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.55	300
5.90	101
30.00	102

Casing

Depth(m)	Diam (mm)
1.50	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	0.50	1.50	
19/03	17:00	4.50	-	
20/03	17:00	6.00	-	
14/04	17:00	14.00	-	
15/04	17:00	17.00	-	
16/04	17:00	24.50	-	
17/04	17:00	30.00	-	

Strata Description

Samples, Tests and Rotary Coring

Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results

71

72

73

74

75

76

77

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80

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
27.50	29.00	0		Water
29.00	30.00	0		Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP4	81

Project Number

784-B077402

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306216.96	Northing:	207120.82
Level:	278.90mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH104**

Sheet 1 of 4

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300
1.20	1.30	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	11.90	101
1.30	11.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	30.50	102
11.20	30.50	Rotary Core	Fraste	Apex Drilling Services		

Casing		Drilling Progress by Time				
Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
10.50	146	13/03	17:00	6.00	6.00	
		17/03	00:00	11.20	10.50	
		25/03	00:00	12.30	-	
		26/03	17:00	21.20	-	
		27/03	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 13/03/2026
Finish Date: 27/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Firm to stiff grey to dark grey silty sandy GRAVEL with high cobble content. Gravel is subangular to subrounded fine to coarse porous and fused slag, limestone, siltstone, occasional concrete. Cobbles are subangular to subrounded (to 150mm) of slag and limestone. Sand is fine to coarse. Limited recovery, clay partially lost through drilling. MGR						0.00 - 1.30	B1						
						0.30 - 0.90	ES1						PID 0.30m, 0.0ppm
						0.50	D1						
						0.90 - 1.20	ES2						PID 0.90m, 0.0ppm
From 1.30m to 4.00m bgl limited recovery core recovered comprises coarse gravel and cobbles.													SPT(C) 1.30m, 50 (25 for 125mm/50 for 21mm)
													SPT(C) 2.80m, N=50 (3,7/50 for 290mm)
From 4.00m to 5.00m bgl no recovery.													SPT(C) 4.00m, N=47 (2,3/4,12,13,18)
From 5.00m to 5.50m bgl no recovery													
From 5.50m to 6.30m bgl limited recovery core recovered comprises coarse gravel and cobbles.													
						6.00 - 7.50	B2						SPT(C) 6.00m, N=16 (4,5/4,5,3,4)
Extremely to very weak thickly laminated (0-15 degrees) grey MUDSTONE locally weathered to clay. Discontinuities: 1) 0-15 degrees along bedding extremely closely spaced planar to undulating rough with reddish brown surface staining and occasional light orange discolouration penetrating walls to 5mm. 2) Locally discernible 0 degrees closely spaced planar smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		6.30	272.60			6.50	ES3						PID 6.50m, 0.0ppm
						7.50 - 9.00	B3						SPT(C) 7.50m, 50 (4,5/50 for 202mm)
						8.00	D2						
						8.50	ES4						PID 8.50m, 0.0ppm
						9.00 - 10.50	B4						SPT(C) 9.00m, N=28 (6,8/6,6,7,9)
						10.00	D3						

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
1.20	1.30	101	100
1.30	2.80	101	33
2.80	4.00	101	25
4.00	5.00	101	0
5.00	5.50	101	0
5.50	6.00	101	40
6.00	7.50	101	76
7.50	9.00	101	86
9.00	10.50	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306216.96	Northing:	207120.82
Level:	278.90mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH104**

Sheet 2 of 4

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300
1.20	1.30	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	11.90	101
1.30	11.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	30.50	102
11.20	30.50	Rotary Core	Fraste	Apex Drilling Services		

Casing	
Depth(m)	Diam (mm)
10.50	146

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
13/03	17:00	6.00	6.00	
17/03	00:00	11.20	10.50	
25/03	00:00	12.30	-	
26/03	17:00	21.20	-	
27/03	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 13/03/2026
Finish Date: 27/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Extremely to very weak thickly laminated (0-15 degrees) grey MUDSTONE locally weathered to clay. Discontinuities: 1) 0-15 degrees along bedding extremely closely spaced planar to undulating rough with reddish brown surface staining and occasional light orange discolouration penetrating walls to 5mm. 2) Locally discernible 0 degrees closely spaced planar smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM						11.00	ES5						SPT(C) 10.50m, N=34 (2,3/5,9,9,11) PID 11.00m, 0.0ppm PID 11.00m, 0.0ppm SPT(C) 11.20m, 50 (25 for 65mm/50 for 10mm)
Limited recovery. Core recovered as sandy clayey angular to subangular fine to coarse GRAVEL of siltstone and mudstone. Sand is fine to coarse. (SOUTH WALES LOWER COAL MEASURES) SWLCM		11.20	267.70					11.20 11.70		40	0	0	
Strong to very strong light grey fine grained SANDSTONE. Recovered as angular to subangular partially full diameter locally rinded pieces of core. Possibly closely spaced bedding and 1no 90 degrees, planar, smooth with <1mm of white degraded gypsum. (SOUTH WALES LOWER COAL MEASURES) SWLCM		11.70	267.20			12.20 - 12.30	C1	11.70 12.30		100	17	0	
Moderately weak to medium strong very thinly bedded (0 to 10 degrees) grey to light grey SILTSTONE with closely spaced very thin beds of extremely weak mudstone. Partially non intact. Discontinuities: 1) 0 to 10 degrees along bedding, closely spaced, planar to undulating, smooth and rough with occasional orange surface staining. 2) 60 to 70 degrees, closely to medium spaced, planar, smooth with occasional reddish brown surface staining. 3) 90 degrees, planar to undulating, smooth and rough with light reddish brown surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM		12.40	266.50			13.75 - 13.85	C2	12.30 12.40 12.40 13.20 13.20 13.90 13.90 15.40 15.40 16.90 16.90 18.40 18.40 19.90		100 100 86 100 93 87 100	0 13 21 20 33 33 7	0 0 0 13 13 17 0	
Moderately weak dark grey vitreous COAL with very closely to closely spaced (60 degrees), planar, smooth and rough and polished discontinuity. (SOUTH WALES LOWER COAL MEASURES) SWLCM		19.80	259.10			16.60 - 16.70 17.50 - 17.60	C3 C4						

Observations / Remarks
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd. 2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal. 3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample 4. Location reinstated as instructed by WSP. 5. Flush returns not recorded.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %
10.50	11.20	101	100

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306216.96	Northing:	207120.82
Level:	278.90mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH104**

Sheet 3 of 4

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300	10.50	146	13/03	17:00	6.00	6.00	
1.20	1.30	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	11.90	101			17/03	00:00	11.20	10.50	
1.30	11.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	30.50	102			25/03	00:00	12.30	-	
11.20	30.50	Rotary Core	Fraste	Apex Drilling Services					26/03	17:00	21.20	-	
									27/03	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 13/03/2026
Finish Date: 27/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Moderately weak dark grey vitreous COAL with very closely to closely spaced (60 degrees), planar, smooth and rough and polished discontinuity. (SOUTH WALES LOWER COAL MEASURES) SWLCM		20.30	258.60										
Medium strong very thinly bedded (0 to 5 degrees) dark grey fossiliferous carbonaceous MUDSTONE. Discontinuities: 1) 0 to 5 degrees along bedding, medium spaced, undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM								19.90 21.20		100	65	62	
Medium strong to strong very thinly bedded (0 to 5 degrees) grey slightly carbonaceous SILTSTONE with closely to medium spaced very thin beds of extremely weak mudstone. Partially weathered to clay. Discontinuities: 1) 0 to 5 degrees along bedding, closely to medium spaced, planar to undulating, smooth and rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		21.30	257.60										
From 22.25m to 23.20m bgl interbedded with light grey fine sandstone.						22.55 - 22.80	C5	21.20 22.80		100	81	50	
From 23.20m to 23.50m bgl 2no 90 degrees, curved to stepped, rough discontinuity. *From 23.50m to 23.58m bgl weathered to clay.*								22.80 24.40		100	69	41	
						24.60 - 24.90	C6						
From 25.00m to 25.10m bgl 30 degrees bedding with traces of coal.								24.40 26.00		100	97	87	
								26.00 27.50		100	93	93	
						27.70 - 28.00	C7						
From 28.20m to 28.50m bgl 1no 90 degrees, planar, smooth discontinuity.								27.50 29.00		100	87	77	
From 29.65m to 30.10m bgl bedding is 30 degrees and predominately light grey fine sandstone. *From 29.80m to 30.00m bgl 1no 90 degrees, planar, smooth discontinuity.*								29.00 30.50		100	100	100	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306216.96	Northing:	207120.82
Level:	278.90mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH104**

Sheet 4 of 4

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300	10.50	146	13/03	17:00	6.00	6.00	
1.20	1.30	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	11.90	101			17/03	00:00	11.20	10.50	
1.30	11.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	30.50	102			25/03	00:00	12.30	-	
11.20	30.50	Rotary Core	Fraste	Apex Drilling Services					26/03	17:00	21.20	-	
									27/03	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 13/03/2026
Finish Date: 27/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong to strong very thinly bedded (0 to 5 degrees) grey slightly carbonaceous SILTSTONE with closely to medium spaced very thin beds of extremely weak mudstone. Partially weathered to clay. Discontinuities: 1) 0 to 5 degrees along bedding, closely to medium spaced, planar to undulating, smooth and rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		30.50	248.40			30.25 - 30.50	C8						
EOH at 30.50m - Achieved target depth													

31 32 33 34 35 36 37 38 39 40

Observations / Remarks
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd. 2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal. 3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample 4. Location reinstated as instructed by WSP. 5. Flush returns not recorded.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306304.95	Northing:	207134.19
Level:	280.46mAOD	Depth:	30.20m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH105**

Sheet 1 of 5

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 12/03/2026
Finish Date: 16/04/2026

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300
1.20	7.90	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	13.20	101
7.90	9.00	Rotary Open Hole	Klemm	Apex Drilling Services	30.20	102
9.00	13.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services		
13.20	30.20	Rotary Core	Fraste	Apex Drilling Services		

Casing	
Depth(m)	Diam (mm)
9.00	146

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	1.20	-	
16/03	17:00	10.50	-	
17/03	17:00	13.20	-	
15/04	17:00	20.20	9.00	
16/04	17:00	30.20	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Soft to firm brown slightly sandy gravelly CLAY with medium to high cobble content. Gravel is subangular to subrounded fine to coarse siltstone and limestone. Cobbles are subangular (to 100mm) of siltstone and limestone. Sand is fine to coarse. (GLACIAL TILL) TILL *No representative sample available for geotechnical sampling*						0.30	ES1						PID 0.30m, 0.0ppm
						0.60	ES2						PID 0.60m, 0.0ppm
						1.00	ES3						PID 1.00m, 0.0ppm PID 1.00m, 0.0ppm
Limited recovery. Core recovered as dense brown subangular to subrounded fine to coarse locally rinded GRAVELS of limestone. (GLACIAL TILL) TILL		1.50	278.96										SPT(C) 1.50m, N=50 (25 for 130mm/50 for 240mm)
Firm to stiff light brown sandy gravelly CLAY. Gravel is subangular to subrounded fine to coarse limestone. Sand is fine to coarse. (GLACIAL TILL) TILL		2.30	278.15										
		2.50	277.96			2.50 - 3.50	B1						SPT(C) 2.50m, N=50 (7,12/50 for 240mm)
Stiff to very stiff brown very silty very sandy GRAVEL. Gravel is subangular to subrounded fine to coarse limestone, siltstone, sandstone with occasional mudstone and rare coal. Sand is fine to medium. (GLACIAL TILL) TILL						3.00 3.00	D1 ES4						PID 3.00m, 0.0ppm
						3.50 3.50 - 4.50	D2 B2						SPT(C) 3.50m, N=50 (5,8/50 for 295mm)
						4.00	D3						
													SPT(C) 4.50m, N=45 (6,8/10,9,13,13)
Light grey subrounded COBBLES of limestone. (GLACIAL TILL) TILL *From 5.00m to 5.70m bgl light yellowish brown.*		5.00	275.46										
Stiff to very stiff brown to dark greyish brown slightly sandy gravelly CLAY. Gravel is subangular to subrounded fine to coarse limestone, siltstone, occasional mudstone and rare coal. Sand is fine to medium. (GLACIAL TILL) TILL		5.75	274.70										SPT(C) 6.00m, N=50 (7,9/50 for 295mm)
Stiff thinly laminated (0-10 deg) grey locally mottled light brown very silty gravelly SAND with occasional thin laminations of degraded coal and occasional partings. (GLACIAL TILL) TILL		6.60	273.86			6.70 - 7.50	B3						
						7.00 7.00 7.00 7.20	D4 ES ES5 D5						PID 7.00m, 0.0ppm
No recovery.		7.50	272.96										SPT(C) 7.50m, 50 (16,9/50 for 135mm)
						7.80	D6						
Stiff to very stiff brown to dark greyish brown slightly sandy gravelly CLAY. Gravel is subangular to subrounded fine to coarse limestone, siltstone, occasional mudstone and rare coal. Sand is fine to medium. (GLACIAL TILL) TILL		9.00	271.46										SPT(C) 9.00m, N=50 (7,10/50 for 280mm)
						9.50	ES6						PID 9.50m, 0.0ppm

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
1.50	2.50	101	30
2.50	3.50	101	100
3.50	4.50	101	100
4.50	6.00	101	100
6.00	7.50	101	100
7.50	7.90	101	100
9.00	10.50	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
13.20	14.00		Grey	Water
14.00	15.50		Grey	Water
15.50	17.00		Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306304.95	Northing:	207134.19
Level:	280.46mAOD	Depth:	30.20m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH105**

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300
1.20	7.90	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	13.20	101
7.90	9.00	Rotary Open Hole	Klemm	Apex Drilling Services	30.20	102
9.00	13.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services		
13.20	30.20	Rotary Core	Fraste	Apex Drilling Services		

Casing	
Depth(m)	Diam (mm)
9.00	146

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	1.20	-	
16/03	17:00	10.50	-	
17/03	17:00	13.20	-	
15/04	17:00	20.20	9.00	
16/04	17:00	30.20	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 12/03/2026
Finish Date: 16/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Stiff to very stiff brown to dark greyish brown slightly sandy gravelly CLAY. Gravel is subangular to subrounded fine to coarse limestone, siltstone, occasional mudstone and rare coal. Sand is fine to medium. (GLACIAL TILL) TILL													SPT(C) 10.50m, N=50 (5,7/50 for 295mm)
						11.50	ES7						PID 11.50m, 0.0ppm
													SPT(C) 12.00m, 50 (25 for 85mm/50 for 135mm)
Extremely to very weak thinly laminated grey MUDSTONE. Discontinuities are 0 to 10 degrees, extremely closely spaced, undulating, rough, partially weathered to clay. Weathering grade V. (SOUTH WALES LOWER COAL MEASURES) SWLCM		12.60	267.86										
Medium strong thinly bedded (0 to 5 degrees) grey slightly carbonaceous SILTSTONE with closely spaced, very thin beds of extremely to very weak mudstone. Partially non intact. Discontinuities: 1) 0 to 5 degrees, very closely spaced, planar to undulating, smooth. 2) 80 to 90 degrees, planar to wary, smooth with reddish brown surface staining. Weathering grade III to IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		13.20	267.26			13.30 - 13.40	C1	13.20 14.00		100	31	13	SPT(C) 13.20m, 50 (25 for 115mm/50 for 0mm)
Moderately weak thinly bedded (0 to 10 degrees) light grey MUDSTONE with closely spaced, very thin to thin beds of extremely to very weak mudstone locally weathered to clay. Partially non intact. Discontinuities: 1) 0 to 10 degrees, very closely spaced, planar to undulating, smooth. 2) 70 degrees, closely spaced, planar, smooth with light orangish brown surface discoloration. 3) 1 to 2no 90 degrees, planar to undulating, smooth with light orangish brown surface discoloration. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		14.30	266.15					14.00 15.50		100	10	0	
								15.50 17.00		100	7	0	
From 16.70m to 17.60m bgl extremely to very weak locally carbonaceous, partially weathered to clay.								17.00 18.50		100	23	7	
						18.30 - 18.40	C2						
From 18.50m to 20.20m bgl thinly interbedded (0 to 30 degrees) with fine grained sandstone. *From 18.65m to 18.75m bgl extremely to very weak mudstone.*								18.50 19.00		100	30	30	
From 19.00m to 19.30m bgl extremely to very weak mudstone.								19.00 19.50		100	20	20	
From 19.50m to 19.75m bgl 2 to 3no 90 degrees, planar to undulating, smooth discontinuity.						19.70 - 19.90	C3	19.50 20.20		100	71	43	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
10.50	12.00	101	100
12.00	13.20	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
17.00	18.50		Grey	Water
18.50	19.00		Grey	Water
19.00	19.50		Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306304.95	Northing:	207134.19
Level:	280.46mAOD	Depth:	30.20m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH105**

Sheet 3 of 5

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300
1.20	7.90	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	13.20	101
7.90	9.00	Rotary Open Hole	Klemm	Apex Drilling Services	30.20	102
9.00	13.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services		
13.20	30.20	Rotary Core	Fraste	Apex Drilling Services		

Casing	
Depth(m)	Diam (mm)
9.00	146

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	1.20	-	
16/03	17:00	10.50	-	
17/03	17:00	13.20	-	
15/04	17:00	20.20	9.00	
16/04	17:00	30.20	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 12/03/2026
Finish Date: 16/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Moderately weak thinly bedded (0 to 10 degrees) light grey MUDSTONE with closely spaced, very thin to thin beds of extremely to very weak mudstone locally weathered to clay. Partially non intact. Discontinuities: 1) 0 to 10 degrees, very closely spaced, planar to undulating, smooth. 2) 70 degrees, closely spaced, planar, smooth with light orangish brown surface discoloration. 3) 1 to 2no 90 degrees, planar to undulating, smooth with light orangish brown surface discoloration. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		20.20	260.26										
Strong to very strong thinly to thickly bedded (0 to 15 degrees) light grey SILTSTONE with frequent laminations of fine sandstone. Discontinuities: 1) 0 to 15 degrees along bedding, medium spaced, planar, smooth with reddish brown and orange surface staining. 2) 45 degrees, medium spaced, planar to undulating, smooth with reddish brown and orange surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM		21.70	258.76			21.35 - 21.60	C4	20.20 21.70		100	100	77	
Moderately weak to medium strong very thinly bedded (0 to 10 degrees) grey SILTSTONE with closely spaced, very thin beds of extremely to very weak mudstone. Discontinuities: 1) 0 to 10 degrees along bedding, very closely to closely spaced, planar to undulating, smooth with reddish brown surface staining. 2) 2to 3no 80 to 90 degrees, planar, smooth with reddish brown surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 23.20m bgl non intact. Recovered as angular to subangular locally rinded coarse gravel.*		24.50	255.96			22.20 - 22.30	C5	21.70 23.20		93	17	7	
Limited recovery. Core recovered as subangular coarse GRAVEL of grey to dark grey carbonaceous mudstone and siltstone and occasional dark grey clay pockets. (SOUTH WALES LOWER COAL MEASURES) SWLCM		25.70	254.76					23.20 24.50		92	0	0	
Weak to moderately weak very thinly bedded (0 to 10 degrees) grey to dark grey carbonaceous MUDSTONE with closely spaced very thin to thin beds of extremely weak fissile mudstone. Predominantly non intact. Discontinuities are 0 to 10 and 70 to 90 degrees, very closely spaced, planar, smooth with reddish brown surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 25.70m to 25.90m bgl recovered as dark grey slightly clayey fine to medium sand.*		27.35	253.10					24.50 25.70		50	0	0	
Weak to moderately weak dark grey vitreous COAL with 60 to 70 degrees, very closely spaced incipient discontinuity. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 27.40m to 27.85m bgl non intact. Recovered as coarse sand and gravel. (Partially degraded)*		28.05	252.40					25.70 27.20		87	7	0	
Medium strong thinly bedded (0 to 10 degrees) grey SILTSTONE with closely spaced very thin beds of extremely weak fissile mudstone. Discontinuities are 0 to 10 degrees along bedding, closely spaced, planar to undulating, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		29.20	251.26			28.30 - 28.40	C6	27.20 28.70		100	33	0	
Strong to very strong very thinly bedded (0 to 10 degrees) grey medium grained SANDSTONE. Discontinuities are 0 to 10 degrees along bedding, medium spaced, planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 29.60m to 29.80m bgl medium strong grey siltstone.*						29.30 - 29.55	C7	28.70 30.20		100	93	77	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
19.50	20.20		Grey	Water
20.20	21.70		Grey	Water
21.70	23.20		Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306304.95	Northing:	207134.19
Level:	280.46mAOD	Depth:	30.20m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH105**

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 12/03/2026
Finish Date: 16/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
1.20	7.90	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
7.90	9.00	Rotary Open Hole	Klemm	Apex Drilling Services
9.00	13.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
13.20	30.20	Rotary Core	Fraste	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
1.20	300
13.20	101
30.20	102

Casing

Depth(m)	Diam (mm)
9.00	146

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
12/03	17:00	1.20	-	
16/03	17:00	10.50	-	
17/03	17:00	13.20	-	
15/04	17:00	20.20	9.00	
16/04	17:00	30.20	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong to very strong very thinly bedded (0 to 10 degrees) grey medium grained SANDSTONE. Discontinuities are 0 to 10 degrees along bedding, medium spaced, planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		30.20	250.26										
EOH at 30.20m - Achieved target depth													

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
23.20	24.50		Grey	Water
24.50	25.70		Grey	Water
25.70	27.20		Grey	Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306304.95	Northing:	207134.19
Level:	280.46mAOD	Depth:	30.20m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH105**

Sheet 5 of 5

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300	9.00	146	12/03	17:00	1.20	-	
1.20	7.90	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	13.20	101			16/03	17:00	10.50	-	
7.90	9.00	Rotary Open Hole	Klemm	Apex Drilling Services	30.20	102			17/03	17:00	13.20	-	
9.00	13.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services					15/04	17:00	20.20	9.00	
13.20	30.20	Rotary Core	Fraste	Apex Drilling Services					16/04	17:00	30.20	-	

Scale:	1:50
Checked By:	JC + DD
Approved By:	NB
Start Date:	12/03/2026
Finish Date:	16/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring							
						Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results

41
42
43
44
45
46
47
48
49
50

Observations / Remarks
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd. 2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal. 3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample 4. Location reinstated as instructed by WSP.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type
27.20	28.70		Grey / black	Water
28.70	30.20		Grey	Water

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306150.82	Northing:	207099.33
Level:	278.78mAOD	Depth:	30.30m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH106**

Sheet 1 of 4

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	1.00	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.00	300
1.00	5.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	5.20	101
5.20	30.30	Rotary Core	Fraste	Apex Drilling Services	30.30	102

Casing	
Depth(m)	Diam (mm)
5.00	146

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	1.00	-	
23/03	17:00	5.20	3.00	
30/03	17:00	13.50	5.00	
31/03	17:00	30.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 31/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Medium dense to dense grey very silty very sandy subangular to subrounded fine to coarse GRAVEL of slag, limestone, siltstone, concrete and brick. Sand is fine to coarse. MGR *No representative sample available for geotechnical sampling*						0.30	ES						PID 0.30m, 0.5ppm
						0.80 - 2.50	B1						
						1.50	D1						SPT(C) 1.50m, N=36 (5,9/11,10,7,8)
						2.00	ES3						PID 2.00m, 0.0ppm
						2.50 - 5.00	B2						SPT(C) 2.50m, N=20 (8,10/4,4,6,6)
From 3.00m bgl slight hydrocarbon odour.						3.00 3.00	ES ES4						
						3.50	D2						SPT(C) 3.50m, N=47 (4,6/25,10,5,7)
						4.00 4.00	ES ES5						SPT(C) 4.00m, N=20 (6,11/5,5,5,5)
													SPT(C) 5.00m, N=50 (9,5/50 for 240mm)
MADE GROUND: Recovered as dense grey GRAVEL & COBBLES of slightly porous slag and occasional limestone and concrete. MGR		5.20	273.58					5.20 6.00		100	19	13	
Limited recovery. Core recovered as dense to medium dense grey angular to subangular fine to coarse GRAVEL of moderately weak siltstone with orange surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM		6.00	272.78					6.00 7.00		30	0	0	SPT(C) 6.00m, N=50 (7,9/50 for 235mm)
From 7.00m to 7.50m bgl partially full diameter piece of core.								7.00 7.50		20	0	0	SPT(C) 7.00m, N=24 (3,9/6,5,6,7)
								7.50 8.00		0	0	0	
Weak to moderately weak very thinly bedded (0 to 15 degrees) grey SILTSTONE. Predominately non intact with occasional thin beds of full diameter core. Discontinuities are randomly orientated to locally discernible 30 to 45 and 70 degrees, extremely to very closely spaced, planar to undulating, smooth and rough with reddish brown and orange surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM		8.00	270.78					8.00 8.50		50	0	0	SPT(C) 8.00m, N=28 (2,5/5,7,9,7)
								8.50 9.00		100	10	0	
From 9.40m to 9.80m bgl moderately weak with 1no 70 degrees, planar, smooth discontinuity.						9.70 - 9.80	C1	9.00 10.50		100	13	13	SPT(C) 9.00m, N=42 (6,6/7,9,12,14)

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
0.80	1.50	101	85
1.50	2.50	101	80
2.50	3.50	101	100
3.50	4.00	101	80
4.00	5.00	101	50
5.00	5.20	101	100

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60
AP5	65

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306150.82	Northing:	207099.33
Level:	278.78mAOD	Depth:	30.30m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH106**

Sheet 2 of 4

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	1.00	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.00	300
1.00	5.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	5.20	101
5.20	30.30	Rotary Core	Fraste	Apex Drilling Services	30.30	102

Casing	
Depth(m)	Diam (mm)
5.00	146

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	1.00	-	
23/03	17:00	5.20	3.00	
30/03	17:00	13.50	5.00	
31/03	17:00	30.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 31/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Weak to moderately weak very thinly bedded (0 to 15 degrees) grey SILTSTONE. Predominately non intact with occasional thin beds of full diameter core. Discontinuities are randomly orientated to locally discernible 30 to 45 and 70 degrees, extremely to very closely spaced, planar to undulating, smooth and rough with reddish brown and orange surface staining. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 10.90m to 11.10m bgl moderately weak 2 to 3no crosscutting 45 degrees, planar, smooth discontinuity.* *From 11.40m to 11.50m bgl moderately weak to medium strong.* *From 11.50m to 12.00m bgl 2 to 3no 90 degrees, planar, smooth discontinuity.*						11.40 - 11.50	C2	10.50 12.00		80	13	13	
						13.15	C3	12.00 13.50		90	0	0	
Moderately weak dark grey carbonaceous SILTSTONE with occasional very thin beds of extremely weak mudstone. Non intact. Recovered as angular to subangular medium to coarse gravel. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 13.50m to 13.90m bgl non intact. Recovered as clayey subangular fine to medium gravel.*		13.50	265.28										
Moderately weak dark grey vitreous COAL. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 14.40m to 14.70m bgl 70 degrees, planar, smooth discontinuity.*		14.30	264.48					13.50 15.00		93	17	17	
		14.70	264.08										
Medium strong grey SILTSTONE. Discontinuities are 70 to 90 degrees, planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		14.90	263.88										
No recovery.		15.00	263.78			15.15 - 15.40	C3						
Moderately weak to medium strong thinly bedded (0 to 5 degrees) grey fossiliferous MUDSTONE. Discontinuities are 0 to 5 degrees along bedding, medium spaced, undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		15.90	262.88					15.00 16.50		90	90	90	
Strong very thinly to thinly interbedded (0 to 5 degrees) grey and light grey SILTSTONE and fine grained SANDSTONE with occasional subrounded inclusions (to 40mm) of siderite. Discontinuities are 0 to 5 degrees, medium to widely spaced, undulating, rough with localised fossilised plant remains. (SOUTH WALES LOWER COAL MEASURES) SWLCM						17.30 - 17.60	C4	16.50 18.00		100	97	97	
Weak to moderately weak thinly bedded (0 to 5 degrees) grey MUDSTONE. Discontinuities: 1) 0 to 5 degrees along bedding, closely spaced, undulating, rough. 2) Randomly orientated to locally discernible 70 to 90 degrees, incipient. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 18.15m to 18.60m bgl very weak to weak with fossilised plant remains.* *From 19.50m to 21.50m bgl 4 to 5no 80 degrees, closely spaced, planar to locally curved, smooth with a trace of calcite.*		17.85	260.93			18.60 - 18.80	C5	18.00 19.50		100	27	13	
Strong very thinly bedded (0 to 15 degrees) grey and light grey SILTSTONE with occasional very thin beds of fine grained sandstone. Frequently cross bedded. Discontinuities are 0 to 15 degrees along bedding, medium spaced, planar to undulating, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		19.55	259.23										

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3 AP5	60 65

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306150.82	Northing:	207099.33
Level:	278.78mAOD	Depth:	30.30m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH106**

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.00	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.00	300	5.00	146	10/03	17:00	1.00	-	
1.00	5.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	5.20	101			23/03	17:00	5.20	3.00	
5.20	30.30	Rotary Core	Fraste	Apex Drilling Services	30.30	102			30/03	17:00	13.50	5.00	
									31/03		30.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 31/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring							
						Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong very thinly bedded (0 to 15 degrees) grey and light grey SILTSTONE with occasional very thin beds of fine grained sandstone. Frequently cross bedded. Discontinuities are 0 to 15 degrees along bedding, medium spaced, planar to undulating, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM								19.50 21.00		100	80	80	
								21.00 22.60		100	100	100	
						23.50 - 23.80	C6	22.60 24.10		100	100	93	
From 24.30m to 24.35m bgl very thin beds of weathered mudstone.								24.10 25.70		100	97	78	
						26.20 - 26.60	C7	25.70 27.20		100	100	100	
From 27.50m to 27.55m bgl very thin beds of weathered mudstone.								27.20 28.80		100	97	97	
						29.30 - 29.70	C8	28.80 30.30		100	87	87	
From 29,50m to 29.75m bgl bedding dipping at 30 degrees, Light grey fine to medium grained sandstone. *From 29.80m to 29.90m bgl possible weathered siltstone/mudstone. Close to 70 degrees discontinuity.*													

21 22 23 24 25 26 27 28 29 30

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3 AP5	60 65

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306150.82	Northing:	207099.33
Level:	278.78mAOD	Depth:	30.30m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH106**

Sheet 4 of 4

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.00	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.00	300	5.00	146	10/03	17:00	1.00	-	
1.00	5.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	5.20	101			23/03	17:00	5.20	3.00	
5.20	30.30	Rotary Core	Fraste	Apex Drilling Services	30.30	102			30/03	17:00	13.50	5.00	
									31/03	17:00	30.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 31/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong very thinly bedded (0 to 15 degrees) grey and light grey SILTSTONE with occasional very thin beds of fine grained sandstone. Frequently cross bedded. Discontinuities are 0 to 15 degrees along bedding, medium spaced, planar to undulating, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 30.00m to 30.30m bgl 2no 70 degrees, undulating, rough discontinuity.*		30.30	248.48										
EOH at 30.30m - Achieved target depth													

31
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34
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38
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40

Observations / Remarks
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd. 2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal. 3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample 4. Location reinstated as instructed by WSP. 5. Flush returns not recorded.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3 AP5	60 65

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306190.42	Northing:	207062.63
Level:	279.22mAOD	Depth:	30.70m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH107**

Sheet 1 of 4

Method, Plant and Crew					Diameter		Casing	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)
0.00	0.97	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.97	300	3.90	146
0.97	3.75	Rotary Core	Fraste	Apex Drilling Services	30.70	102		
3.75	3.90	Rotary Open Hole	Fraste	Apex Drilling Services				
3.90	30.70	Rotary Core	Fraste	Apex Drilling Services				

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
09/03	17:00	0.97	-	
10/03	17:00	2.00	-	
16/03	17:00	3.00	-	
17/03	00:00	8.30	3.90	
18/03	17:00	12.30	-	
19/03	17:00	18.30	-	
20/03	17:00	20.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 24/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Firm dark greyish brown slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse of limestone and siltstone with frequent rootlets. (TOPSOIL)		0.20	279.02			0.00 - 0.20	B1						PID 0.10m, 0.0ppm
MGR		0.35	278.87			0.10	D1						
MADE GROUND: Firm dark greyish brown slightly sandy gravelly CLAY with low cobble and/ or boulder content. Gravel is very angular to subrounded fine to coarse of limestone and siltstone. cobbles and/or boulders are angular to subangular of limestone and siltstone. with occasional rootlets.						0.10	ES4						
MGR						0.20 - 0.35	B2						PID 0.30m, 0.0ppm
MADE GROUND: Dense brown slightly silty slightly slightly sandy GRAVEL with high cobble content Gravel is angular to subangular fine to coarse of siltstone. Cobbles are subangular to subrounded of thinly laminated siltstone. Sand is fine to coarse.						0.30	D2						
MGR						0.30	ES7						
						0.35 - 0.95	B3						
						0.95	D3						PID 0.95m, 0.0ppm
						0.95	ES5						SPT(C) 0.97m, 50 (25 for 55mm/50 for 55mm) 1
Limited recovery. Core recovered as dense angular to subangular tabular locally rinded GRAVEL and COBBLES of medium strong mudstone. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM		2.00	277.22					2.00 3.00		40	0	0	SPT(C) 2.00m, 50 (25 for 60mm/50 for 30mm) 2
From 2.30m bgl rinded cobble of strong siltstone.								3.00 3.75		25	0	0	SPT(C) 3.00m, N=50 (7,10/50 for 270mm) 3
Openhole from 3.75 to 3.90m								3.75 3.90		0	0	0	
								3.90 4.90		50	0	0	SPT(C) 3.90m, N=38 (25 for 140mm/14,10,7,7) 4
Moderately weak to medium strong thinly bedded grey MUDSTONE with closely spaced very thin bedded of extremely to very weak mudstone. Non intact with reddish brown surface staining. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM		4.90	274.32					4.90 5.65		100	0	0	SPT(C) 4.90m, N=39 (5,14/6,10,10,13) 5
From 5.65m to 6.30m bgl limited recovery.								5.65 6.30		60	15	0	6
No recovery.		6.30	272.92					6.30 6.80		0	0	0	SPT(C) 6.30m, N=50 (7,9/50 for 250mm)
Limited recovery. Core recovered as dense grey angular to subangular tabular locally tabular GRAVEL and COBBLES of strong siltstone and moderately weak to medium strong mudstone. Possible 90 degrees discontinuities. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM		6.80	272.42					6.80 7.30		40	0	0	7
Limited recovery. Core recovered as dense grey angular to subangular tabular locally tabular GRAVEL of siltstone and moderately weak to medium strong mudstone. Possible 90 degrees discontinuities. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM		7.30	271.92					7.30 7.80		50	0	0	SPT(C) 7.30m, 50 (8,11/50 for 195mm)
								7.80 8.30		50	0	0	8
Limited recovery. Core recovered as dense grey angular to subangular coarse GRAVEL of siltstone with localised reddish brown surface staining. Possible 90 degrees discontinuities. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM		8.30	270.92					8.30 9.30		50	10	0	SPT(C) 8.30m, 50 (9,13/50 for 195mm) 9
No recovery.		9.30	269.92			9.23 - 9.30	C1						SPT(C) 9.30m, 50 (25 for 50mm/50 for 85mm)
Limited recovery. Core recovered as grey angular to subangular coarse GRAVELS and COBBLES of moderately weak to medium strong carbonaceous mudstone. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM		9.80	269.42					9.30 9.80		0	0	0	10

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
AP5	65

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306190.42	Northing:	207062.63
Level:	279.22mAOD	Depth:	30.70m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH107**

Sheet 2 of 4

Method, Plant and Crew					Diameter		Casing	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)
0.00	0.97	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.97	300	3.90	146
0.97	3.75	Rotary Core	Fraste	Apex Drilling Services	30.70	102		
3.75	3.90	Rotary Open Hole	Fraste	Apex Drilling Services				
3.90	30.70	Rotary Core	Fraste	Apex Drilling Services				

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
09/03	17:00	0.97	-	
10/03	17:00	2.00	-	
16/03	17:00	3.00	-	
17/03	00:00	8.30	3.90	
18/03	17:00	12.30	-	
19/03	17:00	18.30	-	
20/03	17:00	20.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 24/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Limited recovery. Core recovered as grey angular to subangular coarse GRAVELS and COBBLES of moderately weak to medium strong carbonaceous mudstone. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM								9.80 10.30		40	10	0	
								10.30 10.80		50	20	0	SPT(C) 10.30m, N=49 (4,9/10,11,14,14)
								10.80 11.30		40	0	0	
								11.30 11.80		70	0	0	SPT(C) 11.30m, 50 (25 for 105mm/50 for 130mm)
Strong thinly interbedded (0 to 20 degrees) light grey SILTSTONE and fine grained SANDSTONE. Discontinuities: 1) 0 to 20 degrees along bedding, closely to medium spaced, undulating, rough with reddish brown surface staining. 2) 80 degrees, planar, smooth with reddish brown surface staining and calcite infill to 1mm. (SOUTH WALES LOWER COAL MEASURES) SWLCM		11.80	267.42			11.80 - 12.10	C2	11.80 12.30		100	100	70	
Moderately weak to medium strong grey SILTSTONE with very thin beds of weak siltstone/ mudstone. Discontinuities are predominately non intact with very closely to closely spaced, locally discernible 0 to 10 and 80 to 90 degrees, undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		12.30	266.92					12.30 12.70		100	0	0	SPT(C) 12.30m, 50 (25 for 100mm/50 for 75mm)
						13.10 - 13.20	C3	12.70 13.20		100	30	10	
Weak very thinly bedded (0 to 10 degrees) grey to dark grey slightly carbonaceous SILTSTONE. Discontinuities: 1) 0 to 10 degrees along bedding, extremely to very closely spaced, planar and undulating, smooth and rough with reddish brown and orange surface staining. 2) 70 to 80 degrees, closely spaced, planar and curved, smooth and rough with reddish brown surface staining. 3) 90 degrees, planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		13.30	265.92					13.20 13.90		100	0	0	
								13.90 14.60		100	0	0	
Moderately weak to medium strong grey slightly carbonaceous SILTSTONE with very closely to closely spaced bedding. (SOUTH WALES LOWER COAL MEASURES) SWLCM		14.60	264.62					14.60 15.30		100	35	0	
Medium strong to strong very thinly bedded (0 to 10 degrees) grey SILTSTONE. (SOUTH WALES LOWER COAL MEASURES) SWLCM		15.30	263.92			15.30 - 15.50	C4						
Weak very thinly bedded (0 to 10 degrees) dark grey to grey carbonaceous MUDSTONE and SILTSTONE. Discontinuities: 1) 0 to 10 degrees, very closely to closely spaced, planar and undulating, rough. 2) 70 degrees, closely spaced, planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM		15.50	263.72					15.30 16.80		85	30	25	
From 15.50m to 15.65m bgl very weak locally weathered to clay. *From 16.30m to 16.80m bgl medium strong with limited recovery.*						16.30 - 16.40	C5						
Weak dark grey carbonaceous MUDSTONE with very closely to closely spaced, 45 to 70 degrees, planar, smooth discontinuity. Partially non intact. (SOUTH WALES LOWER COAL MEASURES) SWLCM		17.45	261.77					16.80 18.30		100	40	30	
From 18.90m to 19.80m bgl medium strong.								18.30 18.90		100	70	0	
Very weak to weak thickly laminated dark grey vitreous COAL. Partially non intact. (SOUTH WALES LOWER COAL MEASURES) SWLCM						18.90 - 19.05	C6						
Moderately weak to medium strong thinly bedded grey locally fossiliferous carbonaceous SILTSTONE with closely spaced very thin beds extremely weak mudstone. Discontinuities: 1) 0 to 10 degrees, closely spaced, undulating, rough. 2) 70 degrees, closely to medium spaced, planar, smooth. Partially non intact. (SOUTH WALES LOWER COAL MEASURES) SWLCM		19.20	260.02					18.90 19.80		90	50	20	
		19.80	259.42										

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
AP5	65

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306190.42	Northing:	207062.63
Level:	279.22mAOD	Depth:	30.70m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH107**

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	0.97	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.97	300	3.90	146	09/03	17:00	0.97	-	
0.97	3.75	Rotary Core	Fraste	Apex Drilling Services	30.70	102			10/03	17:00	2.00	-	
3.75	3.90	Rotary Open Hole	Fraste	Apex Drilling Services					16/03	17:00	3.00	-	
3.90	30.70	Rotary Core	Fraste	Apex Drilling Services					17/03	00:00	8.30	3.90	
									18/03	17:00	12.30	-	
									19/03	17:00	18.30	-	
									20/03	17:00	20.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 24/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Moderately weak to medium strong thinly bedded grey locally fossiliferous carbonaceous SILTSTONE with closely spaced very thin beds extremely weak mudstone. Discontinuities: 1) 0 to 10 degrees, closely spaced, undulating, rough. 2) 70 degrees, closely to medium spaced, planar, smooth. Partially non intact. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 20.80m to 21.00m bgl frequent pyrite nodules (20mm)*								19.80 20.30		100	10	0	
								20.30 20.70		100	50	0	
Strong to very thinly bedded (0 to 10 degrees) grey to dark grey carbonaceous locally fossiliferous SILTSTONE. Locally interbedded (2 to 20mm) with light grey fine sandstone. Discontinuities: 1) 0 to 10 degrees, medium spaced, planar to undulating, smooth and rough. 2) 70 to 90 degrees, medium to widely spaced, undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		20.90	258.32					20.70 21.50		100	50	40	
From 21.80m to 22.30m bgl 80 to 90 degrees, planar, smooth discontinuity.						21.55 - 21.70	C7	21.50 23.00		100	60	30	
						23.40 - 23.70	C8	23.00 24.50		100	100	100	
From 25.00m to 25.40m bgl 80 to 90 degrees, planar, smooth discontinuity.								24.50 26.10		100	80	50	
From 26.60m to 27.60m bgl 70 to 90 degrees, undulating, rough discontinuity.								26.10 27.70		100	90	90	
						28.80 - 29.10	C9	27.70 29.20		100	100	100	
From 29.30m bgl 70 to 90 degrees, undulating, rough discontinuity with plant remains.								29.20 30.70		100	90	90	

21 22 23 24 25 26 27 28 29 30

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
AP5	65

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306190.42	Northing:	207062.63
Level:	279.22mAOD	Depth:	30.70m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH107**

Sheet 4 of 4

Method, Plant and Crew					Diameter		Casing	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)
0.00	0.97	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.97	300	3.90	146
0.97	3.75	Rotary Core	Fraste	Apex Drilling Services	30.70	102		
3.75	3.90	Rotary Open Hole	Fraste	Apex Drilling Services				
3.90	30.70	Rotary Core	Fraste	Apex Drilling Services				

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
09/03	17:00	0.97	-	
10/03	17:00	2.00	-	
16/03	17:00	3.00	-	
17/03	00:00	8.30	3.90	
18/03	17:00	12.30	-	
19/03	17:00	18.30	-	
20/03	17:00	20.30	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 24/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong to very thinly bedded (0 to 10 degrees) grey to dark grey carbonaceous locally fossiliferous SILTSTONE. Locally interbedded (2 to 20mm) with light grey fine sandstone. Discontinuities: 1) 0 to 10 degrees, medium spaced, planar to undulating, smooth and rough. 2) 70 to 90 degrees, medium to widely spaced, undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		30.70	248.52										
EOH at 30.70m - Achieved target depth													

31 32 33 34 35 36 37 38 39 40

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.
5. Flush returns not recorded.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP5	65

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306129.30	Northing:	207051.47
Level:	279.09mAOD	Depth:	30.10m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH108**

Sheet 1 of 4

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	0.80	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.80	300
0.80	6.00	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.00	101
6.00	30.10	Rotary Core	Fraste	Apex Drilling Services	30.10	102

Casing	
Depth(m)	Diam (mm)
6.00	165

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.80	-	
24/03	17:00	6.00	-	
09/04	17:00	16.50	6.00	
10/04	17:00	22.50	-	
13/04	17:00	30.10	-	
14/04	17:00	30.10	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 14/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Greyish brown slightly sandy gravelly CLAY with frequent rootlets. Gravel is subangular to subrounded fine to coarse siltstone. Sand is fine to coarse.		0.20	278.89			0.30 - 0.50	ES1						PID 0.30m, 0.0ppm
MGR *No representative sample available for geotechnical sampling*													
MADE GROUND: Grey sandy slightly clayey angular to subangular fine to coarse GRAVEL of mudstone and occasional sandstone with low cobble content. Sand is fine to coarse. Cobbles are angular to subangular of mudstone and sandstone.		0.75	278.34			0.75 - 2.50	B1						
MGR Extremely to very weak thinly and thickly laminated (0 to 15 degrees locally 45 degrees) light grey MUDSTONE locally weathered to clay. Discontinuities are 0 to 15 degrees along bedding, very to closely spaced, planar to undulating, smooth and rough with localised reddish brown surface staining. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM						1.50	D1						SPT(C) 1.50m, N=16 (6,5/4,4,4,4)
						2.00	ES2						PID 2.00m, 0.0ppm
						2.50 - 6.00	B2						SPT(C) 2.50m, N=34 (4,3/5,11,9,9)
						3.50	D2		NI				SPT(C) 3.50m, N=23 (5,5/3,4,9,7)
						4.00	ES3						PID 4.00m, 0.0ppm
													SPT(C) 4.50m, N=23 (6,5/5,5,5,8)
From 5.00m to 5.02m bgl dark grey thin lamination of degraded coal. *From 5.05m to 5.50m bgl mottled dark grey and orange.* *From 5.05m bgl recovered as firm to stiff greyish brown mottled dark grey and orange slightly sandy gravelly clay. Sand is fine to coarse. Gravel is angular to subangular tabular fine to medium mudstone. (Possible seat earth)*						5.30	ES4						PID 5.30m, 0.0ppm SPT(C) 5.50m, N=50 (7,5/50 for 290mm)
Very weak thickly laminated (0 to 10 degrees) grey slightly carbonaceous MUDSTONE with closely spaced very thin beds of extremely weak fissile mudstone. Locally weathered to clay. Discontinuities: 1) 0 to 10 degrees along bedding, extremely to very closely spaced, planar to undulating, smooth with occasional light brown discolouration penetrating to 1mm. 2) 80 to 90 degrees (1 to 2no), planar, smooth. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		6.00	273.09					6.00 7.00		100	10	0	SPT(C) 6.00m, 50 (25 for 31mm/50 for 46mm)
Strong thickly laminated to very thinly bedded (0 to 15 degrees) light grey SILTSTONE with frequent laminations of fine grained sandstone and medium spaced very thin beds of extremely weak mudstone. Discontinuities: 1) 0 to 15 degrees along bedding, closely spaced, planar to undulating, smooth with occasional reddish brown surface staining. 2) 70 degrees, medium to widely spaced, planar, smooth with reddish brown surface staining. Weathering grade III. (SOUTH WALES LOWER COAL MEASURES) SWLCM		7.30	271.79			7.30 - 7.50	C1	7.00 7.50		100	50	50	
								7.50 9.00		100	40	17	
						8.50 - 8.60	C2						
								9.00 10.50		100	50	53	
						10.00 - 10.20	C3						

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
0.75	1.50	101	100
1.50	2.50	101	95
2.50	3.50	101	100
3.50	4.50	101	80
4.50	5.50	101	100
5.50	6.00	101	50

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
6.00	10.50		Grey	Water
10.50	12.00	0		Water
12.00	30.10	0		Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306129.30	Northing:	207051.47
Level:	279.09mAOD	Depth:	30.10m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH108**

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 14/04/2026

Method, Plant and Crew

From (m)	To (m)	Type	Plant Used	Crew
0.00	0.80	Inspection Pit	Hand Excavation Tools	Apex Drilling Services
0.80	6.00	Dynamic Windowless Sampling	Klemm	Apex Drilling Services
6.00	30.10	Rotary Core	Fraste	Apex Drilling Services

Diameter

Depth (m)	Diam (mm)
0.80	300
6.00	101
30.10	102

Casing

Depth(m)	Diam (mm)
6.00	165

Drilling Progress by Time

Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.80	-	
24/03	17:00	6.00	-	
09/04	17:00	16.50	6.00	
10/04	17:00	22.50	-	
13/04	17:00	30.10	-	
14/04	17:00	30.10	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong thickly laminated to very thinly bedded (0 to 15 degrees) light grey SILTSTONE with frequent laminations of fine grained sandstone and medium spaced very thin beds of extremely weak mudstone. Discontinuities: 1) 0 to 15 degrees along bedding, closely spaced, planar to undulating, smooth with occasional reddish brown surface staining. 2) 70 degrees, medium to widely spaced, planar, smooth with reddish brown surface staining. Weathering grade III. (SOUTH WALES LOWER COAL MEASURES) SWLCM								10.50 12.00		100	30	23	
Very weak very thinly bedded grey MUDSTONE. Non intact. Recovered as subangular fine to coarse gravel of mudstone. Weathering grade III. (SOUTH WALES LOWER COAL MEASURES) SWLCM		11.50	267.59										
No recovery.		12.00	267.09					12.00 13.50		53	7	7	
Very weak to weak thinly bedded (0 to 10 degrees) grey slightly carbonaceous MUDSTONE with closely spaced very thin beds of extremely weak fissile mudstone. Partially non intact. Discontinuities: 1) 0 to 10 degrees along bedding, very closely spaced, planar to undulating, smooth. 2) 80 to 90 degrees locally persisting to 150mm. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		12.60	266.49					13.50 14.25		100	7	0	
						14.70 - 14.80	C4	14.25 15.00		100	13	0	
From 15.00m to 15.40m bgl extremely weak. partially weathered to clay.						15.50 - 15.60	C5	15.00 16.50		100	37	30	
From 15.60m to 16.00m bgl extremely to very weak. Non intact.													
From 16.70m to 17.10m bgl very weak. Non intact.						17.00 - 17.20	C6	16.50 18.00		100	57	33	
From 17.00m to 17.80m bgl 1no 90 degrees undulating, rough discontinuity.		17.10	261.99										
Strong thickly laminated to very thinly cross bedded (0 to 10 degrees) fine to medium grained SANDSTONE. Discontinuities: 1) 0 to 10 degrees along bedding, closely spaced, planar to undulating, smooth and slightly carbonaceous with slight reduction in strength penetrating walls (1 to 2mm). 2) 1no 90 degrees, wavy to undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		18.00	261.09			18.10 - 18.30	C7	18.00 19.50		100	90	60	
Medium strong to strong thickly laminated to very thinly bedded (0 to 5 degrees) grey SILTSTONE with occasional thin and thick laminations of light grey fine sandstone. Discontinuities are 0 to 5 degrees, closely to medium spaced, planar to undulating, smooth. Weathering grade III to IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM													
From 18.40m to 18.60m bgl extremely to very weak mudstone.													
From 19.85m to 19.95m bgl extremely to very weak mudstone.													

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306129.30	Northing:	207051.47
Level:	279.09mAOD	Depth:	30.10m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH108**

Sheet 3 of 4

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	0.80	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.80	300
0.80	6.00	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.00	101
6.00	30.10	Rotary Core	Fraste	Apex Drilling Services	30.10	102

Casing	
Depth(m)	Diam (mm)
6.00	165

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.80	-	
24/03	17:00	6.00	-	
09/04	17:00	16.50	6.00	
10/04	17:00	22.50	-	
13/04	17:00	30.10	-	
14/04	17:00	30.10	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 14/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong to strong thickly laminated to very thinly bedded (0 to 5 degrees) grey SILTSTONE with occasional thin and thick laminations of light grey fine sandstone. Discontinuities are 0 to 5 degrees, closely to medium spaced, planar to undulating, smooth. Weathering grade III to IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM								19.50 21.00		100	93	90	
From 21.30m to 22.30m bgl 2no 70 to 80 degrees, planar to slightly curved, smooth discontinuity.						21.50 - 21.65	C8	21.00 22.50		100	77	43	
From 22.60m to 22.70m bgl extremely to very weak mudstone. *From 22.80m to 22.90m bgl extremely to very weak mudstone.*						23.50 - 23.70	C9	22.50 24.00		100	73	40	
From 25.10m to 25.80m bgl 80 to 90 degrees, stepped, planar, rough discontinuity.						26.00 - 26.15	C10	24.00 25.50		100	90	70	
								25.50 27.00		100	93	80	
								27.00 28.50		100	100	37	
Extremely to very weak grey MUDSTONE. Locally fissile and partially weathered to clay. Non intact. Weathering grade IV. (SOUTH WALES LOWER COAL MEASURES) SWLCM		29.10	249.99			28.90 - 29.05	C11	28.50 30.10		100	38	13	
Medium strong very thinly bedded (0 to 10 degrees) grey SILTSTONE. Discontinuities: 1) 0 to 10 degrees, closely spaced, planar, smooth. 2) 2 to 3no 80 to 90 degrees, very closely spaced, planar to stepped, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		29.40	249.69										

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306129.30	Northing:	207051.47
Level:	279.09mAOD	Depth:	30.10m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH108**

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	0.80	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.80	300
0.80	6.00	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.00	101
6.00	30.10	Rotary Core	Fraste	Apex Drilling Services	30.10	102

Casing	
Depth(m)	Diam (mm)
6.00	165

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
10/03	17:00	0.80	-	
24/03	17:00	6.00	-	
09/04	17:00	16.50	6.00	
10/04	17:00	22.50	-	
13/04	17:00	30.10	-	
14/04	17:00	30.10	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 10/03/2026
Finish Date: 14/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong very thinly bedded (0 to 10 degrees) grey SILTSTONE. Discontinuities: 1) 0 to 10 degrees, closely spaced, planar, smooth. 2) 2 to 3no 80 to 90 degrees, very closely spaced, planar to stepped, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM	× × × × ×	30.10	248.99										
EOH at 30.10m - Achieved target depth													

31 32 33 34 35 36 37 38 39 40

Observations / Remarks
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd. 2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal. 3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample 4. Location reinstated as instructed by WSP.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP3	60

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306153.40	Northing:	207012.86
Level:	279.66mAOD	Depth:	30.85m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH109**

Sheet 1 of 4

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 23/03/2026

Method, Plant and Crew					Diameter		Casing	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300	3.20	165
1.20	1.80	Rotary Core	Fraste	Apex Drilling Services	30.85	102		
1.80	2.20	Rotary Open Hole	Klemm	Apex Drilling Services				
2.20	30.85	Rotary Core	Fraste	Apex Drilling Services				

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
09/03	17:00	3.20	-	
16/03	17:00		-	
17/03	17:00	7.30	3.20	
18/03	17:00	15.70	-	
20/03	17:00	30.85	-	
23/03	17:00	30.85	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
MADE GROUND: Soft greyish brown slightly sandy gravelly CLAY with frequent rootlets. Gravel is subangular to subrounded fine to coarse siltstone. Sand is fine to coarse. MGR		0.20	279.46			0.30 - 0.50	ES1						PID 0.30m, 0.0ppm
No representative sample available for geotechnical sampling													
MADE GROUND: Grey sandy slightly clayey angular to subangular fine to coarse GRAVEL of mudstone and occasional sandstone with low cobble content. Sand is fine to coarse. Cobbles are angular to subangular of mudstone and sandstone. MGR		1.00	278.66										
Very weak to weak greyish brown MUDSTONE with very closely spaced (0-10 degrees), planar, smooth bedding discontinuities. Partially recovered as coarse subangular gravel. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM						1.40	ES2	1.20 1.80		100	0	0	SPT(C) 1.20m, 50 (9,8/50 for 215mm) PID 1.40m, 0.0ppm
Open holed		1.80	277.86					1.80 2.20		0	0	0	
Strong thinly bedded (0-10 degrees) grey SILTSTONE. Discontinuities: 1) 0-10 degrees along bedding closely to medium spaced (200/200/300), planar, smooth. 2) 70 degrees (2.3-2.5m) and (2.5-2.7m) planar, smooth with reddish brown surface staining and light orange discolouration penetrating walls to 10mm. (SOUTH WALES LOWER COAL MEASURES) SWLCM		2.20	277.46			2.35 - 2.50	C1	2.20 3.20		100	100	90	SPT(C) 2.20m, 50 (25 for 40mm/50 for 0mm)
						2.90 - 3.20	C2						
Medium strong thinly bedded (0-15 degrees) grey SILTSTONE. Discontinuities: 1) 0-15 degrees along bedding closely spaced, undulating, smooth with localised reddish brown surface staining. 2) 70 to 80 degrees, closely to medium spaced, planar, smooth with reddish brown to orange surface staining. 3) 90 degrees. Weathering Grade III (SOUTH WALES LOWER COAL MEASURES) SWLCM		3.20	276.46			3.75 - 4.00	C3	3.20 4.40		100	92	42	
From 4.40m to 5.80m bgl partially non intact with some core loss.								4.40 5.80		71	11	0	
						6.50 - 6.65	C4	5.80 7.30		100	67	33	
						7.50 - 7.60	C5	7.30 7.80		100	20	0	
						8.00 - 8.25	C6						
								7.80 9.40		100	56	13	
From 9.40m to 10.10m bgl partially non intact.								9.40 10.10		100	0	0	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
1.20	18.50	0		Water
18.50	20.00	0		Water
20.00	30.85	100	Grey	Water

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306153.40	Northing:	207012.86
Level:	279.66mAOD	Depth:	30.85m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH109**

Sheet 2 of 4

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300	3.20	165	09/03	17:00	3.20	-	
1.20	1.80	Rotary Core	Fraste	Apex Drilling Services	30.85	102			16/03	17:00		-	
1.80	2.20	Rotary Open Hole	Klemm	Apex Drilling Services					17/03	17:00	7.30	3.20	
2.20	30.85	Rotary Core	Fraste	Apex Drilling Services					18/03	17:00	15.70	-	
									20/03	17:00	30.85	-	
									23/03	17:00	30.85	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 23/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong thinly bedded (0-15 degrees) grey SILTSTONE. Discontinuities: 1) 0-15 degrees along bedding closely spaced, undulating, smooth with localised reddish brown surface staining. 2) 70 to 80 degrees, closely to medium spaced, planar, smooth with reddish brown to orange surface staining. 3) 90 degrees. Weathering Grade III (SOUTH WALES LOWER COAL MEASURES) SWLCM						10.65 - 10.80	C7	10.10 10.80		100	57	29	
								10.80 12.00		100	75	17	
From 12.00m to 13.40m bgl undulating and irregular curved.						11.90 - 12.00	C8						
								12.00 13.40		100	90	39	
From 12.90m to 13.20m bgl moderately weak.													
								13.40 14.40		100	40	20	
						15.00 - 15.10	C9	14.40 15.70		100	100	62	
From 15.40m to 15.70m bgl strong calcareous siltstone/limestone. *From 15.50m to 16.30m bgl partially non intact.*						15.40 - 15.70	C10						
From 15.70m to 16.50m bgl 1no 70 degrees, planar, smooth discontinuity with reduction in strength penetrating walls to 5mm.								15.70 17.00		100	12	0	
						17.30 - 17.40	C11						
								17.00 18.50		93	7	7	
Weak to moderately weak thinly bedded (0 to 15 degrees) dark grey locally fossiliferous carbonaceous MUDSTONE with closely spaced very thin beds of extremely weak fissile mudstone. Partially non intact with some core loss. Discontinuities: 1) 0 to 15 degrees, very closely to closely spaced, undulating, smooth and rough with reddish brown surface staining. 2) 70 to 80 degrees. Weathering Grade III to IV (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 18.50m to 21.00m bgl non intact.*		18.50	261.16					18.50 20.00		80	7	7	
						19.90 - 20.00	C12						

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306153.40	Northing:	207012.86
Level:	279.66mAOD	Depth:	30.85m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH109**

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 23/03/2026

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300	3.20	165	09/03	17:00	3.20	-	
1.20	1.80	Rotary Core	Fraste	Apex Drilling Services	30.85	102			16/03	17:00		-	
1.80	2.20	Rotary Open Hole	Klemm	Apex Drilling Services					17/03	17:00	7.30	3.20	
2.20	30.85	Rotary Core	Fraste	Apex Drilling Services					18/03	17:00	15.70	-	
									20/03	17:00	30.85	-	
									23/03	17:00	30.85	-	

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Weak to moderately weak thinly bedded (0 to 15 degrees) dark grey locally fossiliferous carbonaceous MUDSTONE with closely spaced very thin beds of extremely weak fissile mudstone. Partially non intact with some core loss. Discontinuities: 1) 0 to 15 degrees, very closely to closely spaced, undulating, smooth and rough with reddish brown surface staining. 2) 70 to 80 degrees. Weathering Grade III to IV (SOUTH WALES LOWER COAL MEASURES) SWLCM						21.00 21.00 - 21.10	C13 C12	20.00 21.50		80	23	10	
Medium strong to strong thinly bedded (0 to 15 degrees) grey slightly carbonaceous SILTSTONE locally interbedded with fine sandstone. Discontinuities are 0 to 10 degrees, closely to medium spaced, planar to undulating, smooth and polished. (SOUTH WALES LOWER COAL MEASURES) SWLCM		21.75	257.91					21.50 22.90		79	79	79	
								22.90 24.50		100	100	56	
						24.00 - 24.15	C14						
From 24.50m to 25.20m bgl 3 to 4no 60 to 70 degrees, closely spaced, undulating to irregular, rough discontinuity.								24.50 26.10		97	81	50	
From 25.20m to 25.90m bgl discontinuities are 90 degrees, irregular, rough with a reduction in strength penetrating walls to 3mm and calcite infill 5mm.													
								26.10 27.70		100	100	100	
						27.30 - 27.50	C15						
From 27.70m to 28.00m bgl discontinuities are 70 degrees, undulating, smooth with 5 to 10mm of calcite infill.													
						28.40 - 28.70	C16	27.70 29.20		100	100	100	
From 29.70m to 30.30m bgl discontinuities are 70 degrees, undulating, smooth with 5 to 10mm of calcite infill.													

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306153.40	Northing:	207012.86
Level:	279.66mAOD	Depth:	30.85m
Logger:	DD	Type:	RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH109**

Sheet 4 of 4

Method, Plant and Crew					Diameter		Casing	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)
0.00	1.20	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	1.20	300	3.20	165
1.20	1.80	Rotary Core	Fraste	Apex Drilling Services	30.85	102		
1.80	2.20	Rotary Open Hole	Klemm	Apex Drilling Services				
2.20	30.85	Rotary Core	Fraste	Apex Drilling Services				

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
09/03	17:00	3.20	-	
16/03	17:00		-	
17/03	17:00	7.30	3.20	
18/03	17:00	15.70	-	
20/03	17:00	30.85	-	
23/03	17:00	30.85	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 09/03/2026
Finish Date: 23/03/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring							
						Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong to strong thinly bedded (0 to 15 degrees) grey slightly carbonaceous SILTSTONE locally interbedded with fine sandstone. Discontinuities are 0 to 10 degrees, closely to medium spaced, planar to undulating, smooth and polished. (SOUTH WALES LOWER COAL MEASURES) SWLCM								29.20 30.85		100	100	100	
EOH at 30.85m - Achieved target depth		30.85	248.81										

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306109.60	Northing:	206996.07
Level:	279.32mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH110**

Sheet 1 of 6

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	0.65	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.65	300
0.65	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.20	101
6.20	30.50	Rotary Core	Fraste	Apex Drilling Services	30.50	102

Casing	
Depth(m)	Diam (mm)
6.20	165

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
11/03	17:00	0.65	-	
24/03	17:00	6.20	-	
20/04	17:00	19.50	6.20	
21/04	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 11/03/2026
Finish Date: 21/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Brown slightly gravelly slightly sandy SILT with occasional rootlets. (TOPSOIL) MGR		0.15	279.17			0.20 - 0.45 0.30	B1 ES1						PID 0.30m, 0.0ppm
Dark grey sandy silty clayey angular fine to coarse GRAVEL of mudstone with medium cobble content. Sand is fine to coarse. Cobbles are angular mudstone. (POSSIBLE SOUTH WALES LOWER COAL MEASURES) SWLCM						0.45 - 0.65 0.60	B2 ES2						PID 0.60m, 0.0ppm
Extremely to very weak thickly laminated (0 to 10 degrees) light grey MUDSTONE with extremely to very closely spaced, planar to undulating, smooth and rough bedding with localised light orangish brown discolouration. (SOUTH WALES LOWER COAL MEASURES) SWLCM		1.50	277.82			1.50 - 4.40 1.60	B3 D1						SPT(C) 1.50m, 50 (6,6/50 for 220mm)
													SPT(C) 2.50m, 50 (25 for 30mm/50 for 60mm)
						3.00 3.00	ES ES3						PID 3.00m, 0.0ppm
From 3.50m to 4.40m bgl weak mudstone with very closely spaced bedding.													SPT(C) 3.50m, N=50 (7,9/50 for 235mm)
						4.00	ES4						PID 4.00m, 0.0ppm
From 4.40m to 4.80m bgl weathered to clay.						4.40 - 4.80 4.60	B4 D2						SPT(C) 4.50m, 50 (25 for 75mm/50 for 85mm)
From 4.80m to 5.30m bgl dark grey.						4.80 - 6.00	B5						
No recovery from 6.00m to 6.20m bgl													SPT(C) 6.00m, 50 (25 for 70mm/50 for 65mm)
Strong very thinly bedded to thickly laminated (0 to 10 degrees) grey SILTSTONE with occasional thin laminations of sandstone. Discontinuities are 0 to 10 degrees along bedding, closely to medium spaced, planar, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 6.20m to 6.80m bgl 2no 80 to 90 degrees, planar to undulating, smooth and rough discontinuity with orange surface staining.* *From 6.55m to 6.60m bgl very weak to weak mudstone.* *From 6.60m to 6.70m bgl very strong ironstone.* *From 6.70m to 7.00m bgl thinly interbedded with very weak to weak mudstone.*		6.20	273.12					6.20 6.70		100	60	0	
						7.00 - 7.25	C1						
								6.70 8.30		94	84	63	
From 8.40m to 8.50m bgl extremely to very weak fissile mudstone.													
Medium strong very thinly bedded grey SILTSTONE with occasional very thin beds of very weak locally fissile mudstone. Discontinuities are 0 to 10 degrees along bedding, closely spaced, planar to undulating, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 8.75m to 9.55m bgl discontinuities are 1 to 2no 80 to 90 degrees, undulating to stepped, rough and smooth with light orangish brow discolouration penetrated to 10mm and a venear of speckled calcite.*		8.75	270.57					8.30 9.70		100	46	29	
						9.20 - 9.30	C2						

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2. Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs

From (m)	To (m)	Diameter (mm)	Recovery %
1.50	2.50	101	100
2.50	3.50	101	100
3.50	4.50	101	100
4.50	6.00	101	100
6.00	6.20	101	0

Drilling Fluid

From (m)	To (m)	Return Min %	Colour	Type
6.20	6.70	100	Grey	Water
6.70	8.30	0		Water
8.30	9.70	0		Water

Groundwater

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information

Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306109.60	Northing:	206996.07
Level:	279.32mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH110**

Sheet 2 of 6

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	0.65	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.65	300
0.65	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.20	101
6.20	30.50	Rotary Core	Fraste	Apex Drilling Services	30.50	102

Casing	
Depth(m)	Diam (mm)
6.20	165

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
11/03	17:00	0.65	-	
24/03	17:00	6.20	-	
20/04	17:00	19.50	6.20	
21/04	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 11/03/2026
Finish Date: 21/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong very thinly bedded grey SILTSTONE with occasional very thin beds of very weak locally fissile mudstone. Discontinuities are 0 to 10 degrees along bedding, closely spaced, planar to undulating, smooth. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 10.20m to 10.80m bgl discontinuities are 1 to 2no 80 to 90 degrees, undulating to stepped, rough and smooth with light orangish brow discolouration penetrated to 10mm and a venear of speckled calcite.* *From 10.70m to 11.00m bgl limited recovery with 45 degrees, closely spaced discontinuity.* *From 11.20m to 11.80m bgl non intact with locally discernible 45 to 90 degrees discontinuity.*						11.10 - 11.20	C3	9.70 11.20		83	50	27	
Moderately weak very thinly bedded (0 to 10 degrees) grey to dark grey slightly carbonaceous MUDSTONE with closely spaced very thin beds of extremely to very weak fissile mudstone. Partially non intact. Discontinuities: 1) 0 to 10 degrees along bedding, very closely to closely spaced, planar, smooth. 2) Locally discernible 45 to 90 degrees. Weathering grade III. (SOUTH WALES LOWER COAL MEASURES) SWLCM		11.80	267.52			13.70 - 13.90	C4	11.20 12.70 12.70 14.20		100 100	27 33	0 20	
Moderately weak thinly bedded (0 to 10 degrees) dark grey vitreous COAL. (SOUTH WALES LOWER COAL MEASURES) SWLCM		13.90	265.42										
Extremely weak thinly laminated (0 to 10 degrees) greyish brown fissile MUDSTONE. Partially weathered to clay. Weathering grade IV to V. (SOUTH WALES LOWER COAL MEASURES) SWLCM		14.50 14.70	264.82 264.62										
Medium strong thinly bedded (0 to 10 degrees) grey slightly carbonaceous fossiliferous SILTSTONE with closely spaced very thin beds of extremely weak fissile mudstone. Discontinuities are 0 to 10 degrees along bedding, closely spaced, planar to undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM *From 15.50m to 16.10m bgl 1no 90 degrees, irregular, rough discontinuity persisting to 300mm. Partially non intact.* *From 16.10m to 16.30m bgl 1no 70 degrees, undulating to stepped, rough discontinuity.* *From 17.45m to 17.55m bgl non intact. Extremely to very weak mudstone.* *From 17.90m to 18.05m bgl non intact. Extremely to very weak mudstone.* *From 18.20m to 18.35m bgl extremely to very weak fissile mudstone.* *From 18.80m to 19.30m bgl 1no 80 degrees, planar, smooth discontinuity. Partially non intact.*						15.20 - 15.50 18.10 - 18.20	C5 C6	14.20 15.70 15.70 17.20 17.20 18.80 18.80 20.20		100 100 94 93	73 70 62 64	40 33 44 57	

Observations / Remarks
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd. 2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal. 3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample 4. Location reinstated as instructed by WSP.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type
9.70	11.20	0		Water
12.70	14.20	0		Water
14.20	15.70	0		Water

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306109.60	Northing:	206996.07
Level:	279.32mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH110**

Method, Plant and Crew					Diameter	
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)
0.00	0.65	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.65	300
0.65	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.20	101
6.20	30.50	Rotary Core	Fraste	Apex Drilling Services	30.50	102

Casing	
Depth(m)	Diam (mm)
6.20	165

Drilling Progress by Time				
Date	Time	Depth (m)	Casing (m)	Water (m)
11/03	17:00	0.65	-	
24/03	17:00	6.20	-	
20/04	17:00	19.50	6.20	
21/04	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 11/03/2026
Finish Date: 21/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Medium strong thinly bedded (0 to 10 degrees) grey slightly carbonaceous fossiliferous SILTSTONE with closely spaced very thin beds of extremely weak fissile mudstone. Discontinuities are 0 to 10 degrees along bedding, closely spaced, planar to undulating, rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM													
From 20.95m to 21.15m bgl non intact with 1 to 2no 80 degrees discontinuity.								20.20 21.80		94	59	38	
								21.80 23.30		100	73	40	
From 22.85m to 23.00m bgl extremely to very weak fissile mudstone.						22.60 - 22.85	C7						
Strong thickly laminated to very bedded (0 to 15 degrees) grey to light grey SILTSTONE with frequent very thin to thin beds of fine sandstone and occasional subrounded inclusions (to 40m) of ironstone. Discontinuities are 0 to 15 degrees along bedding, closely to medium spaced, planar to undulating, smooth and rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		23.30	256.02					23.30 24.80		100	67	30	
From 23.80m to 24.50m bgl medium strong with 1no 80 to 90 degrees and 1 to 2no 70 degrees, planar to stepped, rough discontinuity. Partially non intact.						25.50 - 25.75	C8	24.80 26.30		100	90	43	
								26.30 27.50		100	92	42	
						28.10 - 28.35	C9	27.50 29.00		90	73	43	
						29.00 - 29.30	C10						
								29.00 30.50		100	90	53	

Observations / Remarks

1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample
4. Location reinstated as instructed by WSP.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type
15.70	17.20	0		Water
17.20	18.80	0		Water
18.80	19.50	0		Water

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306109.60	Northing:	206996.07
Level:	279.32mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH110**

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	0.65	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.65	300	6.20	165	11/03	17:00	0.65	-	
0.65	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.20	101			24/03	17:00	6.20	-	
6.20	30.50	Rotary Core	Fraste	Apex Drilling Services	30.50	102			20/04	17:00	19.50	6.20	
									21/04	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 11/03/2026
Finish Date: 21/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring: Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results
Strong thickly laminated to very bedded (0 to 15 degrees) grey to light grey SILTSTONE with frequent very thin to thin beds of fine sandstone and occasional subrounded inclusions (to 40m) of ironstone. Discontinuities are 0 to 15 degrees along bedding, closely to medium spaced, planar to undulating, smooth and rough. (SOUTH WALES LOWER COAL MEASURES) SWLCM		30.50	248.82										
EOH at 30.50m - Terminated due to refusal													

31
32
33
34
35
36
37
38
39
40

Observations / Remarks	Sampling Runs				Drilling Fluid					Hammer Information	
	From (m)	To (m)	Diameter (mm)	Recovery %	From (m)	To (m)	Return Min %	Colour	Type	Serial No.	Energy Ratio %
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd.					19.50	20.20	0		Water	AP4	81
2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal.					20.20	21.80	0		Water		
3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample					21.80	23.30	0		Water		
4. Location reinstated as instructed by WSP.											

Groundwater						
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks	

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306109.60	Northing:	206996.07
Level:	279.32mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH110**

Sheet 5 of 6

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	0.65	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.65	300	6.20	165	11/03	17:00	0.65	-	
0.65	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.20	101			24/03	17:00	6.20	-	
6.20	30.50	Rotary Core	Fraste	Apex Drilling Services	30.50	102			20/04	17:00	19.50	6.20	
									21/04	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 11/03/2026
Finish Date: 21/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring							
						Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results

41
42
43
44
45
46
47
48
49
50

Observations / Remarks
1. Location cleared with GPR and CAT 4+ by Safe Dig Ltd. 2, Position re-scanned every 300mm by TT engineer to 1.20m bgl or refusal. 3. ES= Environmental Sample, C= Core Sample, B=Bulk Disturbed Sample, D= Small Disturbed Sample 4. Location reinstated as instructed by WSP.

Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type
23.30	24.80	0		Water
24.80	26.30	0		Water
26.30	27.50	0		Water

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**

TETRA TECH

Project: **Goat Mill Road**

Location: **Merthyr Tydfil**

Client: **Merthyr Tydfil County Borough Council**

Location Details			
Easting:	306109.60	Northing:	206996.07
Level:	279.32mAOD	Depth:	30.50m
Logger:	DD	Type:	DS+RC
		Inclination:	90°

Status: FINAL

Borehole Number: **BH110**

Sheet 6 of 6

Method, Plant and Crew					Diameter		Casing		Drilling Progress by Time				
From (m)	To (m)	Type	Plant Used	Crew	Depth (m)	Diam (mm)	Depth(m)	Diam (mm)	Date	Time	Depth (m)	Casing (m)	Water (m)
0.00	0.65	Inspection Pit	Hand Excavation Tools	Apex Drilling Services	0.65	300	6.20	165	11/03	17:00	0.65	-	
0.65	6.20	Dynamic Windowless Sampling	Klemm	Apex Drilling Services	6.20	101			24/03	17:00	6.20	-	
6.20	30.50	Rotary Core	Fraste	Apex Drilling Services	30.50	102			20/04	17:00	19.50	6.20	
									21/04	17:00	30.50	-	

Scale: 1:50
Checked By: JC + DD
Approved By: NB
Start Date: 11/03/2026
Finish Date: 21/04/2026

Strata Description	Legend	Depth (m)	Reduced Level (mAOD)	Water Level (m)	Inst / Backfill	Samples, Tests and Rotary Coring							
						Depth (m)	Ref	Core Run	FI	TCR	SCR	RQD	Tests / Results

51
52
53
54
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56
57
58
59
60

Observations / Remarks
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Sampling Runs			
From (m)	To (m)	Diameter (mm)	Recovery %

Drilling Fluid				
From (m)	To (m)	Return Min %	Colour	Type
27.50	29.00	0		Water
29.00	30.50	0		Water

Groundwater					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Hammer Information	
Serial No.	Energy Ratio %
AP4	81

Project Number: **784-B077402**