



A P E X D R I L L I N G

Apex Drilling Services Ltd
Sturmi Way
Village Farm
Industrial Estate
Pyle
Bridgend
CF33 6BZ

Your Ref :

Our Ref : AX8690/19

Date : 22nd August 2019

Tel: 01656 749 149
Fax: 01656 749 096
admin@apex-drilling.com

Concept Designs
Cc: GOConceptDesigns@hotmail.com

FOR THE ATTENTION OF MR GARETH OWEN

Dear Sir

RE: Rotary Drilling, Plot 22 Varteg Fawr – Factual Report

Further to receiving your instruction Apex Drilling Services Ltd mobilised a Fraste XL Multidrill to site on 2nd August 2019 to complete three number rotary openholes to investigate the underlying geology with a view to prove the thickness, depth and quality of any coal seams beneath the proposed property.

Three boreholes were drilled at 115mm diameter to a depth of 30mts bgl the plot, all the boreholes had similar geological horizons. Superficials were 13-14mts thick and consisted of sandy bands and gravel. Sandstone bedrock was immediately below the gravel bands.

On completion the boreholes were backfilled using arisings, bentonite and OPC, no artesian water or seepage was evident at the surface following completion of the project on Monday 5th August 2019

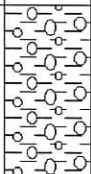
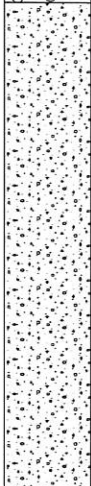
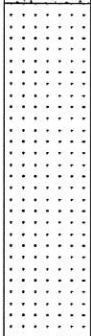
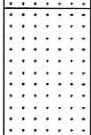
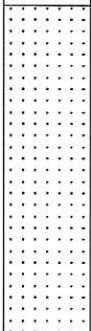
In summary we confirm that no coal measures were found on site.

I trust the afore mentioned details and logs are sufficient for your needs and therefore confirm the geology to your satisfaction.

Yours faithfully

For and on behalf of
Apex Drilling Services Ltd
Roger Martin
Director



Project Name: Plot 22 Varteg fawr				Client: G.O Concept Designs				Date: 02/08/2019																				
Location: Clos Dewi Sant				Contractor: Apex Drilling Ltd																								
Project No. : 12026				Crew Name: RP / CS				Drilling Equipment: Fraste XL																				
Borehole Number BH1		Hole Type RO		Level		Logged By GL		Scale 1:150		Page Number Sheet 1 of 1																		
Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description																	
				TCR	SCR	RQD																						
								3.50			Boulder Clay	1																
												Sandy gravel clay bands	2															
													Silty Sandstone	3														
															Sandstone	4												
																	Silty Sandstone	5										
																			End of Borehole at 30.000m	6								
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							End of Borehole at 30.000m													145								
									End of Borehole at 30.000m											146								

Rotary Log

Project Name: Plot 22 Varteg fawr			Client: G.O Concept Designs			Date: 05/08/2019		
Location: Clos Dewi Sant			Contractor: Apex Drilling Ltd					
Project No. : 12026			Crew Name: RP/CS			Drilling Equipment: Fraste XL		
Borehole Number BH2		Hole Type RO		Level		Logged By GL		Page Number Sheet 1 of 1

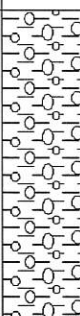
Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								4.00			Boulder clay	1
												2
												3
												4
											Gravel sandy bands, clay bands	5
												6
												7
												8
												9
												10
												11
												12
												13
								13.90			Silty sandstone	14
												15
												16
												17
												18
												19
												20
												21
								21.80			Sandstone	22
												23
								24.00			Silty sandstone	24
												25
												26
												27
												28
												29
								30.00			End of Borehole at 30.000m	30

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
30.00	115	15.00	140					0.00	30.00	90	180	0.00	30.00	Water Flush			

Remarks
Backfilled with cement ballast and bentonite. Stratum - Drillers description.

Rotary Log

Project Name: Plot 22 Varteg fawr			Client: G.O Concept Designs			Date: 05/08/2019		
Location: Clos Dewi Sant			Contractor: Apex Drilling Ltd					
Project No. : 12026			Crew Name: RP/CS			Drilling Equipment: Fraste XL		
Borehole Number BH3		Hole Type RO		Level		Logged By GL		Page Number Sheet 1 of 1

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								6.50			Boulder clay	1
												2
												3
												4
												5
												6
											Gravel, sandy bands, clay bands	7
												8
												9
												10
												11
												12
												13
								14.20				14
											Silty sandstone	15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25
												26
												27
												28
												29
								30.00			End of Borehole at 30.000m	30

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
30.00	115	15.00	140					0.00	30.00	90	180	0.00	30.00	Water Flush			

Remarks

Backfilled with cement ballast and bentonite. Stratum - Drillers description.

APEX

DRILLING SERVICES

DAILY DRILLING LOG

Tel: 01656 749149

E-mail: admin@apex-drilling.com

Contract Name Chos Dew, Sant

Contract No

Date 5, 8, 19

Sheet 1 of 1 Working Day 2

Client G.O. Concept Design

Order No

Drill Crew R. Price C. Smith

Rig Type FRASER

QUANTITIES				INSTALLATION DETAILS			
Bore Hole	Top Depth	Base Depth	Thickness	Recovery	Strata Description	Standing Time — Reason	Borehole
B42	000	4.00	4.00		Moved to B42		
	4.00	13.90	9.90		Boulder clay	ODEX	
	13.90	21.80	2.20		GRAVEL SANDY BANDS, PLAY BANDS		
	21.80	24.00	2.20		SILTY SANDSTONE		
	24.00	30.00	6.00		SILTY SANDSTONE		
				BACK	FILLED B42 WITH CEMENT, BALLAST + BENTONITE		
					Moved to B43		
B43	000	6.50	6.50		Boulder clay	ODEX CASING 15m	
	6.50	14.20	7.70		GRAVEL, SANDY BANDS, PLAY BANDS		
	14.20	30.00	15.80		SILTY SANDSTONE		
				BACK	FILLED B43 WITH CEMENT, BALLAST + BENTONITE		
					Moved off site		
Site Moves				Fixed Plant WATER BOWSER ON SITE			
Bore Moves	(No)	Casing	(No)	Core Boxes	(No)	Standing Times	(hrs)
Return Moves	(No)	Open Hole	(No)	Core Liner	(No)	Breakdown	(hrs)
Security	YES / NO	W. Samples	(No)	SPT/CPT	(No)		
		Coring	(No)	Installation	(No)		
Signed by Apex				Signed by Client			
Date				Date			



Certificate No: 02750A

Blue - Client's Copy Yellow - OS Copy White - Site Copy

Client G.O. Concept Design
Order No. GARETH OWEN.

Tel: 01656 749149

E-mail: admin@apex-drilling.com

Contract No. 12020.

Date 28/19

Sheet of Working Day

Rig Type FRASIER

[illegible]