

APPENDIX F

CABLE PERCUSSION BOREHOLE LOGS

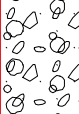
Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP101		
Dates : 4/7/22 - 6/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 149.86 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305952.61 E 203879.04 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata			Water	Install/ Backfill
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend		
0	0.05 - 0.20 0.20 0.20 - 0.65 0.50	B1 ES1 B2 ES2			(0.20) 0.20	Grass over black sandy SILT with rootlets. (TOPSOIL) at 0.2mbgl PID = 0ppm		(0.20) 149.66	
1	0.90 - 1.20 1.00 1.20 - 1.65	B3 ES3 B4	1.20	SPT (C) 36 (8-10-9-8-8-11)		Loose black gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of coal, clinker and slag. (MADE GROUND) at 0.5mbgl PID = 0ppm at 1.0mbgl PID = 0ppm			
2					(3.70)			(3.70)	
	2.50 2.70 - 3.15	ES4 B5	2.70	SPT (C) 16 (3-4-4-3-5-4)		at 2.5mbgl PID = 0ppm			
4	3.90 3.95 - 4.15 4.00 4.20 - 4.65	D1 B6 ES5 SPT1 B7	4.20	SPT (S) 33 (2-2-5-7-10-11)	3.90 (0.60) 4.50	Soft greyish brown sandy gravelly CLAY with a low cobble content of subrounded sandstone. Gravel is subangular to subrounded fine to coarse of sandstone. (ALLUVIUM) at 4.0mbgl PID = 0ppm		145.96 (0.60) 145.36	
5						Dense to medium dense brown sandy subangular to subrounded fine to coarse GRAVEL of sandstone with a medium cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS) at 5.5mbgl PID = 0ppm			
6	5.50 5.53 5.55 5.70 - 6.15	ES6 EW1 EW B8	5.70	SPT (C) 24 (5-5-6-6-6-7)					
7	7.20 - 7.65	B B9	7.20	SPT (C) 39 (4-6-10-11-9-9)					
8					(7.20)			(7.20)	
9	8.70 - 9.15	B10	8.70	SPT (C) 21 (3-5-5-4-6-6)					

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
04/07/2022 08:00	0.00					7.80	6.10	Moderate groundwater inflow.		4.70	4.90	0:30
04/07/2022 17:00	1.20									7.40	7.60	0:30
05/07/2022 08:00	1.20											

Equipment / plant used: Dando 2000 Remarks: 1.) PAS survey undertaken prior to breaking ground, 2.) Hand pit dug to 1.20m, 3.) Borehole terminated at 13.80mbgl due to refusal in dense gravels.												
 Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk					Operator: NF & MW		Logged By: T. Goodrick		Sheet No. 1 Of 2		m Per Page 10	
									All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP101		
Dates : 4/7/22 - 6/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 149.86 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305952.61 E 203879.04 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water	Install/ Backfill
	Depth	Type No. Blows	Depth	Test Results	Depth (Thick- ness)	Description	Legend	Red. Level A.O.D.		
10	10.20 - 10.65	B B11	10.20	SPT (C) 22 (4-4-5-5-5-7)						
11										
12			11.70	SPT (C) 16 (2-3-1-3-2-10)	11.70	Dense to very dense brown sandy subangular to subrounded fine to coarse GRAVEL of sandstone with a medium cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS)		138.16		
13					(2.10)			(2.10)		
14			13.20	SPT (C) 50/275mm (16-9/40mm-7-17-16-10/50mm)						
			13.80	SPT (C) 50/115mm (15-10/20mm-34-16/40mm-)	13.80	Terminatedt at 13.8mbgl upon refusal		136.06		
15										
16										
17										
18										
19										

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
05/07/2022 17:00	10.70	10.70	7.10	13.60	200.00					13.60	13.80	1:00
06/07/2022 08:00	10.70	10.70	5.60									
06/07/2022 17:00	13.80	13.80	6.60									

Equipment / plant used: Dando 2000 Remarks: 1.) PAS survey undertaken prior to breaking ground, 2.) Hand pit dug to 1.20m, 3.) Borehole terminated at 13.80mbgl due to refusal in dense gravels.																	
 Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk						Operator: NF& MW		Logged By: T.Goodrick		Sheet No. 2 Of 2		m Per Page 10		All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP102		
Dates : 6/7/22 - 8/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 149.78 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305837.71 E 203910.53 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata			Red. Level A.O.D.	Water	Install/ Backfill
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend			
0	0.05 - 0.15 0.20 0.20 - 0.35 0.40 - 0.85 0.50	B1 ES1 B2 B3 ES2			(0.15) 0.15 (0.25) 0.40	Grass over loose black sandy SILT with rootlets. (TOPSOIL)		(0.15) 149.63 (0.25) 149.38		
1	1.00 1.20 - 1.65	ES3 B4	1.20	SPT (C) 18 (3-5-3-5-5-5)	(1.10) 1.50	Medium dense black gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of brick, slag and clinker. (MADE GROUND) at 0.2mbgl PID = 0ppm Medium dense reddish grey to black gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of brick, slag and clinker. (MADE GROUND) at 0.5mbgl PID = 0ppm at 1.0mbgl PID = 0ppm		(1.10) 148.28		
2	2.50 2.70 - 3.15	ES4 B5	2.70	SPT (C) 24 (7-5-7-6-6-5)		Dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies with a medium cobble content of subangular sandstone. (RIVER TERRACE DEPOSITS) at 2.5mbgl PID = 0ppm				
3	3.60 - 4.05	B6								
4	4.00 4.20 - 4.65	ES5 B7	4.20	SPT (C) 18 (5-4-5-5-4-4)	(6.40)	at 4.0mbgl PID = 0ppm		(6.40)		
5	5.44 5.46 5.50 5.70 - 6.15	EW1 EW ES6 B8	5.70	SPT (C) 41 (13-11-7-8-11-15)		at 5.5mbgl PID = 0ppm				
6										
7	7.20 - 7.65	B9	7.20	SPT (C) 50/210mm (9-14-15-18-17/60mm-)						
8					7.90	Terminated at 7.9mbgl		141.88		
9										

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
06/07/2022 08:00	0.00					6.60	5.30	Moderate groundwater inflow.		4.70	5.00	1:00
06/07/2022 17:00	3.20	3.20	2.50							5.50	5.70	0:30
07/07/2022 08:00	3.20	3.20								6.10	6.30	0:30
07/07/2022 17:00	7.90	7.90	5.40							6.90	7.30	1:00
08/07/2022 08:00	7.90	7.90	5.40							7.70	7.90	0:30
08/07/2022 09:00	7.90	7.90	5.40							7.90	7.90	1:00

Equipment / plant used: Dando 2000
Remarks: 1.) PAS survey undertaken prior to breaking ground,
2.) Hand pit dug to 1.20m,
3.) Borehole terminated at 7.90mbgl due to refusal in dense gravels.

 Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
	NF & MW	T.Goodrick	1 Of 1	10		

Form Name: SA/SPT. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP103		
Dates : 8/7/22 - 8/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 150.86 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305853.80 E 204060.19 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water	Install/ Backfill
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0	0.20 - 0.65	B1			(0.20)	Tarmac over concrete.		(0.20)		
	0.20	ES1			0.20	at 0.2mbgl PID = 0ppm		150.66		
	0.50	ES				Loose black to reddish grey gravelly fine to coarse				
	0.70 - 1.15	ES2				SAND. Gravel is angular to subangular fine to				
		B				coarse of brick, clinker and slag.(MADE GROUND)				
1	1.00	B2				at 0.5mbgl PID = 0ppm				
	1.20 - 1.65	ES3	1.20	SPT (C) 13 (3-4-3-3-3-4)		at 1.0mbgl PID = 0ppm				
		B3								
2										
	2.50	ES4				at 2.5mbgl PID = 0ppm				
	2.70 - 3.15	B4	2.70	SPT (C) 22 (5-5-5-6-6-5)	(5.20)			(5.20)		
3										
	4.00	ES				at 4.0mbgl PID = 0ppm				
	4.20 - 4.65	ES5	4.20	SPT (C) 22 (5-4-4-5-6-7)						
		B5								
5										
	5.40 - 0.00	D			5.40	Soft greyish brown sandy SILT. (ALLUVIUM)		145.46		
	5.40	D1			(0.50)	at 5.5mbgl PID = 0ppm		(0.50)		
	5.50	ES								
	5.70 - 6.15	ES6	5.70	SPT (C) 50/285mm (1-1-0-12-17-21/60mm)	5.90	Dense to very dense brown sandy subangular to		144.96		
6		SPT1			(0.30)	subrounded fine to coarse GRAVEL of mixed		(0.30)		
		B6			6.20	lithologies with a medium cobble content of		144.66		
						subrounded sandstone. (RIVER TERRACE				
						DEPOSITS)				
						Terminated at 6.2mbgl				
7										
8										
9										

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
08/07/2022 08:00	0.00			6.20	200.00					6.00	6.20	1:00
08/07/2022 17:00	6.20	6.20	5.30									

Equipment / plant used: Dando 2000 Remarks: 1.) PAS survey undertaken prior to breaking ground, 2.) Hand pit dug to 1.20m, 3.) Borehole terminated at 6.20mbgl due to refusal in dense gravels. 4.) No Groundwater Encountered										Operator: NF & MW	Logged By: T.Goodrick	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP104		
Dates : 11/7/22 - 12/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.33 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305687.25 E 204049.09 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.20 - 0.50	B1			(0.20)	Concrete.		(0.20)	
	0.30	ES1			0.20	at 0.2mbgl PID = 0ppm		151.13	
	0.50 - 0.70	B2				Loose grey to black and red gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of slag, clinker and mudstone. (MADE GROUND)			
	0.50	ES2				at 0.5mbgl PID = 0ppm			
	0.70 - 1.20	B3				at 1.0mbgl PID = 0ppm			
1	1.00	ES3							
	1.20 - 1.65	B4	1.20	SPT (C) 1 (1-0-1-0-0-0)	(2.60)			(2.60)	
2									
	2.50	ES4				at 2.5mbgl PID = 0ppm			
	2.70 - 3.15	B5	2.70	SPT (C) 1 (1-1-0-0-1-0)					
3					2.80	Soft brown sandy SILT. (ALLUVIUM)		148.53	
					(0.80)			(0.80)	
4	4.00	ES5			3.60	Very dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies, with a medium cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS)		147.73	
	4.20 - 4.60	B6	4.20	SPT (C) 29 (3-4-8-6-8-7)	(1.50)	at 4.0mbgl PID = 0ppm		(1.50)	
5			5.10	SPT (C) 70/160mm (18-7-20-41-9/10mm-)	5.10	Terminated at 5.1mbgl upon refusal		146.23	
6									
7									
8									
9									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
11/07/2022 08:00	0.00			5.10	200.00					4.90	5.10	2:00
11/07/2022 17:00	5.10	5.10	4.80									

Equipment / plant used: Dando 2000 Remarks: 1.) PAS survey undertaken prior to breaking ground, 2.) Hand pit dug to 1.20m, 3.) Borehole terminated at 5.10mbgl due to refusal in dense gravels. 4.) No Groundwater Encountered															
 Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk				Operator: NF & IT		Logged By: T.Goodrick		Sheet No. 1 Of 1		m Per Page 10		All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP105		
Dates : 8/7/22 - 8/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.27 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305650.55 E 204121.69 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.30 - 0.50	B1			(0.30)	Concrete.		(0.30)	
	0.50	ES1			0.30	Loose black gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of brick, slag and mudstone. (MADE GROUND) at 0.5mbgl PID = 0.5mbgl Loose to medium dense reddish brown sandy angular to subangular GRAVEL of mudstone. (MADE GROUND - COLLIERY SPOIL) at 1.0mbgl PID = 1.0mbgl		150.97	
	0.50 - 0.70	B2			(0.20)			(0.20)	150.77
1	1.00	ES2			0.50				
	1.00 - 1.20	B3			(1.50)			(1.50)	
	1.50	SPT1	1.50	SPT (S) 13 (2-2-4-3-3-3)					
2					2.00	Terminated at 2.0mbgl upon refusal on obstruction, possibly large rubber tyre.		149.27	
3									
4									
5									
6									
7									
8									
9									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
08/07/2022 08:00	0.00			1.50	200.00							
08/07/2022 17:00	2.00	1.50										

Equipment / plant used: Pilcon 1500 Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m, 2.) Borehole terminated due to obstruction at 2.00m, 3.) Borehole moved to CP105A. 4.) No Groundwater Encountered															
 Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk				Operator: JW & AB		Logged By: T.Goodrick		Sheet No. 1 Of 1		m Per Page 10		All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP105A		
Dates : 8/7/22 - 11/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.25 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305653.44 E 204118.32 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water	
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0					(0.20)	Concrete.		(0.20)		
1					0.20	Loose black to grey gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of mudstone and slag. (MADE GROUND)		151.05		
2					(2.30)				(2.30)	
3					2.50			Concrete.	148.75	
					(0.10)	Void.		(0.10)		
					2.60	Concrete.		148.65		
					(0.20)	Terminated at 3.0mbgl upon refusal on concrete		(0.20)		
					2.80			148.45		
					(0.20)			(0.20)		
					3.00			148.25		

SPT (C) 50/20mm (25/40mm-50/20mm-)

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
11/07/2022 08:00	0.00			2.50	200.00					3.00	3.00	1:00
11/07/2022 17:00	3.00	2.50										

Equipment / plant used: Pilcon 1500

Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
 2.) Borehole terminated at 3.00m due to obstruction at 3.00m,
 3.) Borehole moved to CP105B,
 4.) No groundwater encountered.

 Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: JW & AB	Logged By: T.Goodrick	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
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Form Name: SA/SPT. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP105B		
Dates : 11/7/22 - 11/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.29 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305647.99 E 204120.46 N <i>Co-ordinates to National Grid</i>				

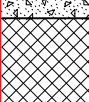
m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0					(0.20)	Concrete.		(0.20)	
1					0.20	Medium dense black to grey gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of mudstone and slag. (MADE GROUND)		151.09	
2					(2.80)			(2.80)	
3	3.50 - 4.00	B B1	3.00	SPT (C) 50/190mm (8-12-15-15-20/40mm-)	3.00	Very dense brown to reddish brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies with a medium cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS)		148.29	
4	4.00	ES1	4.00 4.05	SPT (C) 50/20mm (25/30mm-50/20mm-) SPT (C) 50/20mm (25/20mm-50/20mm-)	(1.05) 4.05	Terminated at 4.05mbgl upon refusal		(1.05) 147.24	
5									
6									
7									
8									
9									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
11/07/2022 08:00	0.00									3.50	4.00	1:00
11/07/2022 17:00	4.00	3.00								4.00	4.00	1:00

Equipment / plant used: Pilcon 1500
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
 2.) Borehole terminated at 4.00m upon refusal in dense gravel,
 3.) No groundwater encountered

 Quantum Geotech Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: JW & AB	Logged By: T.Goodrick	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	 AGS
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP106		
Dates : 6/7/22 - 6/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.61 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305619.29 E 204212.64 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.30 - 0.50 0.30 0.50 0.70 - 1.00	B1 ES1 ES2 B2			(0.20) 0.20 (0.70)	Reinforced concrete. Medium dense reddish brown sandy angular to subangular fine to coarse GRAVEL of brick and clinker. (MADE GROUND)		(0.20) 151.41 (0.70)	
1					0.90	Concrete pipe. Hole terminated and moved to CP106A.		150.71	
2									
3									
4									
5									
6									
7									
8									
9									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours

Equipment / plant used: Pilcon 1500 Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 0.90m, 2.) Borehole terminated upon encountering concrete pipe at 0.90m, 3.) Borehole moved to CP106A, 4.) No groundwater encountered.															
 Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk				Operator: JW & AB		Logged By: T.Goodrick		Sheet No. 1 Of 1		m Per Page 10		All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. CP106A		
Dates : 6/7/22 - 7/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.55 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305617.91 E 204214.44 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water	Install/ Backfill
	Depth	Type No. Blows	Depth	Test Results	Depth (Thick- ness)	Description	Legend	Red. Level A.O.D.		
0					(0.20)	Reinforced concrete.		(0.20)		
1	0.80 - 1.00 0.80	B1 ES1			0.20	Medium dense reddish brown sandy angular to subangular fine to coarse GRAVEL of brick and clinker. (MADE GROUND) at 0.8mbgl PID = 0ppm		151.35		
2			1.50	SPT (S) 7 (2-1-2-2-1-2)	(2.30)			(2.30)		
3	2.50 - 3.00 2.50	B2 ES2			2.50	at 2.5mbgl PID = 0ppm Dense to very dense brown SAND and GRAVEL. Gravel is fine to coarse sub-rounded to sub-angular sandstone and siltstone.		149.05		
4	3.50 - 3.70	B3	3.30 3.50 3.80	SPT (C) 50/40mm (25/70mm-50/40mm-) SPT (C) 50/40mm (25/20mm-50/40mm-) SPT (C) 50/40mm (25/20mm-50/40mm-)	(1.30)			(1.30)		
4					3.80	Terminated upon refusal at 3.8mbgl		147.75		
5										
6										
7										
8										
9										

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
06/07/2022 08:00	0.00			3.00	200.00					3.30	3.50	1:00
06/07/2022 17:00	3.80	3.00								3.50	3.80	2:00

Equipment / plant used: Pilcon 1500 Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m, 2.) Borehole terminated at 3.80m upon refusal in dense gravels, 3.) Borehole moved to already drilled WS114 where no advancement was achieved. 4.) No groundwater encountered.																	
 Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk						Operator: JW & AB		Logged By: T.Goodrick		Sheet No. 1 Of 1		m Per Page 10		All measurements in metres unless otherwise stated			

APPENDIX G

ROTARY BOREHOLE LOGS

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH101 CP		
Dates : 29/6/22 - 4/6/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 149.40 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305961.64 E 203980.38 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.20 0.30 0.50	B2 ES1 ES2			(0.20) 0.20	Grass over black sandy SILT with rootlets. (TOPSOIL) at 0.2mbgl PID = 0ppm		(0.20) 149.20	
1	1.00	ES3	1.20	SPT (C) 18 (5-5-8-4-3-3)	(3.10)	Loose black slightly clayey gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of brick, coal and slag. (MADE GROUND) at 0.5mbgl PID = 0ppm at 1.0mbgl PID = 0ppm		(3.10)	
2	2.50	ES4	2.70	SPT (C) 10 (2-2-2-3-2-3)		at 2.5mbgl PID = 0ppm			
3					3.30 (0.80)	Loose black clayey sandy SILT with wood fragments. (ALLUVIUM)		146.10 (0.80)	
4	3.90 4.00 4.20 - 4.65 4.20	D1 ES5 B B7	4.20	SPT (C) 15 (3-3-4-4-3-4)	4.10 (0.90)	at 4.0mbgl PID = 0ppm Dense black sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies. (RIVER TERRACE DEPOSITS)		145.30 (0.90)	
5	5.13	EW1			5.00	Medium dense to dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies. High cobble content of subangular sandstone. (RIVER TERRACE DEPOSITS)		144.40	
6	5.70 - 6.15	B	5.70	SPT (C) 45 (9-9-9-9-15-12)					
7	7.20 - 7.65	B	7.20	SPT (C) 37 (7-8-8-10-9-10)					
8									
9	8.70 - 9.15 8.70	B B10	8.70	SPT (C) 24 (13-11-6-5-4-9)					

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
29/06/2022 08:00	0.00					6.60	5.70	Moderate groundwater inflow.		5.90	6.10	1:00
29/06/2022 17:00	4.00	4.00								8.50	8.70	0:30
30/06/2022 08:00	4.00	4.00								9.10	9.50	1:00
30/06/2022 17:00	9.50	9.50	5.70									
01/07/2022 08:00	9.50	9.50	5.70									

Equipment / plant used: Dando 2000 Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.												
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	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		NF & MW	T.Goodrick	1 Of 2	10		

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH101 CP		
Dates : 29/6/22 - 4/6/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 149.40 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305961.64 E 203980.38 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
10	10.20 - 10.65	B	10.20	SPT (C) 16 (5-4-4-4-4)					
11									
12	11.70 - 12.15	B	11.70	SPT (C) 24 (7-8-11-5-5-3)	(13.20)			(13.20)	
13									
14	13.20 - 13.65	B	13.20	SPT (C) 17 (4-5-4-4-5-4)					
15									
16	14.70 - 15.15	B	14.70	SPT (C) 50 (3-4-12-24-7-7)					
17									
18	16.20 - 16.65	B	16.20	SPT (C) 23 (5-7-8-5-6-4)					
19									
	17.70 - 18.15	B	17.70	SPT (C) 50/245mm (8-10-11-13-19-7/20mm)					
			18.00	SPT (C) 70/105mm (16-9/20mm-20-29/30mm-21/mm-)	18.20	Terminated at 18.2mbgl upon refusal		131.20	

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
01/07/2022 17:00	16.00	16.00	6.30	18.00	200.00					18.00	18.20	1:00
04/07/2022 08:00	16.00	16.00	5.10									
04/07/2022 17:00	18.20	18.00	6.90									

Equipment / plant used: Dando 2000
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		NF & MW	T.Goodrick	2 Of 2	10		

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 6/7/22 - 6/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level :

149.40 m A.O.D.
Level to Ordnance Datum

Coordinates:

305961.64 E
203980.38 N
Co-ordinates to National Grid

Orientation & Inclination:

Orientation:
N/A
Inclination:
N/A

Borehole No.

RBH101 R

m B.G.L.	Run Details				Fracture Details			Samples		Insitu Tests		Strata				Discontinuities							
	Core Run	TCR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	Depth (Thickness)	Dip	Direction	Fracture Set	Discontinuity Description	Water	Install Backfill
1									0.30	ES1		SPT (C) 18 (5-5-8-4-3-3)	1.2										
2								1.00	ES3														
3								2.50	ES4														
4								4.00 4.20-4.65	ES5 B	4.2	SPT (C) 15 (3-3-4-4-3-4)	4.2											
5								5.17	EW	5.7	SPT (C) 45 (8-8-8-8-15-12)	5.7											
6								5.70-6.15	B	7.2	SPT (C) 37 (7-8-8-10-8-10)	7.2											
7								7.20-7.65	B	8.7	SPT (C) 24 (13-11-6-5-4-9)	8.7											
8								8.70-9.15	B	10.2	SPT (C) 16 (5-1-4-4-4-4)	10.2											
9								10.20-10.65	B	11.7	SPT (C) 24 (7-8-11-6-5-3)	11.7											
10								11.70-12.15	B	13.2	SPT (C) 17 (4-5-4-4-5-4)	13.2											
11								13.20-13.65	B	14.7	SPT (C) 50 (3-4-12-8-7-7)	14.7											
12								14.70-15.15	B														
13																							
14																							
15																							

Hole Progress / Water Obs				Casing			Groundwater			Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
29/06/2022 08:00	0.00					6.60	5.70	Moderate groundwater inflow.		0.00 - 45.00	Mist	100
29/06/2022 17:00	4.00	4.00			7.00							
30/06/2022 08:00	4.00	4.00										
30/06/2022 17:00	9.50	9.50	5.70									
01/07/2022 08:00	9.50	9.50	5.70									
01/07/2022 17:00	16.00	16.00	6.30									
04/07/2022 08:00	16.00	16.00	5.10									
06/07/2022 08:00	7.00	0.00	7.00									

Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 18.0 Cable Percussive, 18.0 - 23.5mbgl ODEX / Rotary Open Hole, 23.5 - 33.8mbgl Rotary Cored, 33.8 - 45.0mbgl Rotary Open Hole

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 6/7/22 - 6/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level :
149.40 m A.O.D.
Level to Ordnance Datum

Coordinates: 305961.64 E
203980.38 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation:
N/A

Inclination:
N/A

Borehole No.
RBH101 R

Run Details				Fracture Details			Samples		Insitu Tests		Strata		Discontinuities					Water	Instal/ Backfill
Core Run	TCR Run	SCR Run	RQD %	Min	Avg	Max	Fl	Depth	Type No. Blows	Test Results	Depth (Thick- ness)	Description	Legend	Red Level A.O.D.	Depth (Thick- ness)	Dip	Direction	Fracture Set	
16								16.20 - 16.65	B	SPT (C) 23 (5'-4.5'-6'-4)	16.2								
17								17.70 - 18.15	B	SPT (C) 50/245mm (8'-10'-14'-13'-16'-10mm) SPT (C) 70/155mm (6'-9'-20mm-26'-29'-30mm-21mm)	17.7 18								
18												Dense Gravels - Drillers Description		131.20					
19																			
20																			
21																			
22																			
23	23.50 - 25.00																		
24		81	43	0	40	101	220	11		SPT (C) 50/15mm (6'-19'-20mm-50/15mm-)	23.5	Mudstone - Drillers Description Medium strong grey SILTSTONE with one discontinuity sets (SOUTH WALES MIDDLE COAL MEASURES) between 23.5 and 23.9mbgl thinly to thickly laminated		126.40					Sub-horizontal to 5 degree (bedding discontinuity set close to medium spaced, smooth planar partly open to open, clean, at 23.9mbgl 45 degree discontinuity smooth planar, partly open, clean. Between 24.0 and 25.27 70 degree discontinuity set extremely closely to medium spaced, smooth to rough planar to undulating, partly open, clean. Between 25.5 and 25.8mbgl and 26 and 26.5mbgl 80 degree discontinuity smooth to rough, planar to undulating, partly open, clean.
25	25.00 - 26.50							24.35 24.35 - 24.60	C C1										
26	26.50 - 28.00							26.00 26.00 - 26.25	C C2										
27		100	70	53	30	136	250	10											
28	28.00 - 29.50							27.30 27.30 - 27.45 28.00 28.00 - 28.24	C C3 C C4										
29	29.50 - 31.00							28.50 - 30.00 28.60	C5 C										
30		73	65	48	20 AZOL	35 100	3												
31	31.00 - 32.30									Weak black COAL. Highly to completely weathered to fine angular Gravel and gravelly Silt Weak to medium strong MUDSTONE with one discontinuity set	31.00 (0.45) 31.45								At 27.5mbgl sub-horizontal discontinuity highly weathered to sandy fine gravel to 20mm penetration. Between 30.46 and 30.6mbgl sub-horizontal discontinuities extremely closely spaced.

Hole Progress / Water Obs				Casing			Groundwater			Flush			Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 18.0 Cable Percussive, 18.0 - 23.5mbgl ODEX / Rotary Open Hole, 23.5 - 33.8mbgl Rotary Cored, 33.8 - 45.0mbgl Rotary Open Hole		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns	Colour	Sheet No.	m Per Page
04/07/2022 17:00	18.20	18.00	6.90	18.00 20.00 23.50	200.00 115.00									2 Of 3	16
Equipment Used: Rig: Dando 2000.															
Operator: NF & MW															
Logged By: T. Goodrick															
Logged Date: 04/07/2022															
Form Name: ROTARY A3, Version 2.11.000, 22/05/15 Output By: Phil Darby, Library File: C:\USERS\PHIL.DARBY\ONE DRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.															

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH101 R

Dates : 6/7/22 - 6/7/22

Job Number : Q0838

Ground Level : 149.40 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305961.64 E
203980.38 N
Co-ordinates to National Grid



Plas Newydd
Swansea
Tel: 01554744880
email: enquiries@quantumgeotechnic.co.uk

Operator:
NF & MW

Logged By:
T.Goodrick

Sheet No.
1 Of 3

m Per
Page
2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH101 R

Dates : 6/7/22 - 6/7/22

Job Number : Q0838

Ground Level : 149.40 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305961.64 E
203980.38 N
Co-ordinates to National Grid



Plas Newydd
Swansea
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Operator:
NF & MW

Logged By:
T.Goodrick

Sheet No.
2 Of 3

m Per
Page
2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

**Borehole No.
RBH101 R**

Dates : 6/7/22 - 6/7/22

Job Number : Q0838

Ground Level : 149.40 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305961.64 E
203980.38 N
Co-ordinates to National Grid



Plas Newydd
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Operator:
NF & MW

Logged By:
T.Goodrick

Sheet No.
3 Of 3

m Per
Page
2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH102		
Dates : 7/7/22 - 8/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 149.90 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305913.62 E 204047.92 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.				
0											Made Ground - Drillers Description					
1																
2																
3																
4																
5							5.33	EW1	4.20 (0.90)	Brown sandy Clay - Drillers Description		145.70				
6									5.10	Dense Gravel and Cobbles - Drillers Description		144.80				
7																
8																
9									8.50	Gravel - Drillers Description		141.40				
10																
11																
12																
13																
14																
15																
16									15.80	Sand and Gravel - Drillers Description		134.10				
17																
18																
19																
20																
21																
22																
23																
24																

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
07/07/2022 08:00	0.00					5.50 8.00 15.00				0.00 - 49.00	Mist	100

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 1 Of 2	m Per Page 25	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH102		
Dates : 7/7/22 - 8/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 149.90 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305913.62 E 204047.92 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
25									25.40	Siltstone - Drillers Description	o x x x x	124.50		
26									(4.10)		x x x x x			
27											x x x x x			
28											x x x x x			
29											x x x x x			
30									29.50	Coal - Drillers Description		120.40		
31									(0.50)	Mudstone - Drillers Description		119.90		
32									30.00	Coal - Drillers Description		119.40		
33									(0.50)	Mudstone - Drillers Description		118.70		
34									30.50					
35									(0.70)					
36									31.20					
37														
38									(6.40)					
39														
40									37.60	Coal - Drillers Description		112.30		
41									(1.20)					
42									38.80	Mudstone - Drillers Description		111.10		
43									(1.20)					
44									40.00	Coal - Drillers Description		109.90		
45									(0.50)	Mudstone - Drillers Description		109.40		
46									40.50					
47														
48														
49									(8.50)					
									49.00	Terminated at 49.0mbgl		100.90		

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
07/07/2022 17:00	49.00	26.50		26.50	115.00							

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	2 Of 2	25		

Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH103	
Dates : 1/7/22 - 4/7/22 Location :					Job Number : Q0838 Engineer : Redstart				Ground Level : 151.00 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305732.04 E 203975.34 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill	
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
0							0.50	ES1	(1.20)	MADE GROUND - Black and reddish brown slightly silty sandy GRAVEL with many wood fragments and low cobble content. Gravel is fine to coarse angular mudstone, clinker, brick and concrete. Cobbles are angular brick, concrete and slag. Ash Fill - Drillers Description		149.80			
1						1.00	ES2	1.20							
2								(2.70)							
3															
4									3.90	Gravel and Boulders - Drillers Description		147.10			
5															
6							6.25	EW1 EW	(6.10)			141.00			
7						6.27									
8															
9															
10									10.00	Sand and Gravel - Drillers Description					
11									(3.90)						
12															
13															
14									13.90	Sandstone and Mudstone Bands - Drillers Description		137.10			
15															
16															
17															
18															
19									19.10	Coal - Drillers Description		131.90			
20									(0.40)	Mudstone - Drillers Description		131.50			
21									19.50						
22									(2.60)						
23															
24															
									22.10	Coal - Drillers Description		128.90			
									(0.90)						
									23.00	Mudstone and Siltstone Bands - Drillers Description		128.00			

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
01/07/2022 08:00	0.00			14.50	115.00	14.00	7.20	Fast groundwater inflow below 14.0mbgl		0.00 - 42.00	Mist	100
01/07/2022 16:00	10.00	10.00	7.40									
04/07/2022 07:00	10.00	10.00	7.40									

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	1 Of 2	25		

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH103		
Dates : 1/7/22 - 4/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.00 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305732.04 E 203975.34 N <i>Co-ordinates to National Grid</i>					

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
25											Mudstone and Siltstone Bands - Drillers Description	x x x x		
26									(6.10)					
27														
28														
29									29.10		Coal - Drillers Description		121.90	
30									(1.10)					
31									30.20		Mudstone and Siltstone Bands - Drillers Description		120.80	
32														
33														
34														
35														
36														
37									(11.80)					
38														
39														
40														
41														
42									42.00		Terminated at 42.0mbgl		109.00	
43														
44														
45														
46														
47														
48														
49														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
04/07/2022 17:00	42.00	14.50										

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 2 Of 2	m Per Page 25	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH104 CP		
Dates : 28/6/22 - 29/6/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.03 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305832.16 E 204157.05 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.30 - 0.75	B B1			(0.30)	Reinforced Concrete. Rebar at 0.25m.		(0.30)	
	0.50	ES1			0.30 (0.50)	Loose dark grey slightly silty slightly gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of coal, brick and slag. (MADE GROUND) at 0.5mbgl PID = 0ppm		150.73 (0.50)	
1	0.80 - 1.15	B2			0.80	Loose grey to black ravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of clinker, coal and slag. (MADE GROUND - COLLIERY SPOIL) at 1.0mbgl PID = 0ppm		150.23	
	1.00	ES2							
	1.20 - 1.65	B3	1.20	SPT (C) 7 (2-1-2-2-1-2)					
2	1.90 - 2.35	B B4			(2.00)			(2.00)	
	2.50	ES3				at 2.5mbgl PID = 0ppm			
	2.70 - 3.15	B5	2.70	SPT (C) 7 (1-1-2-2-1-2)					
3					2.80 (0.90)	Loose black gravelly fine to coarse SAND. Gravel is angular to subangular of fine coal. (MADE GROUND - COAL DUST)		148.23 (0.90)	
4	3.70 - 4.15	B6			3.70	Firm greyish brown sandy gravelly CLAY with a medium cobble content of subrounded sandstone. Gravel is subrounded to rounded fine to coarse of sandstone. (ALLUVIUM) at 4.0mbgl PID = 0ppm		147.33 (0.80)	
	4.00	ES4			(0.80)				
	4.20 - 4.65	B7	4.20	SPT (C) 50/200mm (4-3-10-17-23/50mm-)					
5	5.30 - 5.80	B B8			4.50 (1.30)	Very dense brown fine to coarse SAND + GRAVEL with a medium cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS) at 5.5mbgl PID = 0ppm		146.53 (1.30)	
	5.50	ES5	5.70	SPT (C) 50/170mm (25-20-23-7/20mm-)					
6					5.80	Terminated at 5.8mbgl upon refusal		145.23	
7									
8									
9									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
28/06/2022 08:00	0.00			5.70	200.00					5.70	5.80	1:00
28/06/2022 17:00	4.20	4.00										
29/06/2022 08:00	4.20	4.00										
29/06/2022 17:00	5.80	5.70	5.10									

Equipment / plant used: Dando 2000
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand dug pit to 1.20m,
 2.) Slow progress due to dense Sands and Gravels
 3.) No Groundwater Encountered

 Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: NF & MW	Logged By: T.Goodrick	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 4/7/22 - 5/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 151.03 m A.O.D.
Level to Ordnance Datum

Coordinates: 305832.16 E
204157.05 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation: N/A

Inclination: N/A

Borehole No.
RBH104 R

Run Details

Fracture Details

Samples

Insitu Tests

Strata

Discontinuities

Core Run

TCR %

SCR %

RQD %

Min

Avg

Max

FI

Depth

Type No. Bore

Depth

Test Results

Depth (Thickness)

Description

Legend

Red Level A.O.D.

Depth (Thickness)

Dip

Direction

Fracture Set

Discontinuity Description

Water

Initial/ Backfill

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Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 4/7/22 - 5/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 151.03 m A.O.D.
Level to Ordnance Datum

Coordinates: 305832.16 E
204157.05 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation: N/A
Inclination: N/A

Borehole No.
RBH104 R

Run Details										Fracture Details				Samples		Insitu Tests		Strata		Discontinuities			
Core Run	TCR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No. Blows	Depth (Thickness)	Test Results	Description	Legend	Red Level A.O.D.	Depth (Thickness)	Dip	Fracture Set	Discontinuity Description	Water	Initial/ Backfill			
30	97	85	70	20	112	500	12		23.90 - 34.40 C2			 below 30.0mbgl thinly laminated											
31																							
32	100	85	85	20	136	280	10		31.90 C 31.90 - 32.15 C3	31.70 (0.60) 32.30		Strong fine grained SANDSTONE with one discontinuity set. (SOUTH WALES MIDDLE COAL MEASURES)		119.33				At 30.5mbgl 30 degree discontinuity smooth undulating, partly open, clean. Between 30.75 and 30.85mbgl sub-horizontal to 10 degree discontinuities extremely closely spaced. Below 31.0mbgl sub-horizontal to 10 degree discontinuities medium spaced. Between 31.7 and 32.3mbgl sub-vertical discontinuity rough planar and undulating, open, with calcite surface coating.					
33																							
34																							
35																							
36	93	83	64	40	143	280	7		35.07 C 35.07 - 36.25 C6	36.55 (1.65)		 between 36.55 and 36.7mbgl and between 36.85 and 37.00mbgl highly weathered to fine to medium angular Gravel Weak black COAL. (SOUTH WALES MIDDLE COAL MEASURES) between 37.0 and 38.2mbgl highly weathered to silty sandy fine to medium angular Gravel.		114.48									
37																							
38																							
38.5																							
39																							

Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 5.8 Cable Percussive, 5.8 - 28.0mbgl ODEX / Rotary Open Hole, 28.0 - 38.5mbgl Rotary Cored, 38.5 - 42.0mbgl Rotary Open Hole

Flush

Groundwater

Casing

Hole Progress / Water Obs

Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns	Colour
04/07/2022 17:00	38.50	28.00		38.50	115.00	36.00							
05/07/2022 08:00	38.50	28.00											

Quantum Geotechnics

Rien Nanyind
Swansea
Tel: 0155774880
email: enquiries@quantumgeotechnics.co.uk

Operator: QGL

Logged By: P Darby

Logged Date:

Equipment Used: Rig: Commachio 600.

Form Name: ROTARY A3, Version 2.11.000, 22/05/15 Output By: Phil Darby, Library File: C:\USERS\PHIL.DARBY\ONEDRIVE - QUANTUM GEOTECHNICS\TDQUANTUM 4.GLB.

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 4/7/22 - 5/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 151.03 m A.O.D.
Level to Ordnance Datum

Coordinates: 305832.16 E
204157.05 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation: N/A
Inclination: N/A

Borehole No.
RBH104 R

Run Details

Fracture Details

Samples

Insitu Tests

Strata

Discontinuities

Core Run

TCR %

SCR %

RQD %

Min

Avg

Max

FI

Depth

Type No. Bore

Depth

Test Results

Depth (Thickness)

Description

Legend

Red Level A.O.D.

Depth (Thickness)

Dip

Direction

Fracture Set

Discontinuity Description

Water

Install/ Backfill

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Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH104 R

Dates : 4/7/22 - 5/7/22

Job Number : Q0838

Ground Level : 151.03 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305832.16 E
204157.05 N
Co-ordinates to National Grid



Plas Newydd
Swansea
Tel: 01554744880
email: enquiries@quantumgeotechnic.co.uk

Operator:
QGL

Logged By:
P Darby

Sheet No.
1 Of 3

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Page
2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH104 R

Dates : 4/7/22 - 5/7/22

Job Number : Q0838

Ground Level : 151.03 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305832.16 E
204157.05 N
Co-ordinates to National Grid



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All measurements in
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Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH104 R

Dates : 4/7/22 - 5/7/22

Job Number : Q0838

Ground Level : 151.03 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305832.16 E
204157.05 N
Co-ordinates to National Grid



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Sheet No.

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All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 14/7/22 - 15/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 149.56 m A.O.D.

Level to Ordnance Datum

Coordinates: 305892.68 E

204229.87 N

Co-ordinates to National Grid

Orientation & Inclination:

Orientation: N/A

Inclination: N/A

Borehole No.

RBH105

Run Details										Fracture Details			Samples			Insitu Tests			Strata			Discontinuities					Water	Instal/ Backfill
C.R. #	Core Run	TCR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	Depth (Thickness)	Dip	Fracture Set	Discontinuity Description								
15												(19.40mm-21.20-30mm-)																
16											16.2	SPT (C) 50.85mm (5-20.60mm-31.19/10mm-)																
17											17.7	SPT (C) 50.55mm (26/10mm-50.55mm-)																
18											18.2	SPT (C) 50.55mm (25.50mm-50.55mm-)																
19														Siltstone - Drillers Description		129.56												
20	20.70 - 22.20												20.00 (1.70)	Thinly laminated to thinly bedded medium strong dark grey MUDSTONE and strong light grey SANDSTONE with one discontinuity set. Sub-horizontal to 10 degree (bedding) discontinuity set closely spaced, smooth planar, tight to partly open, clean.		128.86	20.70			Sub-horizontal to 10 degree discontinuity set closely spaced, smooth planar, tight to partly open, clean.								
21	22.20 - 23.70												(2.07)							Between 21.65 and 22.2mbgl sub-vertical discontinuity smooth to rough planar, clean.								
22																												
23	23.70 - 25.20												22.77	Medium strong dark grey thinly laminated MUDSTONE with one discontinuity set. (SOUTH WALES MIDDLE COAL MEASURES)		126.79				Below 22.77mbgl discontinuities close to medium spaced.								
24													(2.73)				6.50			At 24.36mbgl 30 degree discontinuity smooth undulating, open, clean.								
25	25.20 - 26.70												25.50	 between 25.5 and 25.7mbgl highly to completely weathered to gravelly Sand Weak to medium strong black COAL with one dcontinuity set. (SOUTH WALES MIDDLE COAL MEASURES)		124.06												
26		80	55	29									(1.80)															
27	26.70 - 27.20												27.10	Weak to medium strong dark grey MUDSTONE with one discontinuity set. (SOUTH WALES MIDDLE COAL MEASURES)		122.46	27.20			Sub-horizontal to 10 degree (bedding) discontinuity set extremely closely to closely spaced, rough planar to undulating, partly open to open, locally completely weathered to gravelly sand upto 50mm penetration.								
28	27.20 - 28.70												(1.10)				1.00			Sub-horizontal to 10 degree discontinuity set closely spaced, rough planar, tight to partly open, clean								
29		60	46	21									26.20	Weak to medium strong black COAL with two discontinuity sets. (SOUTH WALES MIDDLE COAL MEASURES)		121.36	26.20			45 degree discontinuity set closely spaced rough planar, partly open to open, locally completely weathered to sand upto 50mm penetration.								
30													(1.37)				1.37											
31	28.70 - 29.20												28.57	Medium strong grey conglomeritic MUDSTONE with one discontinuity		119.89	28.57			Sub-horizontal to 10 degree (bedding) discontinuities extremely close								

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH105

Dates : 14/7/22 - 15/7/22

Job Number : Q0838

Ground Level : 149.56 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305892.68 E
204229.87 N
Co-ordinates to National Grid



Plas Newydd
Swansea
Tel: 01554744880
email: enquiries@quantumgeotechnic.co.uk

Operator:

QGL

Logged By:

P Darby

Sheet No.

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Page

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All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.

RBH105

Dates : 14/7/22 - 15/7/22

Job Number : Q0838

Ground Level : 149.56 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305892.68 E
204229.87 N
Co-ordinates to National Grid



Plas Newydd
Swansea
Tel: 01554744880
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Operator:

QGL

Logged By:

P Darby

Sheet No.

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Page

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All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH106		
Dates : 8/7/22 - 8/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.35 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305667.24 E 204070.36 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
0											Ash Backfill - Drillers Description				
1										(2.90)					
2										2.90	Brown Clay - Drillers Description		148.45		
3										(1.10)					
4										4.00	Gravel and Boulders - Drillers Description		147.35		
5										(2.80)					
6										5.56 5.69 5.86					
7										EW2 EW EW1					
8										6.80	Sand and Gravels - Drillers Description		144.55		
9															
10										(7.30)					
11															
12															
13															
14										14.10	Mudstone and Siltstone - Drillers Description		137.25		
15										(2.30)					
16										16.40	Coal - Drillers Description		134.95		
17										(1.20)					
18										17.60	Mudstone and Siltstone - Drillers Description		133.75		
19															
20															
21															
22															
23															
24															

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
08/07/2022 08:00	0.00			14.50	115.00	13.00		Medium groundwater inflow				

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	1 Of 2	25		

Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH107	
Dates : 5/7/22 - 5/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.63 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305769.03 E 204244.24 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Run Details				Fractures		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
0							0.50	ES1		Ash Backfill - Drillers Description					
1									(5.00)						
2															
3															
4															
5									5.00	Gravel and Boulders - Drillers Description		146.63			
6									(1.80)						
7									6.80	Sand and Gravel - Drillers Description		144.83			
8															
9															
10															
11															
12															
13															
14															
15									(15.70)						
16															
17															
18															
19															
20															
21															
22															
23									22.50	Mudstone - Drillers Description		129.13			
24									(1.10)						
									23.60	Coal - Drillers Description		128.03			
									(0.50)	Mudstone - Drillers Description		127.53			
									24.10						

Hole Progress / Water Obs				Casing		Groundwater					Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns	
05/07/2022 08:00	0.00			23.50	115.00	5.50	4.80	Medium groundwater inflow at 5.5mbgl		0.00 - 40.00	Mist	100	

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 1 Of 2	m Per Page 25	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH107		
Dates : 5/7/22 - 5/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.63 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305769.03 E 204244.24 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.				
25									(2.10)	Mudstone - Drillers Description						
26									26.20	Coal - Drillers Description		125.43				
27									(1.20)							
28									27.40	Mudstone and Siltstone - Drillers Description	x x x x	124.23				
29									(1.70)		x x x x					
30									29.10	Coal - Drillers Description		122.53				
31									(0.90)							
32									30.00	Mudstone - Drillers Description		121.63				
33									(4.10)							
34									34.10	Coal - Drillers Description		117.53				
35									(0.90)							
36									35.00	Mudstone and Siltstone - Drillers Description		116.63				
37									(5.00)		x x x x					
38											x x x x					
39											x x x x					
40									40.00	Terminated at 40.0mbgl		111.63				
41																
42																
43																
44																
45																
46																
47																
48																
49																

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
05/07/2022 17:00	40.00	23.50	5.80			34.00	15.80	Fast groundwater inflow at 34.0mbgl				

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 2 Of 2	m Per Page 25	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH108 CP		
Dates : 4/7/22 - 4/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.62 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305734.20 E 204292.11 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water	
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0	0.20 - 0.30	B1			(0.20)	Reinforced concrete. Rebar at 0.15m.		(0.20)		
	0.50 - 0.60	B B2			0.20	Loose black to reddish brown gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of clinker, slag and brick. (MADE GROUND)		151.42		
1	1.00 - 1.20	B3			(1.30)				(1.30)	
	1.50	SPT1 B4	1.50	SPT (S) 5 (1-2-1-2-1-1)	1.50			Soft greyish brown sandy gravelly CLAY with a low cobble content of subrounded sandstone. Gravel is subangular to subrounded fine to coarse of sandstone. (ALLUVIUM)		150.12
2	1.50 - 2.00				(1.50)			(1.50)		
	2.50 - 3.00	B B5								
3	3.00	SPT2 B6	3.00	SPT (S) 48 (3-5-8-12-12-16)	3.00	Dense to very dense brown sandy subrounded to rounded fine to coarse GRAVEL of sandstone with a high cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS)		148.62		
	3.00 - 3.50				(1.20)			(1.20)		
4			4.00	SPT (C) 50/70mm (25/40mm-50/70mm-)						
			4.10	SPT (C) 50/20mm (25/10mm-50/20mm-)						
			4.20	SPT (C) 50/20mm (25/10mm-50/20mm-)	4.20	Terminated at 4.2mbgl upon refusal		147.42		
5										
6										
7										
8										
9										

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
04/07/2022 08:00	0.00			4.00	200.00					4.00	4.20	2:00
04/07/2022 17:00	4.20	4.00										
06/07/2022 08:00	4.00											

Equipment / plant used: Pilcon 1500 Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m, 2.) Refusal at 4.20m, 3.) Borehole terminated and moved to BH108A, 4.) No Groundwater Encountered															
 Quantum Geotech Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk				Operator: JW & AB		Logged By: T.Godrick		Sheet No. 1 Of 1		m Per Page 10		All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH108A CP		
Dates : 5/7/22 - 5/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 151.62 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305734.20 E 204292.11 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.20 - 0.30	B1			(0.20)	Reinforced concrete. Rebar at 0.15m.		(0.20)	
	0.30 - 0.50	B2			0.20	Loose black to reddish brown gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of clinker, slag and brick. (MADE GROUND)		151.42	
1	1.00 - 1.20	B3			(1.30)			(1.30)	
	1.50 - 2.00	B	1.50	SPT (S) 6 (1-2-1-2-1-2)	1.50	Soft greyish brown sandy gravelly CLAY with a low cobble content of subrounded sandstone. Gravel is subangular to subrounded fine to coarse of sandstone. (ALLUVIUM)		150.12	
2	1.50	SPT1			(1.50)			(1.50)	
	1.50 - 2.00	B4							
	2.50 - 3.00	B5							
3	3.00	SPT2	3.00	SPT (S) 45 (4-4-8-10-12-15)	3.00	Dense to very dense brown sandy subrounded to rounded fine to coarse GRAVEL of sandstone with a high cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS)		148.62	
	3.00 - 3.50	B6			(1.10)			(1.10)	
	3.50 - 4.00	B7							
4			4.00	SPT (C) 50/70mm (4-12-50/70mm→)	4.10	Terminated at 4.1mbgl upon refusal		147.52	
			4.10	SPT (C) 50/40mm (25/20mm-50/40mm→)					
5									
6									
7									
8									
9									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
04/07/2022 08:00	0.00									4.00	4.10	1:00
04/07/2022 17:00	4.10	4.00										

Equipment / plant used: Pilcon 1500
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
2.) Refusal at 4.10m.
3.) No Groundwater Encountered

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: JW & AB	Logged By: T.Goodrick	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 6/7/22 - 7/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 151.62 m A.O.D.
Level to Ordnance Datum

Coordinates: 305734.20 E
204292.11 N
Co-ordinates to National Grid

Orientation & Inclination: Orientation: N/A

Inclination: N/A

Borehole No. RBH108A R

Run Details

Fracture Details

Samples

Insitu Tests

Strata

Discontinuities

Core Run

TCR %

SCR %

RQD %

Min

Avg

Max

FI

Depth

Type No. Bore

Depth

Test Results

Depth (Thickness)

Description

Legend

Red Level A.O.D.

Depth (Thickness)

Dip

Direction

Fracture Set

Discontinuity Description

Water

Installs/ Backfill

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2

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 6/7/22 - 7/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 151.62 m A.O.D.
Level to Ordnance Datum

Coordinates: 305734.20 E
204292.11 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation: N/A
Inclination: N/A

Borehole No.
RBH108A R

Run Details

Fracture Details

Samples

Insitu Tests

Strata

Discontinuities

Core Run

TCR %

SCR %

RQD %

Min

Avg

Max

FI

Depth

Type No. Blows

Depth

Test Results

Depth (Thickness)

Description

Legend

Red Level A.O.D.

Depth (Thickness)

Direction

Fracture Set

Discontinuity Description

Water

Install/ Backfill

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

26.50 - 28.00

28.00 - 29.50

29.50 - 31.00

100

87

93

8

21

63

0

21

0

0

10

0

0

58

60

0

200

140

0

10

22

26.50

27.34

27.34 - 27.43

28.00

28.00 - 28.20

28.00

28.36

28.36 - 28.10

28.00

NI

0

NI

6

22

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

26.5

SPT (C) 50/35mm
(25/60mm=50/35mm=)

Weak light grey MUDSTONE with one discontinuity set, (SOUTH WALES MIDDLE COAL MEASURES)
.... between 26.5 and 28.0mbgl highly weathered to fine to coarse angular Gravel

Weak black COAL
.... between 28.19 and 28.6mbgl highly weathered to medium angular Gravel

Medium strong grey MUDSTONE with one discontinuity set, (SOUTH WALES MIDDLE COAL MEASURES)

Siltstone - Drillers Description

Weak light grey MUDSTONE with one discontinuity set, (SOUTH WALES MIDDLE COAL MEASURES)
.... between 26.5 and 28.0mbgl highly weathered to fine to coarse angular Gravel

Weak black COAL
.... between 28.19 and 28.6mbgl highly weathered to medium angular Gravel

Medium strong grey MUDSTONE with one discontinuity set, (SOUTH WALES MIDDLE COAL MEASURES)

126.22

125.12

123.63

123.07

26.50

26.50

26.50

26.50

Sub-horizontal to 15 degree (bedding) discontinuity set extremely closely spaced, smooth and rough planar, partly open to open, clean, between 26.5 and 28.0mbgl with silt surface coating.

Below 28.6mbgl extremely closely to closely spaced.
At 28.9 and 29.0mbgl 45 degree discontinuities rough planar, partly open, clean.

Water

Hole Progress / Water Obs

Casing

Groundwater

Flush

Date / Time

H. Depth

C. Depth

Water

Depth

Diam.

Struck

Rose To

Behaviour

Sealed

Depth

Type

Returns

Colour

06/07/2022 17:00

26.50

26.50

26.50

26.50

115.00

07/07/2022 08:00

26.50

26.50

26.50

7.80

Quantum

Records

Rien Noyvold
Swansea
Tel: 0155774480
email: enquiries@quantumgeotechnic.co.uk

Operator: QGL

Logged By: P Darby

Logged Date:

Equipment Used: Rig: Commachio 600.

Sheet No. 2 Of 3

m Per Page 15

All measurements in metres unless otherwise stated

AGS

Form Name: ROTARY A3, Version 2.11.000, 22/05/15 Output By: Phil Darby, Library File: C:\USERS\PHIL DARBY\ONE DRIVE - QUANTUM\GEOTECHNIC\TDQUANTUM 4.GLB.

Contract : Hoover Candy Factory

Cliet : Merthyr Tydfil County Borough Council

Dates : 6/7/22 - 7/7/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 151.62 m A.O.D.
Level to Ordnance Datum

Coordinates: 305734.20 E
204292.11 N
Co-ordinates to National Grid

Orientation & Indination: Orientation: N/A

Incination: N/A

Borehole No.
RBH108A R

Run Details										Fracture Details				Samples			Insitu Tests		Strata			Discontinuities					Water		Install/ Backfill
Core Run	TCR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No. Blows	Depth	FI	Test Results	Depth (Thick- ness)	Description	Legend	Red Level A.O.D.	Depth (Thick- ness)	Dip	Direction	Fracture Set	Discontinuity Description			Water	Install/ Backfill				
30	93	63	0	10	60	140	22	30.55 - 30.60	C4	30.55 - 30.60			(7.60)	 between 31.0 and 31.26mbgl many Calcite veins		115.42	9.70												
31	96	93	41	15	100	260	14	32.14 - 32.20	C5	32.14 - 32.20																			
32	96	86	0	5	53	90	26	33.05 - 33.14	C6	33.05 - 33.14				 below 35.2mbgl fissile															
33	99	63	13	40	105	190	16	34.53 - 34.73	C7	34.53 - 34.73																			
34	100	78	32	70	111	170	8	35.64 - 35.80	C8	35.64 - 35.80																			
35								36.35 - 36.50	C9	36.35 - 36.50				Strong light grey SANDSTONE with one discontinuity set. (SOUTH WALES MIDDLE COAL MEASURES) Terminated at 36.5mbgl															
36																													
37																													
38																													
39																													
40																													
41																													
42																													
43																													
44																													

Hole Progress / Water Obs

Casing

Groundwater

Flush

Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Sealed	Depth	Type	Returns	Colour
07/07/2022 17:00	36.50	26.50										

Quantum
Geotechnics

Rien Noyvold
Swansea
Tel: 0155774480
email: enquiries@quantumgeotechnics.co.uk

Operator: QGL

Logged By: P Darby

Logged Date:

Equipment Used: Rig: Commachio 600.

Form Name: ROTARY A3, Version 2.11.000, 22/05/15 Output By: Phil Darby, Library File: C:\USERS\PHIL.DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

AGS

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH108A R

Dates : 6/7/22 - 7/7/22

Job Number : Q0838

Ground Level : 151.62 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305734.20 E
204292.11 N
Co-ordinates to National Grid



Plas Newydd
Swansea
Tel: 01554744880
email: enquiries@quantumgeotechnic.co.uk

Operator:

QGL

Logged By:

P Darby

Sheet No.

1 Of 2

m Per
Page

2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH108A R

Dates : 6/7/22 - 7/7/22

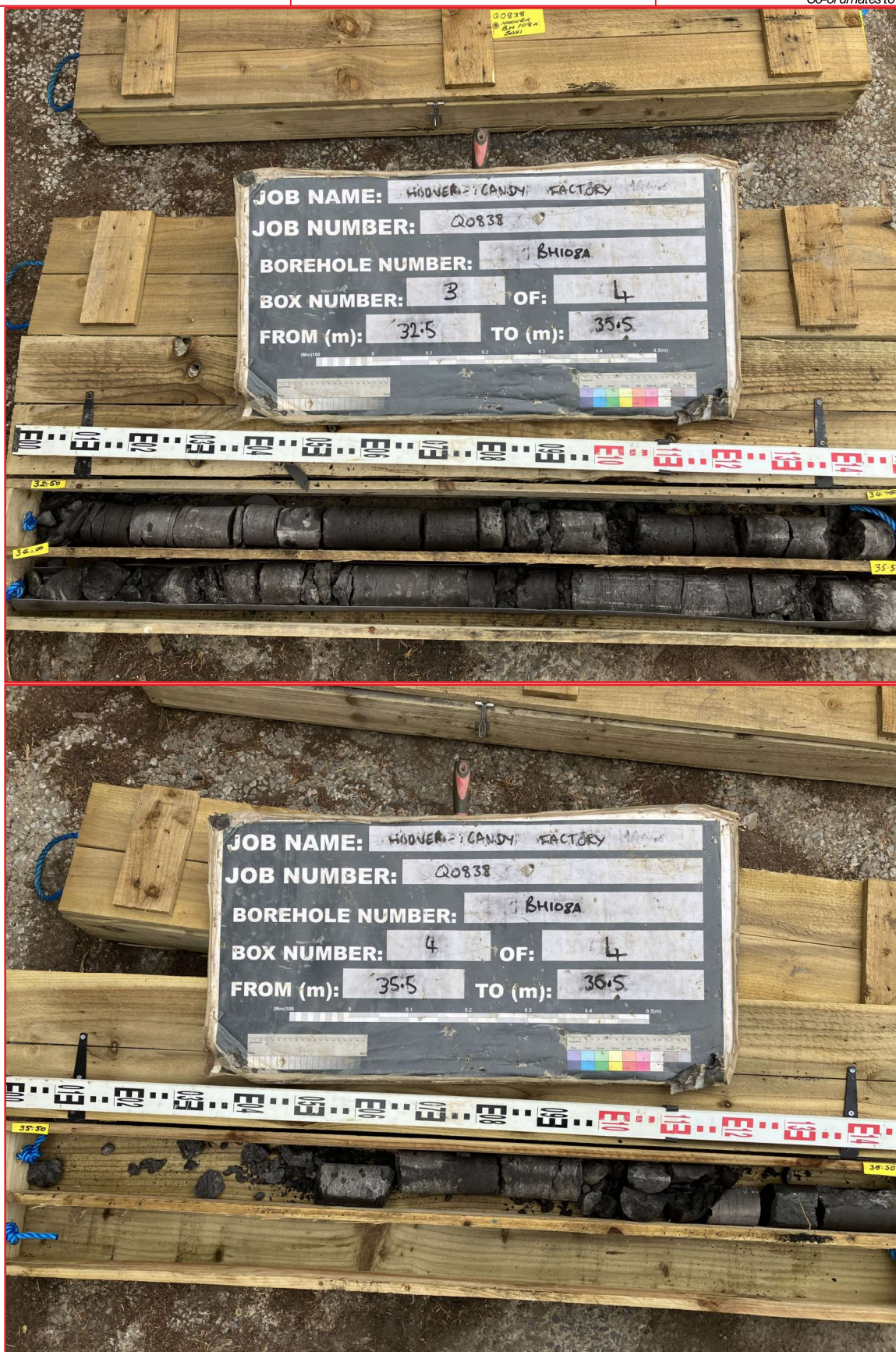
Job Number : Q0838

Ground Level : 151.62 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305734.20 E
204292.11 N
Co-ordinates to National Grid



Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH109		
Dates : 29/6/22 - 30/6/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 156.39 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305679.58 E 204398.93 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
0										(0.30)	TOPSOIL - Light brown SILT with many rootlets		156.09		
1										0.30 (0.90)	MADE GROUND - Pinkish brown gravelly SAND. Gravel is fine to coarse angular slag and brick.				
2										1.20	Colliery Spoil - Drillers Description		155.19		
3															
4										(4.70)					
5															
6										5.90 (1.30)	Brown sandy Clay - Drillers Description		150.49		
7										7.20	Dense Gravel and Boulders - Drillers Description		149.19		
8															
9							8.54 8.66	EW1 EW2		(2.80)					
10										10.00 (2.20)	Sand and Gravel - Drillers Description		146.39		
11															
12										12.20	Silty Sand (Blowing) - Drillers Description		144.19		
13															
14															
15															
16															
17															
18										(11.80)					
19															

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
29/06/2022 08:00	0.00					10.00	8.80	Medium groundwater inflow.				

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	G Blades	1 Of 3	20		

Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH109										
Dates : 29/6/22 - 30/6/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 156.39 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305679.58 E 204398.93 N <i>Co-ordinates to National Grid</i>											
m B.G.L.	Run Details				Fractures		Samples		Strata					Water	Install/ Backfill						
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.									
20										Silty Sand (Blowing) - Drillers Description											
21																					
22																					
23																					
24									24.00	Dense Gravel - Drillers Description		132.39									
25									(3.20)												
26																					
27									27.20	Siltstone and Mudstone Bands - Drillers Description		129.19									
28																					
29																					
30																					
31									(6.80)												
32																					
33																					
34									34.00	Coal - Drillers Description		122.39									
35									(0.60)												
36									34.60	Mudstone - Drillers Description		121.79									
37									(0.60)												
38									35.20	Coal - Drillers Description		121.19									
39									(1.20)												
40									36.40	Mudstone - Drillers Description		119.99									
41																					
42																					
43																					
44																					
45																					
46																					
47																					
48																					
49																					
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54																					
55																					
56																					
57																					
58																					
59																					
60																					
Hole Progress / Water Obs														Casing		Groundwater				Flush	
Date / Time		H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour		Sealed	Depth	Type	Returns							
29/06/2022 17:00		22.00	22.00		28.00	115.00	24.00	9.00	Fast groundwater inflow.												
30/06/2022 08:00		22.00	22.00																		
Plant: Commachio 600 Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl																					
		Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk					Operator: QGL		Logged By: G Blades		Sheet No. 2 Of 3		m Per Page 20		All measurements in metres unless otherwise stated						

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH109		
Dates : 29/6/22 - 30/6/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 156.39 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305679.58 E 204398.93 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata						Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.				
40									(6.90)	Mudstone - Drillers Description						
41																
42																
43																
44									43.30 (1.10)	Coal - Drillers Description		113.09				
45									44.40 (0.60)	Mudstone - Drillers Description		111.99				
46									45.00	Terminated at 45.0mbgl		111.39				
47																
48																
49																
50																
51																
52																
53																
54																
55																
56																
57																
58																
59																

Hole Progress / Water Obs				Casing		Groundwater					Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns	
30/06/2022 17:00	45.00	28.00	9.00										

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: G Blades	Sheet No. 3 Of 3	m Per Page 20	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH110		
Dates : 27/6/22 - 28/6/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 157.22 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305757.35 E 204474.84 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0									(0.10)	Asphalt		157.12		
1								0.50 ES1	0.10	MADE GROUND - silty slightly sandy GRAVEL. Gravel is fine to coarse angular slag, mudstone and brick.				
								1.00 ES2	(1.10)					
2									1.20	Colliery Spoil - Drillers Description		156.02		
3									(4.20)					
4														
5									5.40	Clay Backfill - Drillers Description		151.82		
6									(1.10)					
7									6.50	Sand and Gravel - Drillers Description		150.72		
8									(3.10)					
9														
10									9.60	Weathered Mudstone - Drillers Description		147.62		
11									(0.40)	Mudstone and Siltstone Bands - Drillers Description		147.22		
12									10.00					
13														
14								14.12 ESEW1						
15								14.16 EW						
16									(11.20)					
17														
18														
19														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
27/06/2022 08:00	0.00			10.00	115.00	8.50	7.00	Medium groundwater inflow.		0.00 - 30.00	Mist	100

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	1 Of 2	20		

Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH110		
Dates : 27/6/22 - 28/6/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 157.22 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305757.35 E 204474.84 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
20											Mudstone and Siltstone Bands - Drillers Description			
21														
22											Coal - Drillers Description	136.02		
23														
24											Mudstone and Siltstone Bands - Drillers Description	134.22		
25														
26														
27														
28											Coal - Drillers Description	129.92		
29											Mudstone - Drillers Description	129.22		
30														
31											Terminated at 30.0mbgl	127.22		
32														
33														
34														
35														
36														
37														
38														
39														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
27/06/2022 17:00	30.00	10.00	14.10			23.00	14.10	Fast groundwater inflow.				
28/06/2022 08:00	30.00	10.00	14.10									

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 2 Of 2	m Per Page 20	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH111	
Dates : 30/6/22 - 1/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 157.28 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305654.79 E 204446.02 N <i>Co-ordinates to National Grid</i>		

m B.G.L.	Run Details					Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
0							0.20	ES1	(0.30)	TOPSOIL - Brown Silt with rootlets		156.98			
1						0.50	ES2	0.30	MADE GROUD - Pinkish brown very sandy Gravel.		156.08				
2						1.00	ES3	(0.90)	Gravel is fine to coarse angular slag and brick						
3								1.20	Colliery Spoil - Drillers Description						
4								(3.30)							
5									4.50	Very Soft / Void. (No arisings)		152.78			
6									(2.50)						
7									7.00	Dense Gravel and Boulders - Drillers Description		150.28			
8									(3.00)						
9							8.94	ESEW1							
10									10.00	Wet Sand and Gravel - Drillers Description		147.28			
11															
12															
13															
14															
15															
16															
17									(14.00)						
18															
19															
20															
21															
22															
23															
24									24.00	Siltstone Boulders - Drillers Description		133.28			

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
30/06/2022 08:00	0.00					10.00	8.20	Medium groundwater inflow at		0.00 - 4.50	Mist	100
01/07/2022 08:00	20.50	20.50				22.00	9.20	10.0mbgl Fast groundwater inflow.		4.50 - 7.00	Mist	0
										7.00 - 39.10	Mist	100

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By.	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	1 Of 2	25		

Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH111		
Dates : 30/6/22 - 1/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 157.28 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305654.79 E 204446.02 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
25									(2.10)	Siltstone Boulders - Drillers Description					
26									26.10	Siltstone and Mudstone Bands - Drillers Description		131.18			
27									(2.00)						
28									28.10	Coal - Drillers Description		129.18			
29									(1.30)						
30									29.40	Siltstone and Mudstone Bands - Drillers Description		127.88			
31															
32															
33															
34															
35									(9.70)						
36															
37															
38															
39									39.10	Void - Drillers Description		118.18			
40															
41									(3.80)						
42															
43									42.90	Hard Drill. No Flush Returns - Drillers Description		114.38			
44									(1.10)						
45									44.00	Terminated at 44.0mbgl		113.28			
46															
47															
48															
49															

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
30/06/2022 17:00	25.50	20.50		26.50	115.00					39.10 - 44.00	Mist	0
01/07/2022 17:00	44.00	26.50										

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By.	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	2 Of 2	25		

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH112 CP		
Dates : 27/6/22 - 29/6/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 163.20 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305660.77 E 204594.79 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.10 - 0.55 0.20	B1 ES1				Scrub over dense black to dark grey slightly clayey gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of brick, glass and slag. (MADE GROUND) at 0.2mbgl PID = 0ppm at 0.5mbgl PID = 0ppm at 1.0mbgl PID = 0ppm		(2.70)	
	0.50 0.60 - 1.05	ES2 B2							
1	1.00 1.20 - 1.65	ES3 B B3	1.20	SPT (C) 18 (3-4-3-5-5-5)	(2.70)				
2	2.50 2.70 - 3.15	ES4 B4	2.70	SPT (C) 8 (2-2-2-2-2-2)	2.70	at 2.5mbgl PID = 0ppm		160.50	
3					(1.20)	Loose black silty gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of brick, coal and slag. (MADE GROUND)		(1.20)	
4	3.90 - 4.15 4.00 4.20 - 4.65	B5 ES ES5 B6	4.20	SPT (C) 7 (2-1-2-2-1-2)	3.90	Loose black gravelly fine to coarse SAND. Gravel is angular to subangular of fine coal. (MADE GROUND - COAL DUST) at 4.0mbgl PID = 0ppm		159.30	
5					(1.50)			(1.50)	
6	5.30 - 5.65 5.50 5.70 - 6.15	B7 ES6 B B8	5.70	SPT (C) 7 (3-3-2-2-1-2)	5.40	Dense grey to dark grey clayey sandy angular to subangular fine to coarse GRAVEL of mudstone. (MADE GROUND - COLLIERY SPOIL) at 5.5mbgl PID = 0ppm		157.80	
7	7.00 7.20 - 7.65	ES7 B9	7.20	SPT (C) 16 (4-4-5-3-3-5)		at 7.0mbgl PID = 0ppm			
8					(4.50)			(4.50)	
9	8.50 8.70 - 9.15	ES8 B10	8.70	SPT (C) 17 (5-4-4-4-5-4)		at 8.5mbgl PID = 0ppm			
	9.90 - 10.15	B							

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
27/06/2022 08:00	0.00									1.70	1.90	0:30

Equipment / plant used: Dando 2000
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
 2.) Rotary follow on from 13.00m.
 3.) No Groundwater Encountered

Quantum Geotech Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: NF & MW	Logged By: T.Goodrick	Sheet No. 1 Of 2	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH112 CP		
Dates : 27/6/22 - 29/6/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 163.20 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305660.77 E 204594.79 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
10	10.00	B11			9.90	Soft greyish brown slightly sandy silty CLAY. (ALLUVIUM) at 10.0mbgl PID = 0ppm		153.30	
	10.20 - 10.65	ES9 SPT1 B12	10.20	SPT (S) 18 (1-1-2-2-6-8)	(1.40)			(1.40)	
11									
12	11.70 - 12.15	B13	11.70	SPT (C) 48 (6-16-9-11-11-17)	11.30	Very dense greyish brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies with a medium cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS)		151.90	
					(1.70)			(1.70)	
13					13.00	Terminated at 13.0mbgl upon refusal		150.20	
14	14.50 - 14.60	C							
15									
16									
17									
18									
19									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
27/06/2022 17:00	11.70	9.20		12.40	200.00					11.30	11.50	0:30
28/06/2022 08:00	11.70	9.20	10.80							12.80	13.00	1:00
28/06/2022 17:00	13.00	12.40	10.70									

Equipment / plant used: Dando 2000 Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m, 2.) Rotary follow on from 13.00m. 3.) No Groundwater Encountered																	
Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk						Operator: NF & MW		Logged By: T.Goodrick		Sheet No. 2 Of 2		m Per Page 10		All measurements in metres unless otherwise stated			

Run Details										Fracture Details			Samples		Insitu Tests		Strata				Discontinuities																																
Core Run	TOR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No. Bore	Depth	Test Results	Depth (Thickness)	Description	Legend	Ret. Level A.O.D.	Depth (Thickness)	Dip	Fracture Set	Discontinuity Description	Water																																	
14.50 - 16.00	93	70	36							0.10 - 0.55 0.20 ES1 0.50 ES2 0.60 - 1.05 B2 1.00 ES3 1.20 - 1.65 B3	SPT (C) 18 (3-1-3-5-5-5)	1.2	Progressed using Cable Percussive Drilling Techniques																																								
																					2.50 2.70 - 3.15 B4	SPT (C) 8 (2-2-3-3-4)	2.7																														
																								3.90 - 4.15 B5 4.00 ES5 4.20 - 4.65 B6	SPT (C) 7 (2-1-3-3-1-4)	4.2																											
																											5.30 - 5.65 B7 5.50 ES6 5.70 - 6.15 B8	SPT (C) 7 (3-3-3-3-1-2)	5.7																								
																														7.00 7.20 - 7.65 B9	SPT (C) 16 (4-1-5-3-3-5)	7.2																					
																																	8.50 8.70 - 9.15 B10	SPT (C) 17 (5-1-1-1-5-4)	8.7																		
																																				9.90 - 10.15 B11 10.00 ES9 10.20 - 10.65 B12	SPT (S) 18 (1-1-2-2-4-8)	10.2															
																																							11.70 - 12.15 B13	SPT (C) 48 (6-1-6-9-11-1-1-7)	11.7												
																																										13.00 (0.90)	Sand and Gravel (Drillers Description)	150.20									
																																													13.90 (0.60)	Siltstone / Mudstone	145.30						
																																																14.50 14.50 - 14.60 C1	Weak to medium strong grey MUDSTONE with one discontinuity set. (SOUTH WALES MIDDLE COAL MEASURES)	146.70			
																																																			14.50 - 16.00	Sub-horizontal to 5 degree extremely closely to closely spaced, smooth planar, partly open to open dean, locally highly weathered the	

Contract : Hoover Candy Factory
Client : Merthyr Tydfil County Borough Council

Dates : 27/6/22 - 29/6/22

Location :

Job Number : Q0838
Engineer : Redstart

Ground Level :
163.20 m A.O.D.
Level to Ordnance Datum

Coordinates: 305660.77 E
204594.79 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation:
N/A

Borehole No.
RBH112 R

Run Details										Fracture Details				Samples		Insitu Tests		Strata		Discontinuities					Initial Backfill
Core Run	TCR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Ret. Level A.O.D.	Depth (Thickness)	Dip	Fracture Set	Discontinuity Description	Water							
16.00 - 17.50	93	70	36	10	70	160	14				 between 16.0 and 16.18mbgl non-intact recovered as medium to coarse angular Gravel						fine to medium angular gravel..								
17.50 - 19.00	100	66	30	40	94	180	13			(4.50)							Between 16.9 and 17.4mbgl sub-vertical discontinuity smooth planar, tight to open, locally with gravelly clay infill. Below 17.5mbgl sub-horizontal discontinuities close to medium spaced between 17.5 and 18.6mbgl sub-vertical discontinuity set extremely closely spaced, smooth planar, partly open, clean.								
19.00 - 20.50																	Between 19.1 and 19.55mbgl sub-horizontal discontinuities extremely closely spaced, smooth to rough, planar to undulating, partly open to open, locally highly weathered to fine to medium angular gravel. At 20.2mbgl 45 degree discontinuity rough planar, partly open, clean.								
20.50 - 22.00																									
22.00 - 23.50	100	62	21				NI																		
23.50 - 24.50	100	87	73	20	167	300	8																		
24.5																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									
																									

Hole Progress / Water Obs				Casing		Groundwater			Flush			Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 13.0 Cable Percussive, 13.0 - 14.5mbgl ODEX / Rotary Open Hole, 14.5 - 23.5mbgl Rotary Cored, 23.5 - 45.0mbgl Rotary Open Hole		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type		Returns	Colour
28/06/2022 17:00	17.50	14.50												
29/06/2022 08:00	17.50	14.50												

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Dates : 27/6/22 - 29/6/22

Location :

Job Number : Q0838

Engineer : Redstart

Ground Level : 163.20 m A.O.D.
Level to Ordnance Datum

Coordinates: 305660.77 E
204594.79 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation: N/A

Inclination: N/A

Borehole No.
RBH112 R

Run Details										Fracture Details			Samples			Insitu Tests		Strata			Discontinuities					
Core Run		TCR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No.	Flow	Depth (Thickness)	Test Results	Depth (Thickness)	Description	Legend	Red Level A.O.D.	Depth (Thickness)	Dip	Direction	Fracture Set	Discontinuity Description			Water	Initial/ Backfill
29.6	1.0																									
31																										
32																										
33																										
34																										
35																										
36																										
37																										
38																										
39																										
40																										
41																										
42																										
43																										
44																										

29/06/2022

11:00

H. Depth

45.00

C. Depth

14.50

Water

25.90

Struck

37.00

Rose To

25.90

Behaviour

Medium groundwater inflow below 37.0mbgl

Sealed

Depth

Type

Returns

Colour

Flush

Groundwater

Casing

Hole Progress / Water Obs

Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 13.0 Cable Percussive, 13.0 - 14.5mbgl ODEX / Rotary Open Hole, 14.5 - 23.5mbgl Rotary Cored, 23.5 - 45.0mbgl Rotary Open Hole

Quantum

Geotechnics

Rien Noyvold

Sweeney

Tel: 0155774480

email: enquiry@quantumgeotechnics.co.uk

Operator: QGL

Logged By: P Darby

Logged Date:

Equipment Used: Rig: Commachio 600.

Sheet No. 3 Of 4

m Per Page 15

All measurements in metres unless otherwise stated

AGS

Form Name: ROTARY A3, Version 2.11.000, 22/05/15 Output By: Phil Darby, Library File: C:\USERS\PHIL DARBY\ONE\DRIVE - QUANTUM\GEOTECHNIC\TDQUANTUM 4.GLB.

Contract : Hoover Candy Factory
Client : Merthyr Tydfil County Borough Council

Dates : 27/6/22 - 29/6/22
Location :

Job Number : Q0838
Engineer : Redstart

Ground Level :
163.20 m A.O.D.
Level to Ordnance Datum

Coordinates: 305660.77 E
204594.79 N
Co-ordinates to National Grid

Orientation & Inclination:
Orientation: N/A
Inclination: N/A

Borehole No.
RBH112 R

Run Details				Fracture Details			Samples		Insitu Tests		Strata				Discontinuities						
Core Run	TCR %	SCR %	RQD %	Min	Avg	Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red Level A.O.D.	Depth (Thickness)	Dip	Direction	Fracture Set	Discontinuity Description		Water	Instal/ Backfill
1										45.00	Terminated at 45.0mbgl		118.20								
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
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57																					
58																					
59																					

Date / Time

H. Depth

C. Depth

Water

Depth

Diam.

Struck

Rose To

Behaviour

Sealed

Depth

Type

Returns

Colour

Operator: QGL

Logged By: P Darby

Equipment Used: Rig: Commachio 600.

Logged Date:

Equipment Used:

Quantum Geotechnics

Rien Noyd
Swansea
Tel: 0155774480
email: enquiry@quantumgeotech.co.uk

Form Name: ROTARY A3, Version 2.1.0.00, 22/05/15 Output By: Phil Darby, Library File: C:\USERS\PHIL.DARBY\ONE\DRIVE - QUANTUM GEOTECHNIC\TDQUANTUM 4.GLB.

Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 13.0 Cable Percussive, 13.0 - 14.5mbgl ODEX / Rotary Open Hole, 14.5 - 23.5mbgl Rotary Cored, 23.5 - 45.0mbgl Rotary Open Hole

AGS

All measurements in this report are to be taken as stated unless otherwise stated

Sheet No. 4 Of 4

m Per Page 15

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH112 R

Dates : 27/6/22 - 29/6/22

Job Number : Q0838

Ground Level : 163.20 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305660.77 E
204594.79 N
Co-ordinates to National Grid



Plas Newydd
Swansea
Tel: 01554744880
email: enquiries@quantumgeotechnic.co.uk

Operator:
QGL

Logged By:
P Darby

Sheet No.
1 Of 2

m Per
Page
2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.
RBH112 R

Dates : 27/6/22 - 29/6/22

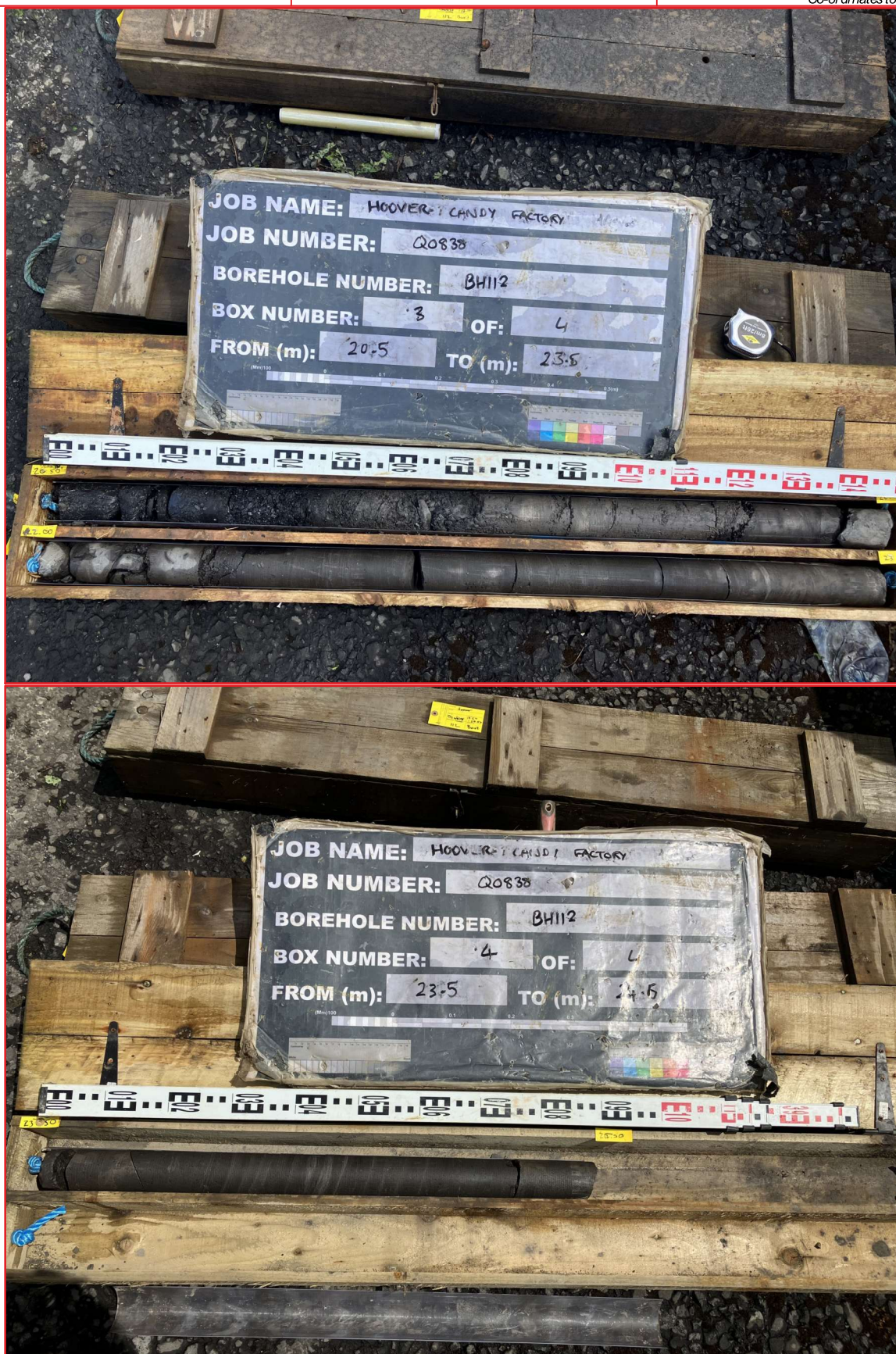
Job Number : Q0838

Ground Level : 163.20 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305660.77 E
204594.79 N
Co-ordinates to National Grid



Plas Newydd
Swansea
Tel: 01554744880
email: enquiries@quantumgeotechnic.co.uk

Operator:
QGL

Logged By:
P Darby

Sheet No.
2 Of 2

m Per
Page
2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH113A CP			
Dates : 5/7/22 - 5/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 157.10 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305533.01 E 204519.79 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.20 - 0.30	B1			(0.10)	Asphalt		(0.10)	
	0.50 - 0.60	B2			0.10	MADE GROUND - Reddish brown sandy GRAVEL. Gravel is fine to coarse angular brick and slag. MADE GROUND - Black silty slightly sandy GRAVEL. Gravel is fine to coarse angular coal, clinker and mudstone.		157.00	
					(0.30)			(0.30)	
					0.40			156.70	
1	1.00 - 1.20	B B3			(1.10)			(1.10)	
	1.50 - 2.00	B4	1.50	SPT (S) 6 (1-1-1-2-2-1)	1.50	MADE GROUND - Grey very clayey GRAVEL. Gravel is fine to coarse angular mudstone. (COLLIERY SPOIL)		155.60	
2									
	2.50 - 3.00	B B5			(2.50)			(2.50)	
3	3.00 - 3.50	B6	3.00	SPT (S) 6 (2-2-2-1-1-2)					
4	4.00 - 4.50	B7			4.00	MADE GROUND - Dark grey slightly silty sandy GRAVEL with medium cobble content. Gravel is fine to coarse angular slag, sandstone and mudstone. Cobbles are sub-angular slag.		153.10	
	4.50 - 5.00	B8	4.50	SPT (S) 18 (5-5-6-4-4-4)	(1.50)			(1.50)	
5									
	5.50 - 6.00	B B9			5.50	Soft brown gravelly CLAY. Gravel is fine to coarse sub-rounded angular sandstone.		151.60	
6			6.00	SPT (S) 65 (2-2-3-5-17-40)	(1.00)			(1.00)	
					6.50	Terminated upon refusal at 6.5mbgl		150.60	
7									
8									
9									

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
				6.50	200.00							

Equipment / plant used: Pilcon 150

Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. No groundwater encountered.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: Wessex Drilling	Logged By: P Darby	Sheet No. 1 Of 1	m Per Page 10	All measurements in metres unless otherwise stated	
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Form Name: SA/SPT. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council												Borehole No. RBH113A R					
Dates : 1/7/22 - 5/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 157.10 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305533.01 E 204519.79 N <i>Co-ordinates to National Grid</i>							
m B.G.L.	Run Details				Fractures		Samples		Strata					Water	Install/ Backfill		
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.					
0										Progressed using Cable Percussive Drilling Techniques							
1																	
2																	
3									(6.50)								
4																	
5																	
6																	
7									6.50	Gravel and Boulders - Drillers Description		150.60					
8									(1.80)								
9									8.30	Sand and Gravel - Drillers Description		148.80					
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18									(17.90)								
19																	
20																	
21																	
22																	
23																	
24																	
Hole Progress / Water Obs						Casing		Groundwater				Flush					
Date / Time		H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour		Sealed	Depth	Type	Returns			
01/07/2022 08:00		0.00			6.00	200.00	9.00	7.30	Medium groundwater inflow at			0.00 - 47.00	Mist	100			
01/07/2022 17:00		6.50	6.00				25.00	7.90	9.0mbgl								
04/07/2022 08:00		6.00							Medium groundwater inflow at								
									25.0mbgl								
Plant: Commachio 600 Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 6.5 Cable Percussive, 6.5 - 47.0mbgl ODEX / Rotary Open Hole																	
 Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk						Operator: QGL		Logged By: P Darby		Sheet No. 1 Of 2		m Per Page 25		All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. RBH113A R						
Dates : 1/7/22 - 5/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 157.10 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305533.01 E 204519.79 N <i>Co-ordinates to National Grid</i>							
m B.G.L.	Run Details				Fractures		Samples		Strata					Water	Install/ Backfill		
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.					
25										Sand and Gravel - Drillers Description							
26									26.20	Siltstone Boulders - Drillers Description		130.90					
27									(1.60)								
28									27.80	Mudstone - Drillers Description		129.30					
29									(2.30)								
30									30.10	Coal - Drillers Description		127.00					
31									(1.10)								
32									31.20	Mudstone - Drillers Description		125.90					
33									(0.80)								
34									32.00	Coal - Drillers Description		125.10					
35									(1.00)								
36									33.00	Mudstone - Drillers Description		124.10					
37									(0.40)								
38									33.40	Coal - Drillers Description		123.70					
39									(0.70)								
40									34.10	Mudstone - Drillers Description		123.00					
41									(0.30)								
42									34.40	Coal - Drillers Description		122.70					
43									(1.50)								
44									35.90	Mudstone - Drillers Description		121.20					
45									(8.70)								
46									44.60	Coal - Drillers Description		112.50					
47									(0.40)								
48									45.00	Mudstone - Drillers Description		112.10					
49									(2.00)								
									47.00	Terminated at 47.0mbgl		110.10					
Hole Progress / Water Obs				Casing		Groundwater				Flush							
Date / Time		H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns				
04/07/2022 16:00		47.00	28.00	7.90	28.00	115.00											
05/07/2022 08:00		47.00	28.00	8.00													
Plant: Commachio 600 Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 6.5 Cable Percussive, 6.5 - 47.0mbgl ODEX / Rotary Open Hole																	
		Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk				Operator: QGL		Logged By: P Darby		Sheet No. 2 Of 2		m Per Page 25		All measurements in metres unless otherwise stated			

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. RBH114 CP		
Dates : 5/7/22 - 6/7/22 Location :				Job Number : Q0838 Engineer : Redstart				Ground Level : 161.28 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305559.13 E 204604.39 N <i>Co-ordinates to National Grid</i>				

m B.G.L.	Samples		Insitu Test Results		Strata				Water
	Depth	Type No. Blows	Depth	Test Results	Depth (Thickness)	Description	Legend	Red. Level A.O.D.	
0	0.20 - 0.50 0.20	B1 ES1			(0.20)	Scrub over loose black sandy SILT with rootlets. (TOPSOIL)		(0.20)	
	0.50 - 1.00 0.50	B2 ES2			(0.40)	Dense grey to dark grey sandy angular to subangular fine to coarse GRAVEL of mudstone. (COLLIERY SPOIL)		161.08 (0.40)	
1	1.00 - 1.20 1.00	B B3 ES3				Dense to medium dense grey to dark grey sandy GRAVEL of mudstone and brick. (COLLIERY SPOIL)		160.68	
	1.50	SPT1	1.50	SPT (S) 11 (7-5-4-3-2-2)					
2	2.00 - 2.50 2.00	B4 ES4							
	2.50 - 3.00	B B5			(4.10)			(4.10)	
3	3.00	SPT2 ES5	3.00	SPT (S) 5 (2-1-1-1-2-1)					
4	4.00	ES6							
	4.50	SPT3 B6	4.50	SPT (S) 7 (1-1-1-2-2-2)					
5	5.00	ES7			4.70	Dense grey to dark grey sandy angular to subangular fine to coarse GRAVEL of mudstone. (COLLIERY SPOIL)		156.58	
	5.50 - 6.00	B7							
6	6.00 - 6.50 6.00	SPT4 B8 ES8	6.00	SPT (S) 8 (2-2-2-2-2-2)	(2.80)			(2.80)	
7	7.00 - 7.50 7.00	B9 ES9							
	7.50	SPT5	7.50	SPT (S) 50/70mm (8-50/70mm—)	7.50	Very dense black sandy subangular to subrounded fine to coarse GRAVEL of sandstone with a medium cobble content of subrounded sandstone. (RIVER TERRACE DEPOSITS)		153.78 (1.30)	
8	8.00 - 8.50 8.00	B B10 ES10			(1.30)				
			8.50	SPT (C) 50/70mm (8-50/70mm—)					
9			8.80	SPT (C) 50/40mm (20-50/40mm—)	8.80			152.48	

Hole Progress / Water Obs				Casing		Groundwater				Chiselling		
Date / Time	H. Depth	C. Depth	Water	Depth	Cas. Dia.	Struck	Rose To	Behaviour	Sealed	From	To	Hours
05/07/2022 08:00	0.00			7.50	200.00					8.50	8.80	1:25
05/07/2022 17:00	4.50	3.00										
06/07/2022 08:00	4.50	3.00										
06/07/2022 17:00	8.80	7.50										

Equipment / plant used: Pilcon 1500
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m.
 2.) No Groundwater Encountered

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		JW & AB	T.Goodrick	1 Of 1	10		

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council												Borehole No. RBH114 R	
Dates : 7/7/22 - 8/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 161.28 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305559.13 E 204604.39 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Insitu Tests		Samples		Strata					Water	Install/Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Test Results	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
0									0.20 - 0.50	B1		Progressed using Cable Percussive Drilling Techniques					
1								0.20	ES1								
2								0.50 - 1.00	B2								
3								0.50	ES2								
4								1.00 - 1.20	B3								
5								1.00	ES3								
6								1.50	SPT1								
7								2.00 - 2.50	B4								
8								2.00	ES4								
9								2.50 - 3.00	B5								
10								3.00	SPT2		(9.30)						
11								3.00	ES5								
12								4.00	ES6								
13								4.50	SPT3								
14								4.50 - 5.00	B6								
15								5.00	ES7								
16								5.50 - 6.00	B7								
17								6.00	SPT4								
18								6.00 - 6.50	B8								
19								6.00	ES8								
20								7.00 - 7.50	B9		(9.80)						
21								7.00	ES9								
22								7.50	SPT5								
23								8.00 - 8.50	B10								
24								8.00	ES10								
											9.30						
											(3.70)						
											13.00						
											22.80						

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
05/07/2022 08:00	0.00			7.50	200.00	13.00	11.80	Medium groundwater infow at 13.0mbgl		0.00 - 39.00	Mist	100
05/07/2022 17:00	4.50	3.00		23.50	115.00							
06/07/2022 08:00	4.50	3.00										
06/07/2022 17:00	8.80	7.50										

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 8.8mbgl Cable Percussive Drilling, 8.8 - 39.0mbgl ODEX / Open Hole Drilling

 Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 1 Of 2	m Per Page 25	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council												Borehole No. RBH114 R	
Dates : 7/7/22 - 8/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 161.28 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305559.13 E 204604.39 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Insitu Tests		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Test Results	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
25												Mudstone and Siltstone - Drillers Description	x x x x x x x x x x x x			
26																
27											(8.40)					
28													x x x x x x x x x x x x			
29																
30																
31											31.20	Coal - Drillers Description		130.08		
32											(1.70)					
33											32.90	Mudstone - Drillers Description		128.38		
34																
35											(3.10)					
36											36.00	Siltstone - Drillers Description	x x x x x x x x x x x x	125.28		
37																
38											(3.00)		x x x x x x x x x x x x			
39											39.00	Terminated at 39.0mbgl	x x x x x x x x x x x x	122.28		
40																
41																
42																
43																
44																
45																
46																
47																
48																
49																

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						30.00	13.60	Fast groundwater inflow at 30.0mbgl				

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. GL - 8.8mbgl Cable Percussive Drilling, 8.8 - 39.0mbgl ODEX / Open Hole Drilling

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 2 Of 2	m Per Page 25	All measurements in metres unless otherwise stated	
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Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH102	
Dates : 11/7/22 - 11/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.61 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305698.56 E 204297.88 N <i>Co-ordinates to National Grid</i>		

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0							0.30	ES1	(0.20)	Concrete		151.41		
1							0.50	ES2	0.20	Colliery Spoil - Drillers Description				
							1.00	ES3		at 0.3mbgl PID = 0ppm				
							1.20 - 2.70	ES4		at 0.5mbgl PID = 0ppm				
2									(2.90)	at 1.0mbgl PID = 0ppm				
										at 1.2mbgl PID = 0ppm				
3							2.70 - 4.20	ES5		at 2.7mbgl PID = 0ppm				
4									3.10	Gravel and Boulders - Drillers Description		148.51		
							4.20 - 5.70	ES6	(2.00)	at 4.2mbgl PID = 0ppm				
5									5.10	Sand and Gravel - Drillers Description		146.51		
6							5.70 - 7.20	ES7		at 5.7mbgl PID = 0ppm				
7							7.20 - 8.70	ES21		at 7.2mbgl PID = 0ppm				
8														
9							8.70 - 10.20	ES22		at 8.7mbgl PID = 0ppm				
10							10.20 - 11.70	ES8		at 10.2mbgl PID = 0ppm				
11														
12							11.70 - 13.20	ES9		at 11.7mbgl PID = 0ppm				
13							13.20 - 14.70	ES10		at 13.2mbgl PID = 0ppm				
14														
15							14.70 - 16.20	ES11						
16							16.20 - 17.70	ES12	(21.00)	at 14.7mbgl PID = 0ppm				
17														
18							17.70 - 19.20	ES13		at 17.7mbgl PID = 0ppm				
19														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						5.00	3.90	Medium groundwater inflow at 5.0mbgl		0.00 - 30.00	Mist	100
						14.00	8.60	Fast groundwater inflow at 14.0mbgl				

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By.	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	1 Of 2	20		

Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH102		
Dates : 11/7/22 - 11/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 151.61 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305698.56 E 204297.88 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.				
20																
21																
22																
23																
24																
25																
26										26.10	Mudstone - Drillers Description		125.51			
27										(1.30)						
28										27.40	Coal - Drillers Description		124.21			
29										(1.20)						
30										28.60	Mudstone - Drillers Description		123.01			
31										(1.40)						
32										30.00	Terminated at 30.0mbgl		121.61			
33																
34																
35																
36																
37																
38																
39																

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				27.00	115.00							

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	2 Of 2	20		

Form Name: ROTARY. Version 2.11.000, 22/05/15 Output By: Phil Darby. Library File: C:\USERS\PHIL DARBY\ONEDRIVE - QUANTUM GEOTECHNIC LTD\QUANTUM 4.GLB.

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH103		
Dates : 14/7/22 - 15/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 151.73 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305632.05 E 204236.96 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0							0.30 - 0.60	B	(0.28)	Concrete.		151.45		
							0.30	B1	0.28	Dense dark grey sandy angular coarse GRAVEL of mudstone. (MADE GROUND - COLLIERY SPOIL)				
							0.50	ES1		at 0.3mbgl PID = 0ppm				
1							1.00	ES2		at 0.5mbgl PID = 0ppm				
								ES3		at 1.0mbgl PID = 0ppm				
2									(3.72)					
							2.50	ES4		at 2.5mbgl PID = 0ppm				
3														
4							4.00	ES5	4.00	at 4.0mbgl PID = 0ppm		147.73		
									(0.50)	Dense brown clayey SILT. (ALLUVIUM)				
5							4.78	EW1	4.50	Dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies with a medium cobble content. (RIVER TERRACE DEPOSITS)		147.23		
							5.50	ES6		at 5.5mbgl PID = 0ppm				
6														
7							7.00	ES7		at 7.0mbgl PID = 0ppm				
8														
							8.50	ES8		at 8.5mbgl PID = 0ppm				
9														

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						8.00				0.00 - 28.50	Mist	100

Plant: Commachio 450
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.00m,
 2.) Rotary openhole from 5.00m.

 Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: G Blades	Sheet No. 1 Of 3	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH103		
Dates : 14/7/22 - 15/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.73 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305632.05 E 204236.96 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details						Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.				
10							10.00	ES9		Dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies with a medium cobble content. (RIVER TERRACE DEPOSITS) at 10.0mbgl PID = 0ppm						
11							11.50	ES10		at 11.0mbgl PID = 0ppm						
12							13.00	ES11		at 13.0mbgl PID = 0ppm						
13							14.50	ES12		at 14.5mbgl PID = 0ppm						
14							16.00	ES13		at 16.0mbgl PID = 0ppm						
15							17.50	ES14	(20.70)	at 17.5mbgl PID = 0ppm						
16							19.00	ES15		at 19.0mbgl PID = 0ppm						

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						17.00						

Plant: Commachio 450
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.00m,
2.) Rotary openhole from 5.00m.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By.	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	G Blades	2 Of 3	10		

Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH103		
Dates : 14/7/22 - 15/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.73 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305632.05 E 204236.96 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.				
20							20.50	ES16		Dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies with a medium cobble content. (RIVER TERRACE DEPOSITS) at 20.5mbgl PID = 0ppm						
21																
22							22.00	ES17		at 22.0mbgl PID = 0ppm						
23																
24							23.50	ES18		at 23.5mbgl PID = 0ppm						
25							25.00	ES19		at 25.0mbgl PID = 0ppm						
26									25.20	Strong grey SILTSTONE. (MIDDLE COAL MEASURES FORMATION)		126.53				
27									(3.30)							
28									28.50	Terminated at 28.5mbgl		123.23				
29																

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
				26.70	115.00	24.00						

Plant: Commachio 450
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.00m,
2.) Rotary openhole from 5.00m.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: G Blades	Sheet No. 3 Of 3	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.

IBH103

Dates : 14/7/22 - 15/7/22

Job Number : Q0838

Ground Level : 151.73 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305632.05 E
204236.96 N
Co-ordinates to National Grid



Plas Newydd
Swansea
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Operator:

QGL

Logged By:

G Blades

Sheet No.

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m Per Page

2

All measurements in metres unless otherwise stated



Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council												Borehole No. IBH104	
Dates : 12/7/22 - 12/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 151.78 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305785.69 E 204121.64 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Insitu Tests		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Test Results	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0									0.20 - 0.70	B1	(0.20)	Concrete.				
									0.30	ES1	0.20	Dense dark brown to black and red sandy angular to subangular fine to coarse GRAVEL of brick, slag and clinker. (MADE GROUND) PID = 0ppm PID = 0ppm		151.58		
								0.50	ES	(0.50)						
1								0.70 - 2.70	ES2	0.70					151.08	
							1.2	SPT (C) 29 (3-5-6-7-7-9)		B		Medium dense black gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of slag. (MADE GROUND) PID = 0ppm PID = 0ppm				
								1.00	B2							
									ES							
2							2.7	SPT (C) 23 (6-6-5-7-3-8)		ES3						
3																
4							4.2	SPT (C) 50/80mm (10-15-41-9/5mm-)		ES4	(3.30)	PID = 0ppm Dense brown clayey SILT. (ALLUVIUM)		147.78		
5																
6							5.7	SPT (C) 50/20mm (25/30mm-50/20mm-)		ES5	4.00	Dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies. (RIVER TERRACE DEPOSITS) PID = 0ppm		146.78		
								5.50	ES6	5.00						
								6.50	EW							
7							7.2	SPT (C) 50/140mm (2-7-32-18/65mm-)		ES7	7.00	PID = 0ppm				
8																
9							8.7	SPT (C) 50/160mm (5-9-16-25-9/10mm-)		ES8	8.50	PID = 0ppm				

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
13/07/2022 08:00	0.00					7.50				0.00 - 27.00	Mist	100

Plant: Commachio MC600
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
 2.) Rotary openhole from 5.00m.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: GF & BR	Logged By: T.Goodrick	Sheet No. 1 Of 3	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council												Borehole No. IBH104	
Dates : 12/7/22 - 12/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 151.78 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305785.69 E 204121.64 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Insitu Tests		Samples		Strata					Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Test Results	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
10							10.2	SPT (C) 40/230mm (10-10-10-9-15-6/5mm)	10.00	ES9		Dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies. (RIVER TERRACE DEPOSITS) PID = 0ppm					
11							11.7	SPT (C) 50/180mm (7-6-10-17-23/30mm)	11.50	ES10		PID = 0ppm					
12							13.2	SPT (C) 45 (21-4/5mm-10-11-10-14)	13.00	ES11		PID = 0ppm					
13							14.7	SPT (C) 50/200mm (8-11-13-20-17/50mm)	14.50	ES12	(19.00)	PID = 0ppm					
14							16.2	SPT (C) 50/160mm (6-12-19-21-10/10mm)	16.00	ES13		PID = 0ppm					
15							17.7	SPT (C) 50/160mm (3-18-21-19-10/10mm)	17.50	ES14		PID = 0ppm					
16							19.2	SPT (C) 50/230mm (10-10-11-15-17-7/5mm)	19.00	ES15		PID = 0ppm					
17																	
18																	
19																	

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
13/07/2022 17:00	16.20	16.20				15.00						
14/07/2022 08:00	16.20	16.20										

Plant: Commachio MC600
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
 2.) Rotary openhole from 5.00m.

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		GF & BR	T.Goodrick	2 Of 3	10		

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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH104		
Dates : 12/7/22 - 12/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.78 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305785.69 E 204121.64 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Insitu Tests		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Test Results	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
20												Dense brown sandy subangular to subrounded fine to coarse GRAVEL of mixed lithologies. (RIVER TERRACE DEPOSITS)					
21							20.7	SPT (C) 50/235mm (1-12-12-14-17-7/10mm)	21.50	ES16		PID = 0ppm					
22							22.2	SPT (C) 50/230mm (6-19-12-16-15-7/5mm)	23.00	ES17		PID = 0ppm					
23							23.7	SPT (C) 50/210mm (7-7-17-15-18/60mm)	24.50	ES18		Strong grey SILTSTONE. (MIDDLE COAL MEASURES FORMATION) PID = 0ppm		127.78			
24											(3.00)						
25																	
26																	
27											27.00	Terminated at 27.0mbgl		124.78			
28																	
29																	

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
14/07/2022 17:00	27.00	25.00		25.00	115.00	23.00						

Plant: Commachio MC600
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
2.) Rotary openhole from 5.00m.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By.	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		GF & BR	T.Goodrick	3 Of 3	10		

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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH105		
Dates : 8/7/22 - 9/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.80 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305831.49 E 204088.05 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0							0.20 - 0.50	B1	(0.25)	Concrete		151.55		
1							0.30	ES1	0.25	MADE GROUND - Purplish brown and purple sandy GRAVEL with medium cobble content. Gravel is fine to coarse sub-angular slag. Cobbles are sub-angular slag. at 1.2mbgl PID = 0ppm				
						0.50 - 0.80	B							
						0.50	B2							
						0.80 - 1.00	ES2							
						1.00 - 4.80	B3							
2						1.00	B1		(4.55)	at 2.7mbgl PID = 0ppm				
3						1.20 - 1.40	ES3							
							ES4							
							ES5							
4							4.20 - 4.40	ES6		 below 4.2mbgl black				
5							4.80 - 5.15	ES7	4.80	at 4.25mbgl PID = 0ppm		147.00		
									(0.35)	Soft brown CLAY.		146.65		
6									5.15	at 4.85mbgl PID = 0ppm				
										Sand and Gravel - Drillers Description				
7							6.80	EW1						
							6.89	EW						
							7.20 - 8.70	ES22						
8														
9							8.70 - 10.20	ES8		at 8.7mbgl PID = 0ppm				
10														
							10.20 - 11.70	ES9		at 10.2mbgl PID = 0ppm				
11														
							11.70 - 13.20	ES10		at 11.7mbgl PID = 0ppm				
12														
							13.20 - 14.70	ES11		at 13.2mbgl PID = 0ppm				
13														
							14.70 - 16.20	ES12		at 14.7mbgl PID = 0ppm				
14														
							16.20 - 17.70	ES13		at 16.2mbgl PID = 0ppm				
15									(22.85)					
							17.70 - 19.20	ES14		at 17.7mbgl PID = 0ppm				
16														
							19.20 - 20.70	ES15						

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						8.00				0.00 - 32.10	Mist	100
						14.00						

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. Dynamic Samples 1.2 - 5.15mbgl (refusal). ODEX / Rotary openhole from 5.15mbgl

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 1 Of 2	m Per Page 20	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH106		
Dates : 12/7/22 - 13/7/22 Location :						Job Number : Q0838 Engineer : Redstart				Ground Level : 151.80 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305799.99 E 204064.30 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
0							0.30	ES1	(0.20)	Concrete.		151.60			
							0.50	ES2	0.20	Loose black slightly sandy angular to subangular fine to coarse GRAVEL of slag. (MADE GROUND) at 0.3mbgl PID = 0ppm at 0.5mbgl PID = 0ppm at 1.0mbgl PID = 0ppm					
1							1.00	ES3	(1.75)						
2									1.95	Loose light brown to black sandy angular to subangular fine to coarse GRAVEL of slag. (MADE GROUND) at 2.5mbgl PID = 0ppm loose reddish brown sandy angular to subangular fine to coarse GRAVEL of slag. (MADE GROUND) at 2.70mbgl PID = 0ppm Loose light brown to black and reddish brown sandy angular to subangular fine to coarse GRAVEL of slag. (MADE GROUND) at 3.10mbgl PID = 0ppm		149.85			
							2.50	ES4	(0.75)						
3									2.70			149.10			
									3.10			148.70			
4							4.00	ES5	(2.40)	at 4.0mbgl PID = 0ppm					
5															
							5.50	ES6	5.50	Soft greyish brown to dark brown sandy SILT. (ALLUVIUM) at 5.5mbgl PID = 0ppm Soft brown sandy gravelly SILT. Gravel is subangular to rounded fine to coarse of mixed lithologies. (ALLUVIUM) DENSE GRAVEL. (RIVER TERRACE DEPOSITS) Logged from openhole chippings. at 7.0mbgl PID = 0ppm	x x	146.30			
6									5.70			x x	146.10		
									(0.30)			x x	145.80		
									6.00						
7							6.86	EW1		DENSE GRAVEL. (RIVER TERRACE DEPOSITS) Logged from openhole chippings. at 7.0mbgl PID = 0ppm					
							6.90	EW							
							6.98	EW2							
							7.00	ES7							
8															
							8.50	ES8		at 8.5mbgl PID = 0ppm					
9															
									9.50	GRAVEL. (RIVER TERRACE DEPOSITS) Logged from openhole chippings.		142.30			

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						7.00				0.00 - 33.00	Mist	100

Plant: Commachio MC 600
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
 2.) Refusal at 5.90m,
 3.) Rotary openhole follow on.

 Quantum Geotech Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: GP & BR	Logged By: T.Goodrick	Sheet No. 1 Of 4	m Per Page 10	All measurements in metres unless otherwise stated	 AGS
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH106		
Dates : 12/7/22 - 13/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.80 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305799.99 E 204064.30 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
10							10.00	ES9		GRAVEL. (RIVER TERRACE DEPOSITS) Logged from openhole chippings. at 10.0mbgl PID = 0ppm				
11							11.50	ES10		at 11.5mbgl PID = 0ppm				
12							13.00	ES11		at 13.0mbgl PID = 0ppm				
13									(8.00)					
14							14.50	ES12		at 14.5mbgl PID = 0ppm				
15							16.00	ES13		at 16.0mbgl PID = 0ppm				
16							17.50	ES14	17.50	at 17.5mbgl PID = 0ppm		134.30		
18									(0.90)	SAND & GRAVEL. (RIVER TERRACE DEPOSITS) Logged from openhole chippings.				
19							18.40		18.40	GRAVEL. (RIVER TERRACE DEPOSITS) Logged from openhole chippings.		133.40		
							19.00	ES15		at 19.0mbgl PID = 0ppm				

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						15.00						

Plant: Commachio MC 600
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
 2.) Refusal at 5.90m,
 3.) Rotary openhole follow on.

 Quantum Geotech Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: GP & BR	Logged By: T.Goodrick	Sheet No. 2 Of 4	m Per Page 10	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council											Borehole No. IBH106		
Dates : 12/7/22 - 13/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.80 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305799.99 E 204064.30 N <i>Co-ordinates to National Grid</i>			

m B.G.L.	Run Details					Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.			
20							20.50	ES16		GRAVEL. (RIVER TERRACE DEPOSITS) Logged from openhole chippings. at 20.5mbgl PID = 0ppm					
21															
22							22.00	ES17		at 22.0mbgl PID = 0ppm					
23															
24							23.50	ES18		at 23.5mbgl PID = 0ppm					
25							25.00	ES19	(11.60)	at 25.0mbgl PID = 0ppm					
26															
27															
28															
29															

Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						29.00						

Plant: Commachio MC 600
Remarks: 1.) PAS survey undertaken prior to breaking ground. Hand pit dug to 1.20m,
2.) Refusal at 5.90m,
3.) Rotary openhole follow on.

	Plas Newydd Swansea Tel : 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By.	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		GP & BR	T.Goodrick	3 Of 4	10		

Contract : Hoover Candy Factory

Client : Merthyr Tydfil County Borough Council

Borehole No.

IBH106

Dates : 12/7/22 - 13/7/22

Job Number : Q0838

Ground Level : 151.80 m A.O.D.
Level to Ordnance Datum

Location :

Engineer : Redstart

Coordinates: 305799.99 E
204064.30 N
Co-ordinates to National Grid



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Swansea
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GP & BR

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T.Goodrick

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m Per Page
2

All measurements in
metres unless
otherwise stated



Contract : Hoover Candy Factory Client : Merthyr Tydfil County Borough Council										Borehole No. IBH107	
Dates : 11/7/22 - 12/7/22 Location :					Job Number : Q0838 Engineer : Redstart					Ground Level : 151.79 m A.O.D. <i>Level to Ordnance Datum</i> Coordinates: 305812.12 E 204073.67 N <i>Co-ordinates to National Grid</i>	

m B.G.L.	Run Details				Fractures		Samples		Strata				Water	Install/ Backfill
	Core Run	TCR %	SCR %	RQD %	Min Avg Max	FI	Depth	Type No. Blows	Depth (Thickness)	Description	Legend	Red. Level A.O.D.		
0							0.30	ES1	(0.30)	Concrete		151.49		
1							0.50	ES2	0.30	at 0.3mbgl PID = 0ppm				
2							1.00	ES3		MADE GROUND - Orange and black sandy GRAVEL with low cobble content. Gravel is fine to coarse sub-angular to angular slag and brick. Cobbles are angular slag.				
3							1.20 - 1.40	B						
4							1.20 - 4.20	ES						
5							1.20 - 1.40	B1	(4.10)	at 0.5mbgl PID = 0ppm at 1.0mbgl PID = 0ppm at 1.2mbgl PID = 0ppm at 2.7mbgl PID = 0ppm				
6							2.70 - 2.90	ES						
7							4.20 - 4.40	ES6	4.40	at 4.2mbgl PID = 0ppm		147.39		
8							4.80 - 5.00	ES	(0.40)	MADE GROUND - Black GRAVEL with low cobble content. Gravel is fine to coarse angular Slag. Cobbles are angular Slag.		146.99		
9							4.80 - 6.15	B2	4.80	at 4.8mbgl PID = 0ppm				
10							4.80 - 5.00	ES7	(1.35)					
11							6.15 - 6.20	ES	6.15	MADE GROUND - Soft to firm dark greyish brown slightly gravelly CLAY. Gravel is fine to coarse angular to sub-angular mudstone and occasional clinker.		145.64		
12							6.20 - 7.20	ES8	(0.05)	at 6.15mbgl PID = 0ppm		145.59		
13							6.89	EW1	6.20	Reddish brown gravelly CLAY. Gravel is fine to coarse rounded sandstone.				
14							6.94	EW	(2.80)	at 6.2mbgl PID = 0ppm				
15							7.20 - 8.70	ES10		Dense Gravel - Drillers Description at 7.2mbgl PID = 0ppm at 8.7mbgl PID = 0ppm		142.79		
16							8.70 - 10.20	ES11	9.00	Gravel - Drillers Description at 10.2mbgl PID = 0ppm				
17							10.20 - 11.70	ES12		at 11.7mbgl PID = 0ppm				
18							11.70 - 13.20	ES13		at 13.2mbgl PID = 0ppm				
19							13.20 - 14.70	ES14	(8.20)	at 14.7mbgl PID = 0ppm				
20							14.70 - 16.20	ES15		at 16.2mbgl PID = 0ppm				
21							16.20 - 17.70	ES16		Sand - Drillers Description at 17.7mbgl PID = 0ppm		134.59		
22							17.70 - 19.20	ES17	(1.30)	Gravel - Drillers Description at 19.2mbgl PID = 0ppm		133.29		
23							19.20 - 20.70	ES18						

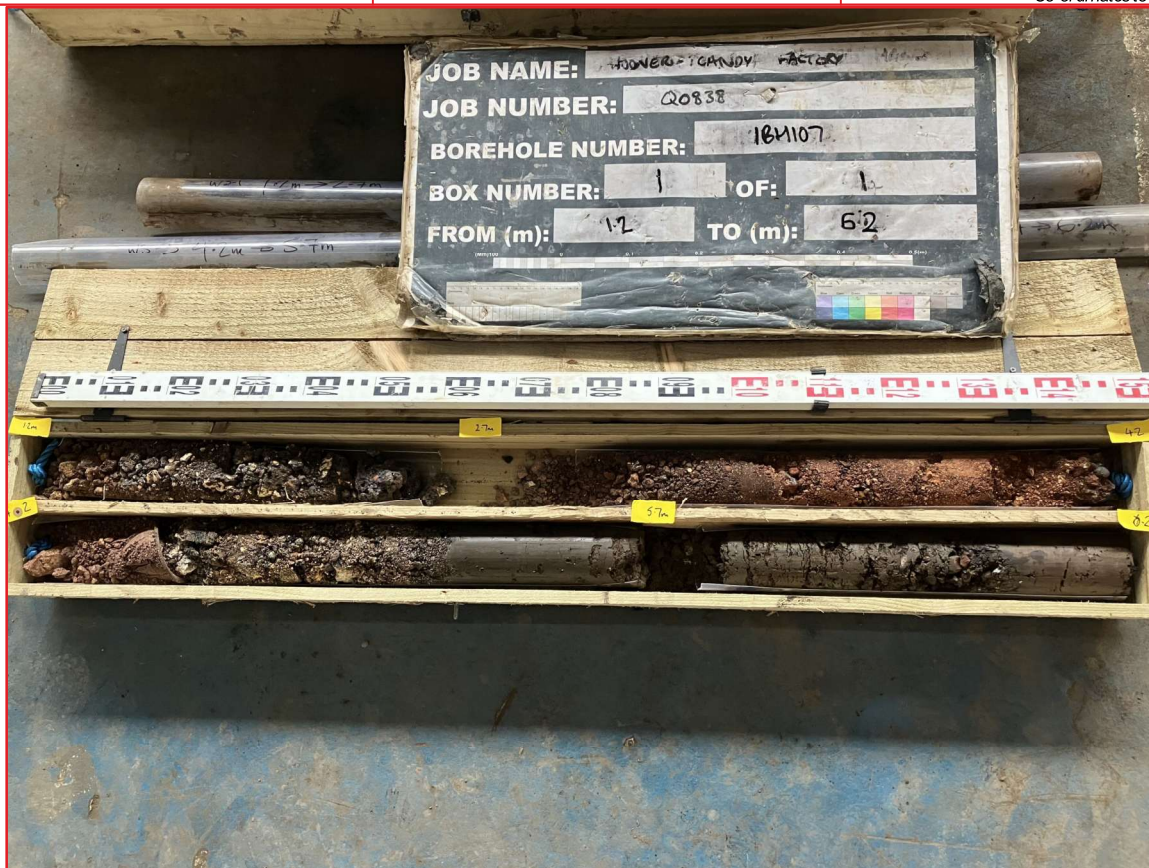
Hole Progress / Water Obs				Casing		Groundwater				Flush		
Date / Time	H. Depth	C. Depth	Water	Depth	Diam.	Struck	Rose To	Behaviour	Sealed	Depth	Type	Returns
						7.50				0.00 - 32.00	Mist	100
						15.00						

Plant: Commachio 600
Remarks: PAS survey undertaken prior to breaking ground. Hand excavated service clearance pit undertaken to 1.2mbgl. Dynamic Samples 1.2 - 6.5mbgl (refusal). ODEX / Rotary openhole from 6.5mbgl

	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator: QGL	Logged By: P Darby	Sheet No. 1 Of 2	m Per Page 20	All measurements in metres unless otherwise stated	
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Contract : Hoover Candy Factory		Borehole No.
Client : Merthyr Tydfil County Borough Council		IBH107
Dates : 11/7/22 - 12/7/22	Job Number : Q0838	Ground Level : 151.79 m A.O.D. <i>Level to Ordnance Datum</i>
Location :	Engineer : Redstart	Coordinates: 305812.12 E 204073.67 N <i>Co-ordinates to National Grid</i>



	Plas Newydd Swansea Tel: 01554744880 email: enquiries@quantumgeotechnic.co.uk	Operator:	Logged By:	Sheet No.	m Per Page	All measurements in metres unless otherwise stated	
		QGL	P Darby	1 Of 1	2		

APPENDIX H

GROUNDWATER AND GROUND GAS MONITORING DATA

WATER QUALITY READINGS**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	CP101
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	8.00	5.0-8.0



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	07/07/2022		0.5	12.30	16.7	787.0	7.1	-22.5	160		5.44		8.00				Water quality reading 0.5 x Well Volume- Temp 12.3, DO% 16.7, SPC 787, pH 7.06, pHmv -22.50, ORPmv 160.3
			1	12.00	31.2	784.0	7.0	-20.7	158		5.53		7.89				Water quality reading 1.0 x Well Volume- Temp 12.0, DO% 31.2, SPC 784, pH 7.02, pHmv -20.70, ORPmv 158
			2	11.60	38.7	783.0	7.0	-22.0	155								Water quality reading 2.0 x Well Volume- Temp 11.6, DO% 38.7, SPC 783, pH 7.04, pHmv -22.00, ORPmv 155.4
			3	11.70	17.7	786.0	7.1	-22.9	159								Water quality reading 3.0 x Well Volume- Temp 11.7, DO% 17.7, SPC 786, pH 7.06, pHmv -22.90, ORPmv 159

WATER QUALITY READINGS**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	CP102
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	7.90	4.50-7.90



Pipe	Date		X	Temp	DO	SPC	pH	pHmv	ORP		Water Level		HoleDepth		Local Weather		Remarks
			Well Volume	°C	%				mv		mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	28/07/2022		0.5	12.20	28.5	682.0	7.1	-26.6	149		5.44		7.60				
			1	12.00	24.5	687.0	7.1	-27.1	147								
			2	11.60	66.1	681.0	7.2	-30.1	148								
			3	11.60	25.8	675.0	7.2	-30.0	148								

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	CP103
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	6.20	1.00-6.20

[illegible]

WATER QUALITY READINGS**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH101
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP		



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022		0.5	14.00	73.5	1135.0	7.3	-37.4	168		5.13		8.20				
			1	13.00	25.8	1152.0	7.2	-28.1	172								
			2	12.60	23.1	1154.0	7.2	-25.3	167								
			3	12.80	76.0	1162.0	7.0	-21.1	162								
A	02/08/2022			14.06	28.7	1211.0	7.2	-33.3	127		5.20		8.16				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH102
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	25.00	22.00 - 25.00
	B	30mm SP	8.50	5.50 - 8.50



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022		0.5	12.80	98.9	1276.0	7.6	-49.3	116		5.33		25.43				
			1	12.50	12.6	1272.0	7.0	-19.3	120								
			2	12.30	11.0	1271.0	6.9	-12.5	121								
			3	12.50	12.5	1270.0	6.9	-14.4	121								
B	29/07/2022										DRY		8.50				
A	02/08/2022			13.05	27.8	1260.0	5.9	-13.6	113		5.37		24.97				
B	02/08/2022										DRY						

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH103
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	12.00	6.0-12.50



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	07/07/2022		0.5	12.80	98.9	1276.0	7.6	-33.7	142		6.20		12.00				Water quality reading 0.5 x Well Volume- Temp 12.8, DO% 98.9, SPC 1276, pH 7.58, pHmv -33.70, ORPmv 141.60
A	26/07/2022		1	12.60	31.6	1102.0	7.0	-21.9	143		6.24		12.50				Water quality reading 1.0 x Well Volume- Temp 12.6, DO% 31.6, SPC 1102, pH 7.04, pHmv -21.90, ORPmv 143.30
			2	12.50	22.8	1099.0	7.0	-17.6	140								Water quality reading 2.0 x Well Volume- Temp 12.5, DO% 22.8, SPC 1099, pH 6.96, pHmv -17.60, ORPmv 140
			3	12.60	28.1	1098.0	7.0	-19.1	136								Water quality reading 3.0 x Well Volume- Temp 12.6, DO% 28.1, SPC 1098, pH 6.99, pHmv -19.10, ORPmv 135.80
A	02/08/2022			15.30	51.5	534.0	7.1	-24.4	139		6.25		12.50				Water quality reading - Temp 15.3, DO% 51.5, SPC 534, pH 7.08, pHmv -24.40, ORPmv 139.20

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH104
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	36.50	34.0-36.5
	B	30mm SP	8.00	6.0-8.0



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	07/07/2022		0.5	12.60	47.7	1102.0	7.3	-33.7	142		5.53		36.50				
			1	12.60	31.6	1102.0	7.0	-21.9	143								
			2	12.50	22.8	1099.0	7.0	-17.6	140								
			3	12.60	28.1	1098.0	7.0	-19.1	136								
B	07/07/2022										5.60		8.00				
A	29/07/2022										5.80		27.00				
B	29/07/2022										5.90		7.80				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH105 (Construction Site)
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	15.00	13.00 - 15.00



Pipe	Date		X	Temp	DO	SPC	pH	pHmv	ORP		Water Level		HoleDepth		Local Weather		Remarks
			Well Volume	°C	%				mv		mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022		0.5	13.60	49.7	1112.0	7.4	-35.2	144		5.30		14.50				
			1	12.90	32.6	1100.0	7.1	-25.8	141								
			2	12.50	25.8	1099.0	7.0	-16.9	139								
			3	12.50	28.1	1089.0	7.0	-19.5	136								
A	03/08/2022			13.40	27.0	770.0	7.1	-23.9	148		5.41		14.66				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH106
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	14.00	11.00 - 14.00
	B	30mm SP	7.00	4.00 - 7.00



Pipe	Date		X	Temp	DO	SPC	pH	pHmv	ORP		Water Level		HoleDepth		Local Weather		Remarks
			Well Volume	°C	%				mv		mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022		0.5	13.60	49.7	865.0	7.4	-35.2	144		5.70		13.90				
			1	13.00	40.6	840.0	7.1	-25.8	141								
			2	12.50	35.8	829.0	7.0	-18.2	139								
			3	12.50	28.1	779.0	7.0	-19.5	136								
A	02/08/2022			14.50	46.7	711.0	7.1	-23.8	140		5.86		13.70				
B	02/08/2022			14.30	49.0	712.0	7.1	-24.6	141		5.56		6.95				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH107
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	12.50	7.00 - 12.50
	B	30mm SP	6.50	5.50 - 6.50



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022		0.5	12.80	90.4	1218.0	6.9	-16.3	135		5.40		12.50				
			1	12.70	37.3	1218.0	6.8	-9.6	137								
			2	12.60	40.5	1223.0	6.8	-9.3	137								
			3	12.70	89.2	1232.0	6.8	-8.0	137								
B	29/07/2022										5.57		6.50				
A	03/08/2022			13.09	32.1	1179.0	6.8	-7.3	135		5.41		12.41				
B	03/08/2022			15.10	44.3	1240.0	6.8	-10.8	162		5.59		6.44				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH108A
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	12.50	7.00 - 12.50



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022		0.5	12.80	90.4	1218.0	6.9	-16.3	135		5.40		12.50				
			1	12.70	37.3	1218.0	6.8	-9.6	137								
			2	12.60	40.5	1223.0	6.8	-9.3	137								
			3	12.70	89.2	1232.0	6.8	-8.0	137								
A	03/08/2022			15.10	44.3	1240.0	6.8	-10.8	162		5.41		12.50				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH109
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	25.00	24.0-25.0
	B	30mm SP	13.00	12.0-13.0



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	07/07/2022		0.5	13.10	2.5	1304.0	7.2	-29.2	110		8.30		25.00				
B	07/07/2022		1	12.80	5.2	1295.0	7.1	-27.4	98		8.43		13.00				
A	29/07/2022		2	12.90	3.1	1292.0	7.1	-22.4	88		8.54		23.60				
B	29/07/2022		3	12.90	2.1	1290.0	7.1	-23.7	73		8.66		12.95				
A	02/08/2022			17.03	28.5	1331.0	7.0	-16.9	132		8.75		24.11				
B	02/08/2022			17.00	21.8	1332.0	7.0	-22.9	110		8.89		12.97				

WATER QUALITY READINGS**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH110 (Car Park)
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	25.00	23.00 - 25.00



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	01/08/2022		0.5	13.20	12.2	1018.0	7.4	-39.6	75		14.09		24.60				
			1	12.70	7.0	871.0	7.6	-52.2	70								
			2	12.80	5.6	869.0	7.6	-52.2	67								
			3	12.70	5.4	867.0	7.6	-51.1	64								
A	02/08/2022										DRY		24.60				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH111
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	11.00	9.0-11.0

[illegible]

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH112 (Car Park)
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	38.00	37.00 - 38.00
	B	30mm SP	13.00	12.00 - 13.00



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	01/08/2022		0.5	13.10	41.8	766.0	7.7	-57.4	121		11.75		38.50				
			1	13.50	42.1	764.0	7.6	-51.6	118								
			2	13.30	38.9	727.0	7.6	-51.5	115								
			3	13.20	38.6	707.0	7.6	-50.4	109								
B	01/08/2022										DRY		8.50				
A	02/08/2022										DRY						
B	02/08/2022										DRY		8.50				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH113A
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	27.00	25.0-27.0
	B	30mm SP	11.00	9.0-11.0



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	07/07/2022		0.5	17.00	60.5	1004.0	7.2	-28.2	120		7.90		27.00				
			1	16.80	55.2	995.0	7.1	-26.4	118								
			2	16.90	53.1	892.0	7.1	-23.4	119								
			3	16.90	52.1	890.0	7.1	-22.7	117								
B	07/07/2022										7.86		11.00				
A	01/08/2022			17.50	45.5	806.0	7.0	-21.2	108		7.87		26.40				
B	01/08/2022										7.86		11.10				
A	02/08/2022			117.70	37.2	811.0	7.0	-210.0	125		7.85		26.50				
B	02/08/2022										7.86		11.12				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH114
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	14.00	10.00 - 14.00



Pipe	Date		X	Temp	DO	SPC	pH	pHmv	ORP		Water Level		HoleDepth		Local Weather		Remarks
			Well Volume	°C	%				mv		mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022		0.5	13.90	11.6	1075.0	6.9	-12.8	138		11.31		12.50				
			1	13.50	11.2	1074.0	6.9	-11.1	138								
			2	13.20	14.0	1071.0	6.9	-11.3	136								
			3	13.00	12.4	1070.0	6.9	-11.0	135								
A	02/08/2022										DRY		12.77				

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	IBH102
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	26.00	23.00 - 26.00

[illegible]

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	IBH103
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	16.00	13.00 - 16.00



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	01/08/2022		0.5	16.40	37.4	1008.0	6.9	-33.6	137		4.83		13.65				
			1	16.20	36.1	1002.0	7.0	-29.7	137								
			2	16.10	35.8	1001.0	7.0	-28.7	136								
			3	16.20	37.2	982.0	7.0	-28.6	136								
A	03/08/2022			17.10	36.1	938.0	7.1	-24.6	148		4.78		13.50				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	IBH104
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	24.00	21.00 - 24.00
	B	30mm SP	8.00	7.00 - 8.00



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										6.42		23.23				
B	26/07/2022										6.69		7.77				
A	01/08/2022										6.44		23.23				
B	01/08/2022										6.70		7.84				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	IBH105
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	28.00	25.00 - 28.00

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WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	IBH106
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	30.00	27.00 - 30.00
	B	30mm SP	9.50	6.00 - 9.50



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										6.84		29.95				
B	26/07/2022										6.90		8.98				
A	01/08/2022										6.84		30.00				
B	01/08/2022										6.93		9.05				

WATER QUALITY READINGS

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	IBH107
Instruments Used:	Peristaltic Pump, TSI Pro Plus

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP		
	B	30mm SP		



Pipe	Date		X Well Volume	Temp °C	DO %	SPC	pH	pHmv	ORP mv		Water Level		HoleDepth		Local Weather		Remarks
											mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										6.75		26.66				
B	26/07/2022										6.89		8.85				
A	01/08/2022										6.90		26.70				
B	01/08/2022										6.90		8.90				

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	WS102
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	2.00	1.00 - 2.00



Pipe	Date	Time (24hrs)	Atmos	Differential	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			Pressure mBar	Well Pressure mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										DRY		1.90		Dry	Dry	
A	09/08/2022		1018	0.09	0.2	0.0	0.1	19.8	0	0	DRY		1.90		Dry	Dry	
A	17/08/2022		998	-0.07	0.1	0.0	0.1	20.8	0	0	DRY		1.90		Dry	Dry	
A	23/08/2022		995	0.04	0.1	0.0	0.1	20.5	0	0	DRY		1.90		Dry	Dry	

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	WS117
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	1.70	1.00 - 1.7



Pipe	Date	Time (24hrs)	Atmos	Differential	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			Pressure mBar	Well Pressure mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										DRY		1.48		Dry	Dry	
A	09/08/2022		1018	0.09	0.2	0.0	0.1	20.1	0	0	DRY		1.48		Dry	Dry	
A	17/08/2022		998	-0.07	0.1	0.0	0.1	20.8	0	0	DRY		1.48		Dry	Dry	
A	23/08/2022		995	0.04	0.1	0.0	0.1	19.9	0	0	DRY		1.48		Dry	Dry	

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	WS128
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	4.57	3.00 - 4.57



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										DRY		4.00		Dry	Dry	
A	09/08/2022		1018	0.09	0.2	0.0	0.1	20.1	0	0	DRY		4.00		Dry	Dry	
A	17/08/2022		998	-0.07	0.1	0.0	0.1	20.8	0	0	DRY		4.00		Dry	Dry	
A	23/08/2022		995	0.04	0.1	0.0	0.1	20.8	0	0	DRY		4.00		Dry	Dry	

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	WS121
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	4.00	1.00 - 4.00



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										DRY		3.74		Dry	Dry	
A	09/08/2022		1018	0.09	0.2	0.0	0.1	20.1	0	0	DRY		3.74		Dry	Dry	
A	17/08/2022		998	-0.07	0.1	0.0	0.1	20.8	0	0	DRY		3.74		Dry	Dry	
A	23/08/2022		995	0.04	0.1	0.0	0.3	21.1	0	0	DRY		3.74		Dry	Dry	

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	WS129
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	5.00	1.00 - 5.00



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										DRY		4.74		Dry	Dry	
A	09/08/2022		1018	0.09	0.1	0.0	0.2	19.7	0	0	DRY		4.74		Dry	Dry	
A	17/08/2022		998	-0.07	0.1	0.0	0.1	20.8	0	0	DRY		4.74		Dry	Dry	
A	23/08/2022		995	0.04	0.1	0.0	0.1	19.9	0	0	DRY		4.74		Dry	Dry	

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	WS130
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	4.00	1.00 - 4.00



Pipe	Date	Time (24hrs)	Atmos	Differential	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			Pressure mBar	Well Pressure mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										DRY		3.80		Dry	Dry	
A	09/08/2022		1018	0.09	0.1	0.1	0.1	19.9	0	0	DRY		3.80		Dry	Dry	
A	17/08/2022		998	-0.07	0.1	0.0	0.1	20.8	0	0	DRY		3.80		Dry	Dry	
A	23/08/2022		995	0.04	0.1	0.0	0.1	20.0	0	0	DRY		3.80		Dry	Dry	

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	WS132
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
	A	50mm SP	6.20	4.00 - 6.20



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	07/07/2022										4.80		5.68		Dry	Dry	
A	09/08/2022		1018	0.09	0.2	0.1	0.1	19.7	0	0	5.10		5.68		Dry	Dry	
A	17/08/2022		998	-0.07	0.1	0.0	0.1	20.8	0	0	DRY		5.68		Dry	Dry	
A	23/08/2022		995	0.04	0.1	0.0	0.4	19.9	0	0	DRY		5.68		Dry	Dry	

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
149.86	A	50mm SP	8.00	5.0-8.0

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
149.78	A	50mm SP	7.90	4.50-7.90

[illegible]

LANDGAS & GROUNDWATER MONITORING RECORD SHEET

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	CP103
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
150.85	A	50mm SP	6.20	1.00-6.20



Pipe	Date	Time (24hrs)	Atmos	Differential	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			Pressure mBar	Well Pressure mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										6.08	144.77	6.10	144.75	Dry	Dry	
A	09/08/2022		1018	-0.02	0.0	0.0	1.1	18.0	0	0	Dry		5.99	144.86	Dry	Dry	
A	16/08/2022		992	-0.02	0.1	0.0	1.8	18.2	0	0	Dry		6.01	144.84	Dry	Dry	
A	23/08/2022		995	0.04	0.0	0.0	2.1	17.9	0	0	Dry		6.01	144.84	Dry	Dry	

LANDGAS & GROUNDWATER MONITORING RECORD SHEET

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	CP106A
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.61	A	50mm SP	3.80	1.0 - 3.8

[illegible]

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH101
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
149.4	A	50mm SP		



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022										5.13	144.27	8.20	141.20	Dry	Dry	
A	09/08/2022		1018	-0.04	-0.1	0.0	0.2	19.5	0	0	5.16	144.24	8.15	141.25	Dry	Dry	
A	17/08/2022		998	-0.02	0.1	8.8	1.4	8.0	0	0	5.14	144.26	8.16	141.24	Dry	Dry	
A	23/08/2022		995	-0.05	0.1	2.4	0.9	15.8	0	0	5.17	144.23	8.17	141.23	Dry	Dry	

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.65	A	50mm SP	25.00	22.00 - 25.00
	B	30mm SP	8.50	5.50 - 8.50

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.00	A	50mm SP	12.00	6.0-12.50

[illegible]

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH104
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.03	A	50mm SP	36.50	34.0-36.5
	B	30mm SP	8.00	6.0-8.0

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
149.56	A	50mm SP	15.00	13.00 - 15.00

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.35	A	50mm SP	14.00	11.00 - 14.00
	B	30mm SP	7.00	4.00 - 7.00

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.63	A	50mm SP	12.50	7.00 - 12.50
	B	30mm SP	6.50	5.50 - 6.50

[illegible]

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH108A
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.62	A	50mm SP	12.50	7.00 - 12.50



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022										5.40	146.22	12.50	139.12	Dry	Dry	
A	10/08/2022		1015	0.04	0.2	0.0	1.0	19.0	0	0	5.48	146.14	12.43	139.19	Dry	Dry	
A	16/08/2022		997	0.04	0.2	0.0	0.7	19.1	0	0	5.47	146.15	12.43	139.19	Dry	Dry	
A	23/08/2022		995	0.09	0.1	0.0	1.0	18.5	0	0	5.46	146.16	12.40	139.22	Dry	Dry	

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
156.39	A	50mm SP	25.00	24.0-25.0
	B	30mm SP	13.00	12.0-13.0

[illegible]

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH110 (Car Park)
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
157.22	A	50mm SP	25.00	23.00 - 25.00



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	01/08/2022										14.09	143.13	24.60	132.62	Dry	Dry	
A	09/08/2022		1017	-0.04	-0.1	0.0	0.1	20.7	0.0	0.0	14.12	143.10	25.20	132.02	Dry	Dry	
A	16/08/2022		992	0.07	0.1	0.0	0.2	20.1	0.0	0.0	14.12	143.10	25.45	131.77	Dry	Dry	
A	23/08/2022		995	-0.05	0.0	0.0	0.5	20.3	0.0	0.0	14.16	143.06	25.22	132.00	Dry	Dry	

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
157.28	A	50mm SP	11.00	9.0-11.0

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
163.2	A	50mm SP	38.00	37.00 - 38.00
	B	30mm SP	13.00	12.00 - 13.00

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
157.1	A	50mm SP	27.00	25.0-27.0
	B	30mm SP	11.00	9.0-11.0

[illegible]

LANDGAS & GROUNDWATER MONITORING RECORD SHEET**Page 1 of 1**

Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	RBH114
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
161.28	A	50mm SP	14.00	10.00 - 14.00



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	29/07/2022										11.31	149.97	12.50	148.78	Dry	Dry	
A	10/08/2022		1011	0.04	0.1	0.0	0.8	19.2	0	0	11.32	149.96	12.76	148.52	Dry	Dry	
A	16/08/2022		997	0.05	0.2	0.0	0.8	18.1	0	0	11.30	149.98	12.77	148.51	Dry	Dry	
A	23/08/2022		995	-0.04	0.1	0.0	0.8	18.1	0	0	11.33	149.95	12.78	148.50	Dry	Dry	

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.65	A	50mm SP		

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.73	A	50mm SP	16.00	13.00 - 16.00

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.78	A	50mm SP	24.00	21.00 - 24.00
	B	30mm SP	8.00	7.00 - 8.00

[illegible]

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.8	A	50mm SP	28.00	25.00 - 28.00

[illegible]

LANDGAS & GROUNDWATER MONITORING RECORD SHEET

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Project Name:	Hoover Factory
Project No.:	Q0838
BH/TP No.:	IBH106
Instruments Used:	Water Dip Meter Probe, GA2000 Gas Analyser

Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.8	A	50mm SP	30.00	27.00 - 30.00
	B	30mm SP	9.50	6.00 - 9.50



Pipe	Date	Time (24hrs)	Atmos Pressure	Differential Well Pressure	Flow	CH ₄	CO ₂	O ₂	CO	H ₂ S	Water Level		HoleDepth		Local Weather		Remarks
			mBar	mBar	L/hr	%	%	%	ppm	ppm	mbgl	mAOD	mbgl	mAOD	Recent	Current	
A	26/07/2022										6.84	144.96	29.95	121.85	Dry	Dry	
B	26/07/2022										6.90	144.90	8.98	142.82	Dry	Dry	
A	01/08/2022										6.84	144.96	30.00	121.80	Dry	Dry	
B	01/08/2022										6.93	144.87	9.05	142.75	Dry	Dry	
A	10/08/2022		1022	0.04	0.1	0.0	0.3	20	0.0	0.0	6.85	144.95	29.98	121.8	Dry	Dry	
B	10/08/2022		1022	0.04	0.1	0.0	0.2	20.1	0.0	0.0	6.96	144.84	8.98	142.82	Dry	Dry	
A	17/08/2022		997	-0.05	0.1	0.0	0.7	19.8	0.0	0.0	6.87	144.93	29.98	121.82	Dry	Dry	
B	17/08/2022		997	-0.05	0.1	0.0	0.8	19.5	0.0	0.0	6.95	144.85	8.98	142.82	Dry	Dry	
A	23/08/2022		1002	-0.05	0.1	0.0	0.9	19.6	0.0	0.0	6.90	144.9	29.98	121.82	Dry	Dry	
B	23/08/2022		1002	-0.05	0.1	0.0	1.0	19.2	0.0	0.0	6.98	144.82	8.99	142.81	Dry	Dry	

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Installation Date:				
GL (mAOD)	Pipe	Type	Installation Depth (mbgl)	Response Zone (mbgl)
151.79	A	50mm SP		
	B	30mm SP		

[illegible]

FIGURES

Site Location

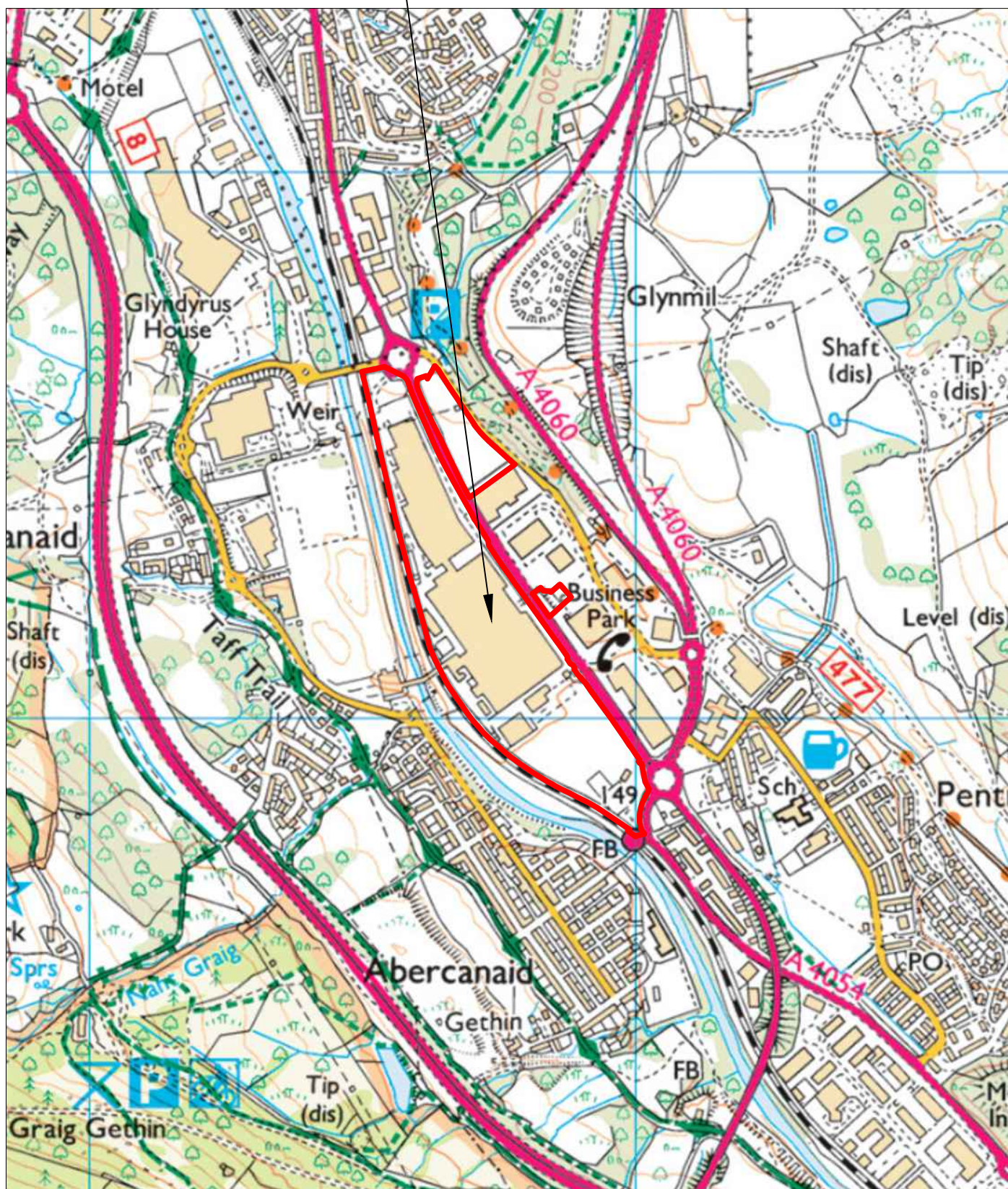


Figure 1: Site Location

Project: Former Hoover Candy Site, Merthyr Tydfil

Job no.: 14275

Client: Walters Land Limited

Scale: 1:10,000 at A4

Intégral
Géotechnique

Integral House,
7 Beddau Way,
Castlegate Business Park,
Caerphilly,
CF83 2AX.
Tel: 029 2080 7991

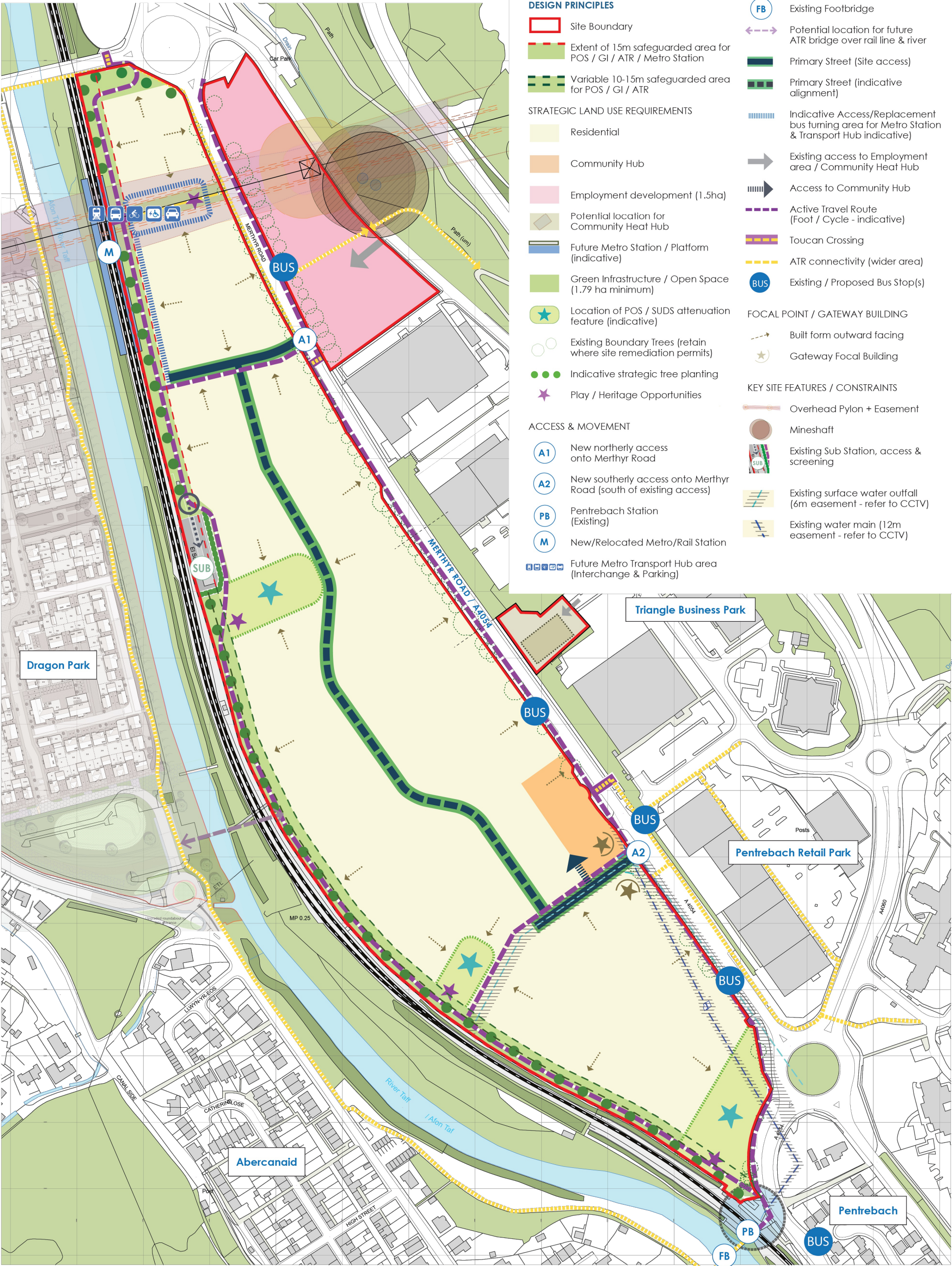


Figure 3: Indicative Masterplan

Project: Former Hoover Candy Site, Merthyr Tydfil

Client: Walters Land Limited

Job No.: 14275

Scale: NTS

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Integral House,
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Castlegate Business Park,
Caerphilly,
CF83 2AX.
Tel: 029 2080 7991

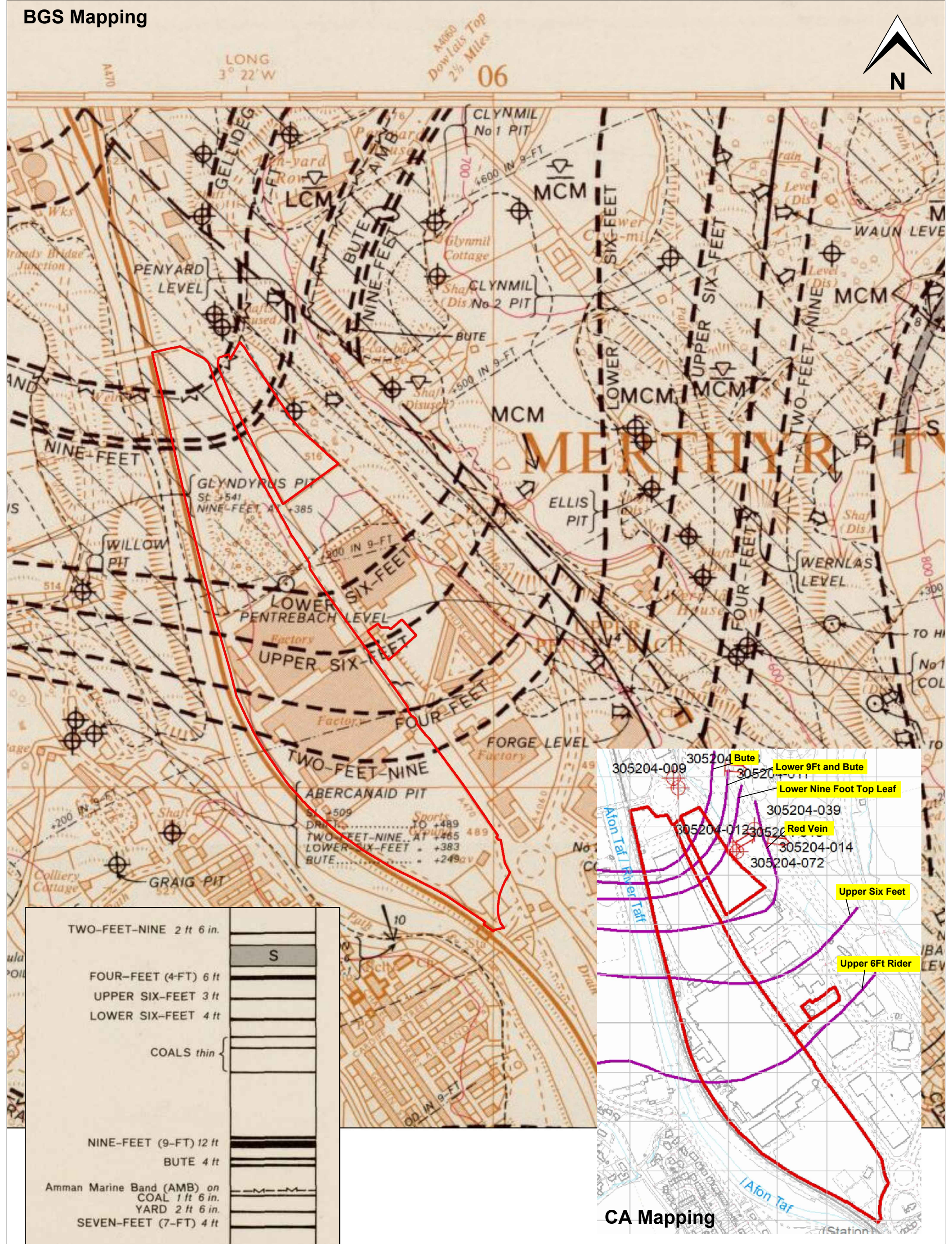


Figure 4: Geological Map (including Coal Authority seam outcrops)

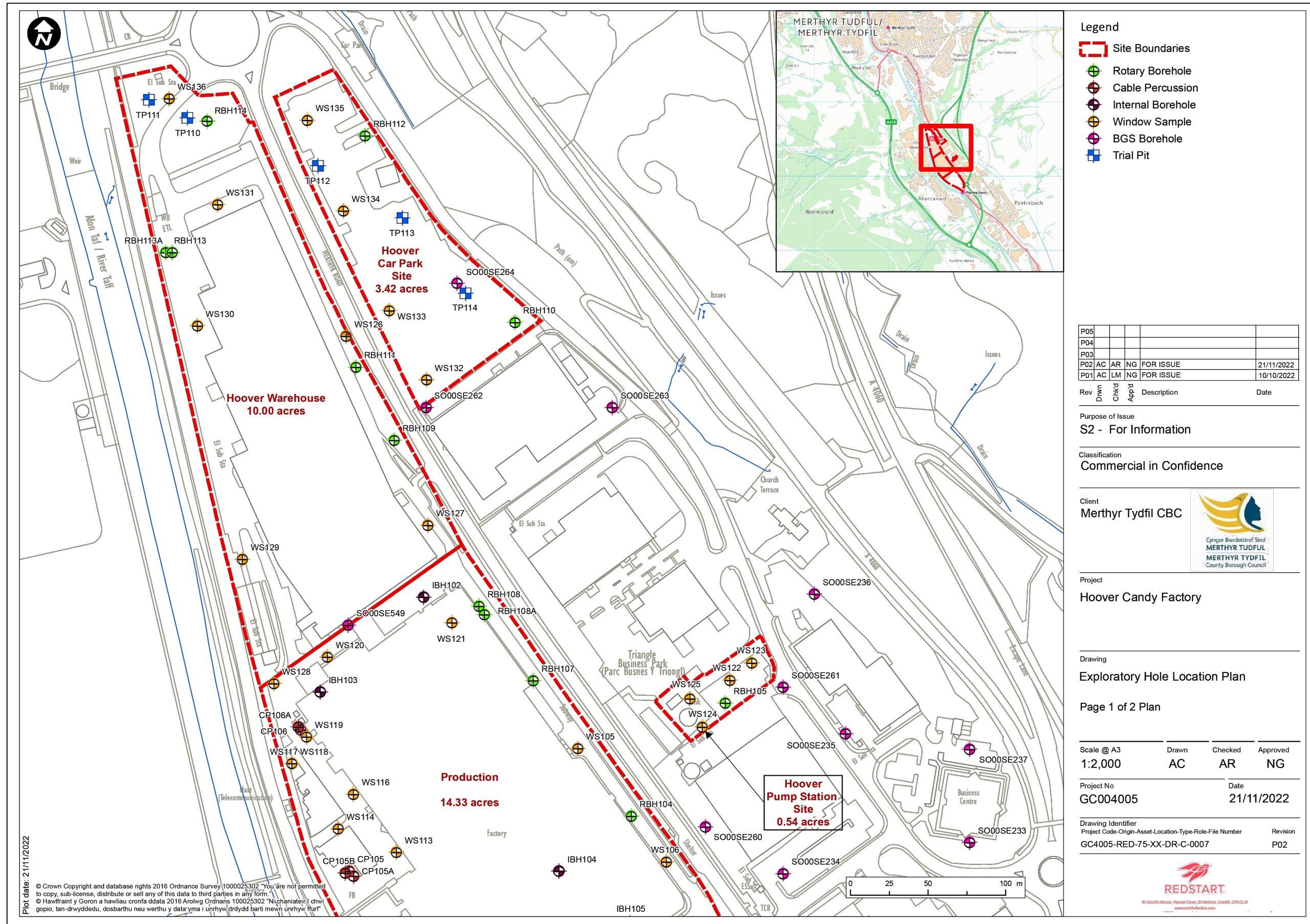


Figure 5a: Exploratory Hole Location Plan (Sheet 1 of 2)

Project: Former Hoover Candy Site, Merthyr Tydfil

Client: Walters Land Limited

Job No.: 14275

Scale: NTS

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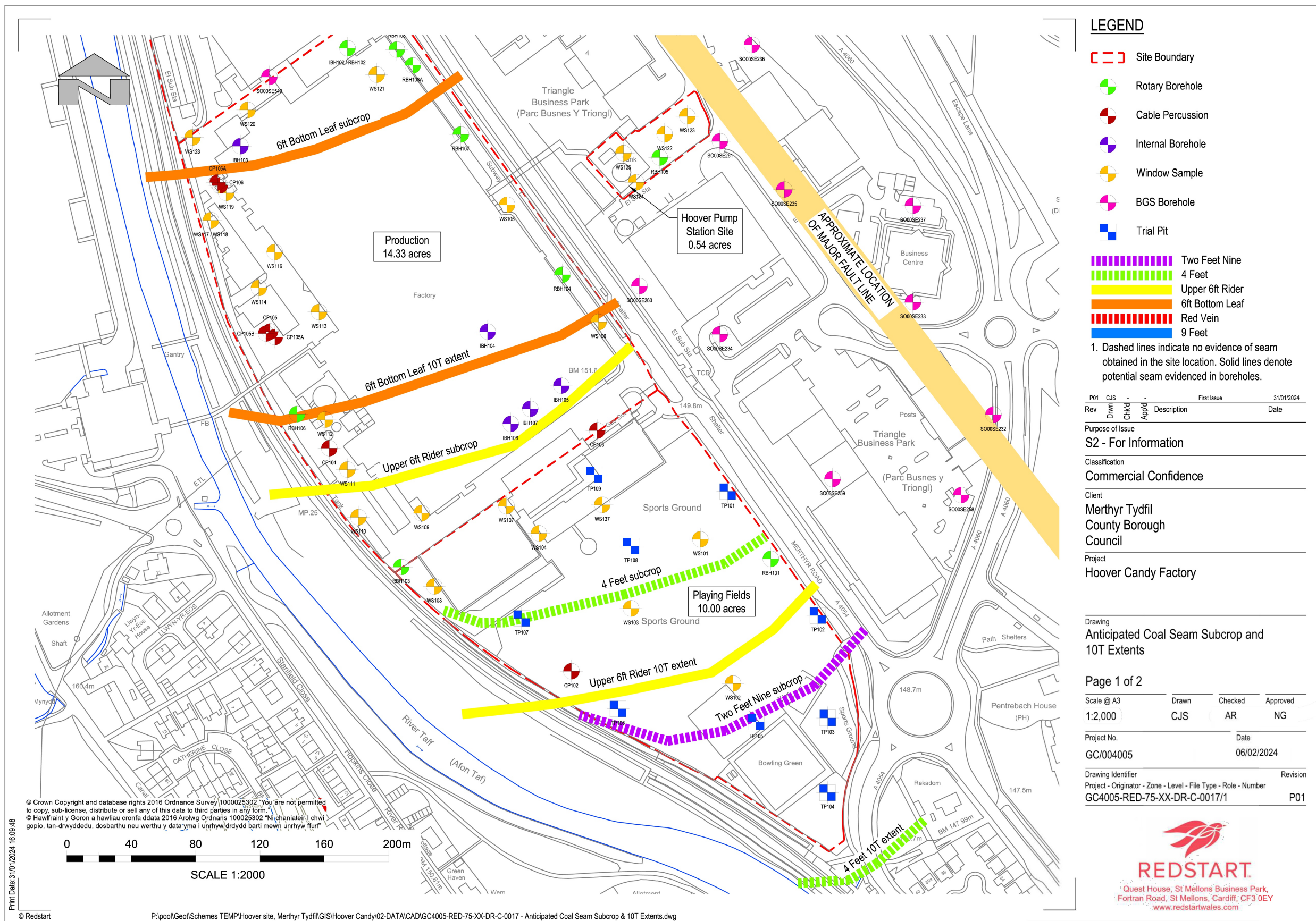


Figure 7b: Preliminary Crown Hole Risk Zones (Sheet 2 of 2)

Project: Former Hoover Candy Site, Merthyr Tydfil

Client: Walters Land Limited

Job No.: 14275

Scale: NTS

Intégral
Géotechnique

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