



The Coal
Authority

Consultants Coal Mining Report

Site At 305760, 206280
Merthyr Tydfil
CF47 0HU

Date of enquiry:	23 January 2024
Date enquiry received:	23 January 2024
Issue date:	23 January 2024
Our reference:	51003400733001
Your reference:	332266288_2



Consultants

Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

NLIS Hub

Enquiry address

Site At 305760, 206280
Merthyr Tydfil
CF47 0HU

How to contact us

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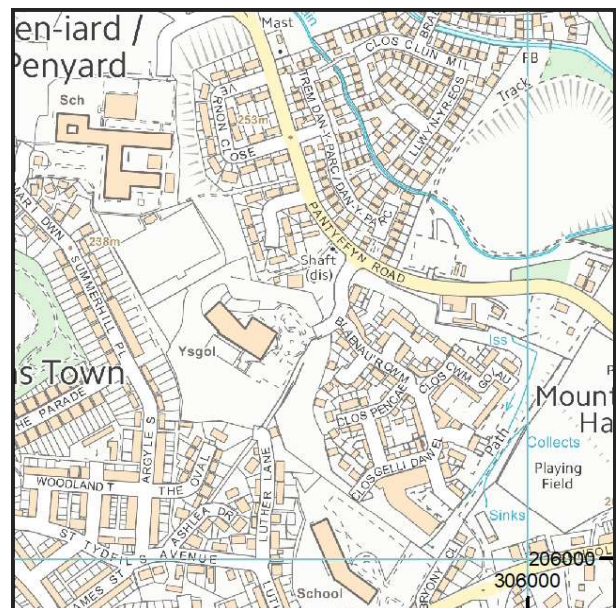
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

No past mining recorded.

Probable unrecorded shallow workings

Yes.

Spine roadways at shallow depth

Distance to spine roadway (m)	Direction to spine roadway
Within	N/A

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	305206-004	305785 206353	This shaft has been capped and was filled in November 1982. It was further enclosed by a 7ft chain link fence with barbed wire and double access gates	Coal	
Adit	305206-005	305834 206294		Coal	
Adit	305206-014	305748 206256		Coal	

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

SW4130	837	SW2307
16532	SW40	SWR2510
SWR2523	8194	

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
FIVE FOOT GELLIDEG	Coal	Yes	23.1	South-West	157

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

Please refer to the “Summary of findings” map (on separate sheet) for details of any opencast areas within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

Distance to site investigation (m)	Direction
0.6	South-East
6.1	South-West

See Section 4 for further information.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk**.

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

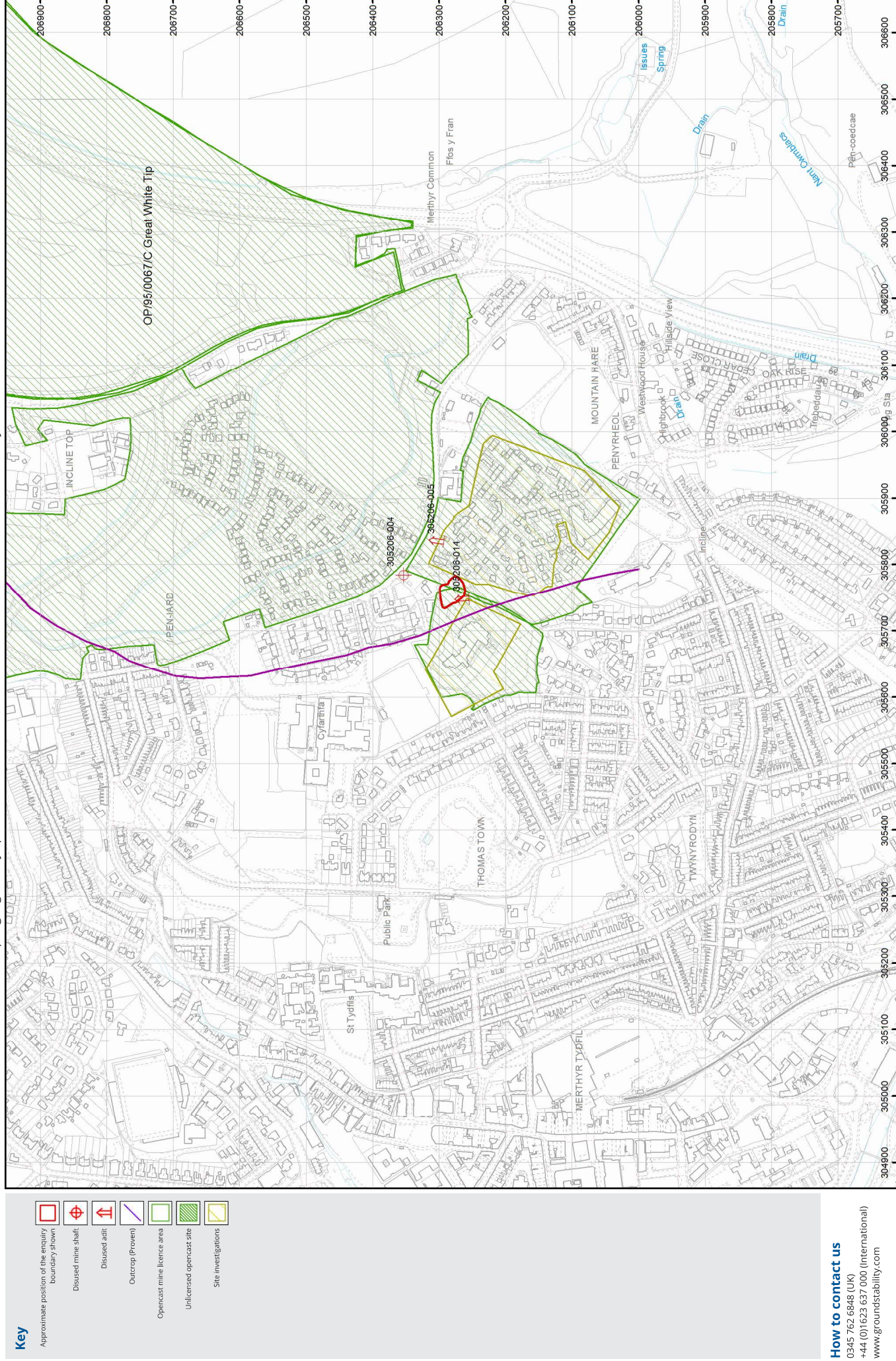
Payment to owners of former copyhold land

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.



Summary of findings

The map highlights any specific surface or subsurface features within or near to the boundary of the site.



ANNEX B
Risk Assessment Definitions

The contaminated land regime is set out in Part 2A of the Environmental Protection Act (EPA) 1990 and was introduced on the 1st April 2000 in England and 1st July 2001 in Wales. A similar regime was introduced in Scotland on 14th July 2000.

Part 2A was introduced to achieve three overarching objectives:

- (a) To identify and remove unacceptable risks to human health and the environment.
- (b) To seek to ensure that contaminated land is made suitable for its current use.
- (c) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

Under Part 2A the statutory definition of 'contaminated land' is:

"any land which appears to the local authority in whose area it is situated, to be in such a condition, by reason of substances in, on, or under the land, that:

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) Pollution of controlled waters is being, or is likely to be, caused."

Under Part 2A, for land to be classified as 'Contaminated Land' there must be one or more contaminant, pathway, receptor linkages, known as the '**Pollutant Linkage**'. A pollutant linkage requires three essential elements:

- (a) A **CONTAMINANT** (SOURCE) – a substance that is in, on or under the land and has the potential to cause harm or to cause pollution of controlled waters.
- (b) A **RECEPTOR** – something which could be adversely affected by a contaminant.
- (c) A **PATHWAY** – a route by which a receptor is or might be exposed to or affected by a contaminant.

The term 'Risk' is widely used in different contexts and situations, but a prescriptive definition is given by the Guidelines for Environmental Risk Assessment and Management (DEFRA *et al*, 2000):

'Risk is a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence'.

Model Procedures for the Management of Land Contamination – Contamination Land Report 11 (2004) defines a 'Hazard' as

'a property or situation that in particular circumstances could lead to harm'.

A framework for qualitative risk assessment is provided in CIRIA publication C552 Contaminated Land Risk Assessment – A Guide to Good Practice (2001). The method requires an assessment of the magnitude of the probability of the risk occurring and the magnitude of the potential consequence. Classifications of consequences and probability, levels and descriptions of risk have been devised from the above publication and are defined in the following sections.

Classification of Consequence

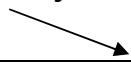
Table A Classification of Consequence	
Classification	Definition
Severe	• Short term (acute) risk to human health likely to result in significant harm • Short term risk to controlled waters • Catastrophic damage to buildings/structures • Short term risk to an ecosystem or organism within the particular ecosystem
Medium	• Chronic damage to human health (long term risk) • Pollution of a sensitive water resource • A significant change in an ecosystem or organism within the ecosystem
Mild	• Pollution of non-sensitive water resources • Significant damage to buildings/structures • Damage to sensitive buildings/structure/services or the environment
Negligible	• Harm (not necessarily significant) which may result in financial loss • Non-permanent health effects to humans (easily prevented by PPE for example) • Easily repairable effects of structural (building) damage

Classification of Probability

Table B Classification of Probability	
Classification	Definition
High Likelihood	• There is a complete pollution linkage and an event appears very likely to occur in the short term and is inevitable in the long term. • Evidence of harm to the receptor
Likely	• There is a complete pollution linkage which means that it is probable that an event will occur • The event is not inevitable but possible in short term and likely in the long term
Low Likelihood	• There is a complete pollution linkage and circumstances are possible under which an event could occur • It is not certain that an event will occur in the long term, and it is less likely to occur in the short term
Unlikely	• There is a complete pollution linkage but circumstances are such that it is improbable that an event would occur even in the long term

Risk Assessment Matrix

By comparing the consequences of a risk and the probability of the risk of a pollution linkage, the likely risk category can be determined as shown in **Table C** below.

Table C Risk Assessment Matrix					
Increasing acceptability 		Consequence			
		Severe	Medium	Mild	Negligible
Probability	High Likelihood	High risk	High risk	Medium risk	Low risk
	Likely	High risk	Medium risk	Low risk	Near zero risk
	Low Likelihood	Medium risk	Low risk	Low risk	Near zero risk
	Unlikely	Low risk	Near zero risk	Near zero risk	Near zero risk

Description of Risks and Likely Actions

High Risk

There is a high probability that severe harm could arise to a receptor, or there is evidence that a receptor is currently being severely harmed. The risk if realised is likely to result in liability, and urgent investigation or remediation will be required.

Medium Risk

It is probable that harm will arise to a receptor. However, it is relatively unlikely that such harm would be severe, or if harm does occur the harm is likely to be relatively mild. Investigation will be required to determine the liability, and some remedial works may be required in the long term.

Low Risk

It is possible that harm may arise to a receptor, but it is likely that the harm would be mild.

Near Zero Risk

There is a very low risk of harm to the receptor. In the event of harm being realised the harm is not likely to be severe.

ANNEX C
Trial Pit Logs



Consulting Geotechnical, Geo-Environmental Engineers
& Site Investigation Contractors

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Email: hello@tfwgroup.co.uk

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Exeter Office
The Slate Barn
Lower Lowley
Dunsford
Exeter
EX6 7BP

Portsmouth Office
Technopole
Kingston Crescent
North End
Portsmouth
PO2 8FA

Borehole No.

BH01

Sheet 1 of 4

Project Name Ysgol Gymraeg Santes Tydfil						Project No. 18167		Date 13/02/2024			Hole Type RO	
Client Merthyr Tydfil County Borough Council						Co-ords E: 305754.00 N: 206282.00 L: 252.10		Water Strike Details			Logged By ACASE	
Contractor Van Elle								Plant Used Rotary Drilling Rig			Approved By ACASE	
									Scale 1:50			
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well	
Results	Type	Depth										
					1 (2.00)		MADE GROUND: Black mottled light brown sandy gravelly CLAY with coal (Rotary Open Hole Drillers Description)					
					2 2.00 250.10		Sandy gravelly CLAY of glacial till/boulder clay (Rotary Open Hole - Drillers Description)					
					3							
					4							
					(5.40)							
					5							
					6							
					7							
					7.40 244.70		Interbedded grey MUDSTONE & SANDSTONE (Rotary Open Hole - Drillers Description) (I)					
					8 (1.40)							
					8.80 243.30		Very soft POSSIBLE BACKFILLED WORKINGS & Broken Ground (Rotary Open Hole - Drillers Description) (I)					
					9							

Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.30m	Borehole Diameter	
	Base Depth	Diameter
	40.00	200
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.		



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Exeter
EX6 7BP

Portsmouth Office
Technopole
Kingston Crescent
North End
Portsmouth
PO2 8FA

Borehole No.

TP01

Sheet 1 of 1

Project Name Ysgol Gymraeg Santes Tydfil		Project No. 18167	Date 15/02/2024		Hole Type TP
Client Merthyr Tydfil County Borough Council		Co-ords E: 305750.00 N: 206284.00 L: 252.10	Water Strike Details		Logged By ACASE
			Depth Strike	Remarks	Approved By ACASE Scale 1:50
Contractor M & J Plant	Plant Used 6 Tonne Tracked Excavator				

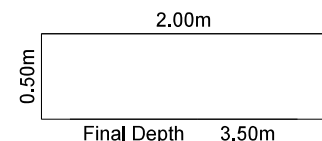
Samples and Results			Depth, (Thickness)	Level	Stratum Description	Legend
Results	Type	Depth				
	ES	0.50	(0.70)		MADE GROUND: Soft to firm light brown mottled black and orangish brown sandy gravelly CLAY. Gravel is angular to sub angular fine to coarse brick and concrete fragments, mudstone, sandstone.	
			0.70 (0.30)	251.40	MADE GROUND: Firm black slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse colliery spoil, coal, and mudstone. Sand is fine to coarse.	
			1 1.00	251.10	Firm dark brown slightly gravelly CLAY. Gravel is sub angular fine to coarse sandstone and mudstone.	
			2 (2.50)			
			3			
			3.50	248.60	End of Trial Pit at 3.50m	
			4			

Remarks

1] Consistency, strength and density indicators are based upon field judgement. 2] Density indicator is in brackets and is for guidance only, and is not in accordance with BS 5930:2015. 3] Trial pit paused at 1.5m to perform infiltration test. Following termination of test, excavation recommenced and terminated at 3.5m. 4] Trial pit backfilled with arisings on completion of test. 5] No groundwater encountered.

Pit Stability: STABLE

Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.



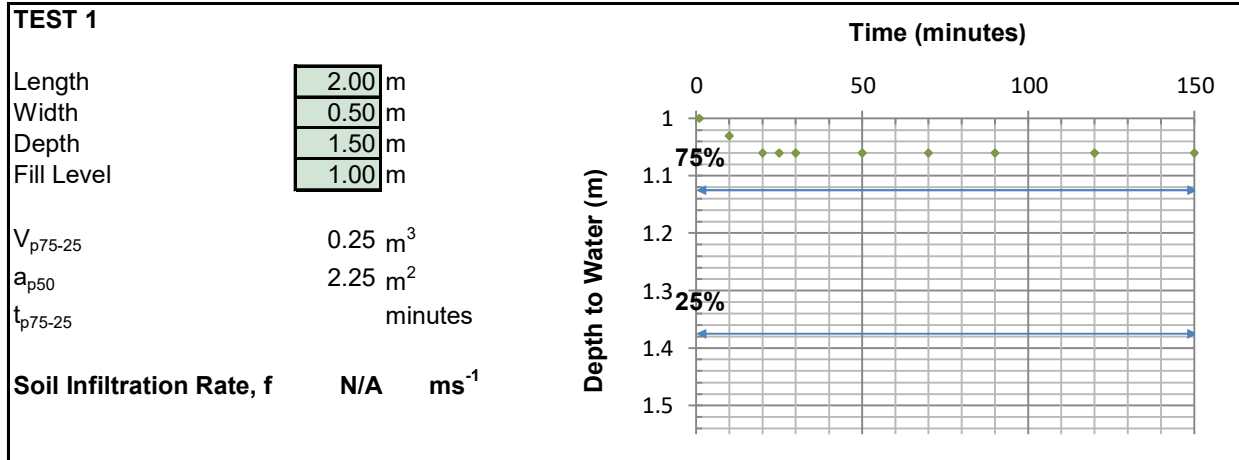
ANNEX D
Soakaway Results

SOAKAWAY TEST



Site Name: Ysgol Gymraeg Santes Tydfil, Merthyr
Project Number: 18167
Date: 15/02/20245
Engineer: AC

Trial Pit: **TP01**

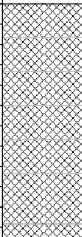
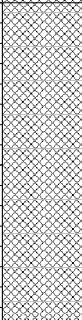


ANNEX E
Windowless Sample Borehole Logs

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors Phone: 033 022 36380 Email: hello@tfwgroup.co.uk		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. WS02 Sheet 1 of 1		
Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167		Date 16/02/2025				Hole Type WS		
Client Merthyr Tydfil County Borough Council				Co-ords E: 305752.00 N: 206276.00 L: 252.10		Water Strike Details				Logged By ACASE		
Contractor TFW Group Ltd				Plant Used Windowless Sample Rig		Depth Strike 2.10		After 20 mins 1.85		Remarks		
										Approved By ACASE		
										Scale 1:50		
Samples and Results			Depth, (Thickness)	Level	Stratum Description					Legend	Well	
Results	Type	Depth										
	ES	0.10			MADE GROUND: Firm light brown mottled black and orangish brown sandy gravelly CLAY. Gravel is angular to sub angular fine to coarse brick and concrete fragments, mudstone, sandstone.							
	ES	0.60	(1.10)									
N=9 (2,5/3,1,2,3)	SPT(C)	1.00	1	1.10 (0,30) 1.40	251.00 250.70	MADE GROUND: Firm black slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse colliery spoil, coal, and mudstone. Sand is fine to coarse.						
						Firm dark brown slightly gravelly CLAY. Gravel is sub angular fine to coarse sandstone and mudstone.						
N=9 (2,1/2,2,2,3)	SPT(C)	2.00	2	(1.00)								
	D	2.50		2.40 (0,60)	249.70	Firm to stiff light bluish grey mottled orangish brown CLAY with occasional pockets of gravel. Gravel is sub angular fine to medium sandstone and mudstone.						
N=17 (4,3/5,1,2,9)	SPT(C)	3.00	3	3.00	249.10	End of Borehole at 3.00m						
			4									
			5									
			6									

Remarks 1] On completion a 50mm standpipe (50mm) was installed to 3.0m depth. Slotted pipe with granular response zone from 0.5m-3.0m, solid standpipe with bentonite seal GL-0.50m, and a flat cover. 2] Medium groundwater inflow encountered at 2.10m.	Borehole Diameter	
	Base Depth	Diameter
	3.00	200

Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.

Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167	Date 16/02/2025			Hole Type WS	
Client Merthyr Tydfil County Borough Council				Co-ords E: 305761.00 N: 206278.00 L: 252.10	Water Strike Details			Logged By ACASE	
Contractor TFW Group Ltd		Plant Used Windowless Sample Rig			Depth Strike 2.90	After 20 mins 2.90	Remarks	Approved By ACASE	
								Scale 1:50	
Samples and Results			Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth							
N=9 (2,3/3, 1,3,2)	ES	0.40			MADE GROUND: Firm light brown mottled black and orangish brown sandy gravelly CLAY. Gravel is angular to sub angular fine to coarse brick and concrete fragments, mudstone, sandstone.				
	SPT(C)	1.00	1	1.20					
N=11 (1,1/1,2,5,3)	ES	2.00			MADE GROUND: Firm black slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse colliery spoil, coal, and mudstone. Sand is fine to coarse.				
	SPT(C)	2.00	2	(1.60)					
N=11 (1,1/2,3,3,3)	SPT(C)	3.00			Firm dark brown slightly gravelly CLAY. Gravel is sub angular fine to coarse sandstone and mudstone.				
			3	249.30 (0.20) 3.00					
					End of Borehole at 3.00m				

Remarks

1] On completion a 50mm standpipe (50mm) was installed to 3.0m depth. Slotted pipe with granular response zone from 0.5m-3.0m, solid standpipe with bentonite seal GL-0.50m, and a flat cover. 2] Medium groundwater inflow encountered at 2.90m.

Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.

Borehole Diameter

Base Depth	Diameter
3.00	200

ANNEX F
Rotary Open Borehole Logs



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Portsmouth Office
Technopole
Kingston Crescent
North End
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Borehole No.

BH01

Sheet 2 of 4

Project Name Ysgol Gymraeg Santes Tydfil						Project No. 18167		Date 13/02/2024			Hole Type RO	
Client Merthyr Tydfil County Borough Council						Co-ords E: 305754.00 N: 206282.00 L: 252.10		Water Strike Details			Logged By ACASE	
								Depth Strike	After 20 mins	Remarks	Approved By ACASE	
Contractor Van Elle				Plant Used Rotary Drilling Rig					Scale 1:50			
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description				Legend	Well
Results	Type	Depth										
					(3.30)		Very soft POSSIBLE BACKFILLED WORKINGS & Broken Ground (Rotary Open Hole Drillers Description)					
					11							
					12	12.10 240.00	Interbedded grey MUDSTONE & SANDSTONE with no flush returns (Rotary Open Hole Drillers Description)					
					13							
					14							
					15							
					16							
					17							
					18							
					19							

Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.30m	Borehole Diameter	
	Base Depth	Diameter
	40.00	200
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.		

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors Phone: 033 022 36380 Email: hello@tfwgroup.co.uk			Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH01 Sheet 3 of 4	
Project Name Ysgol Gymraeg Santes Tydfil					Project No. 18167		Date 13/02/2024			Hole Type RO		
Client Merthyr Tydfil County Borough Council					Co-ords E: 305754.00 N: 206282.00 L: 252.10		Water Strike Details			Logged By ACASE		
Contractor Van Elle					Plant Used Rotary Drilling Rig		Depth Strike After 20 mins Remarks 2.30 2.10			Approved By ACASE		
										Scale 1:50		
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well	
Results	Type	Depth										
					21 (18.10)		Interbedded grey MUDSTONE & SANDSTONE with no flush returns (Rotary Open Hole Drillers Description)					
					22							
					23							
					24							
					25							
					26							
					27							
					28							
					29							
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.30m							Borehole Diameter					
							Base Depth		Diameter			
							40.00		200			
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.												

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors Phone: 033 022 36380 Email: hello@tfwgroup.co.uk		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH01 Sheet 4 of 4	
Project Name Ysgol Gymraeg Santes Tydfil					Project No. 18167		Date 13/02/2024			Hole Type RO	
Client Merthyr Tydfil County Borough Council					Co-ords E: 305754.00 N: 206282.00 L: 252.10		Water Strike Details			Logged By ACASE	
Contractor Van Elle					Plant Used Rotary Drilling Rig		Depth Strike After 20 mins Remarks 2.30 2.10			Approved By ACASE	
										Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth									
					30.20	221.90	Interbedded grey MUDSTONE & SANDSTONE with no flush returns (Rotary Open Hole - Drillers Description) Very soft POSSIBLE BACKFILLED WORKINGS (Rotary Open Hole - Drillers Description)				
					31	(1.60)					
					31.80	220.30	Interbedded grey MUDSTONE & SANDSTONE with no flush returns (Rotary Open Hole Drillers Description)				
					32						
					33						
					34						
					35						
					36	(8.20)					
					37						
					38						
					39						
					40.00	212.10	End of Borehole at 40.00m				
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.30m							Borehole Diameter				
							Base Depth		Diameter		
							40.00		200		
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.											



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Kingston Crescent
North End
Portsmouth
PO2 8FA

Borehole No.

BH02

Sheet 1 of 4

Project Name Ysgol Gymraeg Santes Tydfil						Project No. 18167		Date 13/02/2024			Hole Type RO	
Client Merthyr Tydfil County Borough Council						Co-ords E: 305756.00 N: 206278.00 L: 252.10		Water Strike Details			Logged By ACASE	
Contractor Van Elle								Plant Used Rotary Drilling Rig			Approved By ACASE	
								Scale 1:50				
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description				Legend	Well
Results	Type	Depth										
					1 (3.00) 2 3 3.00 249.10		MADE GROUND: Black mottled light brown sandy gravelly CLAY with coal (Rotary Open Hole Drillers Description)					
					4 (3.00) 5 6 6.00 246.10		Sandy gravelly CLAY of glacial till/boulder clay (Rotary Open Hole -Drillers Description)					
					7 8 (3.70) 9 9.70 242.40		Interbedded grey MUDSTONE & SANDSTONE (Rotary Open Hole -Drillers Description)					
							Very soft POSSIBLE BACKFILLED WORKINGS with no flush returns (Rotary Open Hole Drillers Description)					

Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.50m	Borehole Diameter	
	Base Depth	Diameter
	40.00	200
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.		

[illegible]

Remarks

1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.50m

Borehole Diameter

Base Depth	Diameter
40.00	200

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH02 Sheet 4 of 4	
Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167		Date 13/02/2024				Hole Type RO	
Client Merthyr Tydfil County Borough Council				Co-ords E: 305756.00 N: 206278.00 L: 252.10		Water Strike Details Depth Strike After 20 mins Remarks 2.50 2.30				Logged By ACASE	
Contractor Van Elle				Plant Used Rotary Drilling Rig						Approved By ACASE	
										Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth									
					30.30	221.80	Very soft POSSIBLE BACKFILLED WORKINGS & Broken Ground (Rotary Open Hole Drillers Description)				
							Interbedded grey MUDSTONE & SANDSTONE (Rotary Open Hole -Drillers Description)				
					31						
					32						
					33						
					34						
					35	(9.70)					
					36						
					37						
					38						
					39						
					40.00	212.10	End of Borehole at 40.00m				
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.50m							Borehole Diameter				
							Base Depth		Diameter		
							40.00		200		
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.											

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors Phone: 033 022 36380 Email: hello@tfwgroup.co.uk		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH03 Sheet 1 of 4	
Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167		Date 13/02/2024				Hole Type RO	
Client Merthyr Tydfil County Borough Council				Co-ords E: 305748.00 N: 206277.00 L: 252.10		Water Strike Details				Logged By ACASE	
Contractor Van Elle				Plant Used Rotary Drilling Rig		Depth Strike 1.70		After 20 mins 1.60		Remarks	
										Approved By ACASE	
										Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth									
					1		MADE GROUND: Black mottled light brown sandy gravelly CLAY with coal (Rotary Open Hole Drillers Description)				
					(3.00)						
					2						
					3	3.00 249.10	Sandy gravelly CLAY of glacial till/boulder clay (Rotary Open Hole -Drillers Description)				
					4						
					(3.00)						
					5						
					6	6.00 246.10	Interbedded grey MUDSTONE & SANDSTONE (Rotary Open Hole -Drillers Description)				
					7						
					(3.00)						
					8						
					9	9.00 243.10	Very soft POSSIBLE BACKFILLED WORKINGS with no flush returns (Rotary Open Hole Drillers Description)				
					(2.00)						
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 1.70m							Borehole Diameter				
							Base Depth		Diameter		
							40.00		200		
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.											

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors Phone: 033 022 36380 Email: hello@tfwgroup.co.uk			Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH03 Sheet 2 of 4	
Project Name Ysgol Gymraeg Santes Tydfil					Project No. 18167		Date 13/02/2024			Hole Type RO		
Client Merthyr Tydfil County Borough Council					Co-ords E: 305748.00 N: 206277.00 L: 252.10		Water Strike Details			Logged By ACASE		
Contractor Van Elle					Plant Used Rotary Drilling Rig		Depth Strike After 20 mins Remarks 1.70 1.60			Approved By ACASE		
										Scale 1:50		
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well	
Results	Type	Depth										
					11 11.00 241.10		Very soft POSSIBLE BACKFILLED WORKINGS with no flush returns (Rotary Open Hole Drillers Description)					
					12		Interbedded grey MUDSTONE & SANDSTONE with no flush returns (Rotary Open Hole Drillers Description)					
					13							
					14							
					15							
					16 (10.20)							
					17							
					18							
					19							
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 1.70m							Borehole Diameter					
							Base Depth		Diameter			
							40.00		200			
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.												

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH03 Sheet 4 of 4	
Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167		Date 13/02/2024				Hole Type RO	
Client Merthyr Tydfil County Borough Council				Co-ords E: 305748.00 N: 206277.00 L: 252.10		Water Strike Details Depth Strike After 20 mins Remarks 1.70 1.60				Logged By ACASE	
Contractor Van Elle				Plant Used Rotary Drilling Rig						Approved By ACASE	
										Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth									
							Interbedded grey MUDSTONE & SANDSTONE (Rotary Open Hole -Drillers Description)				
					31						
					32						
					33						
					34						
					35 (10.00)						
					36						
					37						
					38						
					39						
					40.00	212.10	End of Borehole at 40.00m				
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 1.70m							Borehole Diameter				
							Base Depth		Diameter		
							40.00		200		
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.											



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Borehole No.

BH04

Sheet 1 of 4

Project Name Ysgol Gymraeg Santes Tydfil						Project No. 18167		Date 13/02/2024 to 14/02/2024			Hole Type RO	
Client Merthyr Tydfil County Borough Council						Co-ords E: 305753.00 N: 206275.00 L: 252.10		Water Strike Details			Logged By ACASE	
								Depth Strike	After 20 mins	Remarks	Approved By ACASE	
Contractor Van Elle						Plant Used Rotary Drilling Rig					Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description				Legend	Well
Results	Type	Depth										
					1 (2.00)		MADE GROUND: Black mottled light brown sandy gravelly CLAY with coal (Rotary Open Hole Drillers Description)					
					2 2.00 250.10		Sandy gravelly CLAY of glacial till/boulder clay (Rotary Open Hole -Drillers Description)					
					3							
					4 (4.20)							
					5							
					6 6.20 245.90		Interbedded grey MUDSTONE & SANDSTONE (Rotary Open Hole -Drillers Description)					
					7 (1.80)							
					8 8.00 244.10		Very soft POSSIBLE BACKFILLED WORKINGS & Broken Ground (Rotary Open Hole Drillers Description)					
					9 (2.60)							

Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.40m	Borehole Diameter	
	Base Depth	Diameter
	40.00	200
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.		

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH04 Sheet 2 of 4	
Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167		Date 13/02/2024 to 14/02/2024				Hole Type RO	
Client Merthyr Tydfil County Borough Council				Co-ords E: 305753.00 N: 206275.00 L: 252.10		Water Strike Details Depth Strike After 20 mins Remarks 2.40 2.20				Logged By ACASE	
Contractor Van Elle				Plant Used Rotary Drilling Rig						Approved By ACASE	
										Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth									
					10.60	241.50	Very soft POSSIBLE BACKFILLED WORKINGS & Broken Ground (Rotary Open Hole Drillers Description)				
					11		Interbedded grey MUDSTONE & SANDSTONE with poor returns (Rotary Open Hole Drillers Description)				
					12						
					13						
					14						
					15						
					16						
					17						
					18						
					19						
					(17.60)						
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.40m							Borehole Diameter				
							Base Depth		Diameter		
							40.00		200		
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.											

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH04 Sheet 3 of 4	
Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167		Date 13/02/2024 to 14/02/2024				Hole Type RO	
Client Merthyr Tydfil County Borough Council				Co-ords E: 305753.00 N: 206275.00 L: 252.10		Water Strike Details Depth Strike After 20 mins Remarks 2.40 2.20				Logged By ACASE	
Contractor Van Elle				Plant Used Rotary Drilling Rig						Approved By ACASE	
										Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth									
							Interbedded grey MUDSTONE & SANDSTONE with poor returns (Rotary Open Hole Drillers Description)				
					21						
					22						
					23						
					24						
					25						
					26						
					27						
					28						
					28.20	223.90	Very soft POSSIBLE BACKFILLED WORKINGS (Rotary Open Hole -Drillers Description)				
					29	(1.80)					
					30.00	222.10					
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.40m							Borehole Diameter				
							Base Depth		Diameter		
							40.00		200		
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.											

		Consulting Geotechnical, Geo-Environmental Engineers & Site Investigation Contractors		Cardiff Office 5 Deryn Court Wharfedale Road Pentwyn Cardiff CF23 7HA		Exeter Office The Slate Barn Lower Lowley Dunsford Exeter EX6 7BP		Portsmouth Office Technopole Kingston Crescent North End Portsmouth PO2 8FA		Borehole No. BH04 Sheet 4 of 4	
Project Name Ysgol Gymraeg Santes Tydfil				Project No. 18167		Date 13/02/2024 to 14/02/2024				Hole Type RO	
Client Merthyr Tydfil County Borough Council				Co-ords E: 305753.00 N: 206275.00 L: 252.10		Water Strike Details Depth Strike After 20 mins Remarks 2.40 2.20				Logged By ACASE	
Contractor Van Elle				Plant Used Rotary Drilling Rig						Approved By ACASE	
										Scale 1:50	
Samples and Results			TCR SCR RQD	FI	Depth, (Thickness)	Level	Stratum Description			Legend	Well
Results	Type	Depth									
							Interbedded grey MUDSTONE & SANDSTONE with poor returns (Rotary Open Hole Drillers Description)				
					31						
					32						
					33						
					34						
					35 (10.00)						
					36						
					37						
					38						
					39						
					40.00	212.10	End of Borehole at 40.00m				
Remarks 1] On completion, the rotary open borehole was backfilled with gravel. 2] Groundwater encountered at 2.40m							Borehole Diameter				
							Base Depth		Diameter		
							40.00		200		
Notes: For all symbols and abbreviations please see key sheet. All depths and measurements in metres. Stratum thicknesses given in brackets.											

ANNEX G
Laboratory Soil Chemical Test Results



Amended Report

Report No.: 24-05465-2 24-05465-2

Initial Date of Issue: 03/Mar/2024 03/Mar/2024 **Date of Re-Issue:** 25/Mar/2024 25/Mar/2024

Re-Issue Details: This report has been revised and directly supersedes 24-05465-1 in its entirety This report has been revised and directly

Client Terra Firma Terra Firma

Client Address: 5 Deryn Court
Wharfedale Road
Pentwyn
Cardiff
CF23 7HA 5 Deryn Court
Wharfedale Road
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CF23 7HA

Contact(s): aaron@terrafirmawales.co.uk
aaron@terrafirmawales.co.uk

Project Ysgol Gymraeg Santes Tydfil, Merthyr

Quotation No.: **Date Received:** 23/Feb/2024 23/Feb/2024

Order No.: 18167-AC 18167-AC **Date Instructed:** 23/Feb/2024 23/Feb/2024

No. of Samples: 8 8

Turnaround (Wkdays): 5 5 **Results Due:** 29/Feb/2024 29/Feb/2024

Date Approved: 03/Mar/2024 03/Mar/2024

Approved By:

Details: Stuart Henderson, Technical Manager

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project:

[illegible]

Project:

Page 3 of 11

Results - Soil

Project:

Client: Terra Firma				Chemtest Job No.:	24-05465	24-05465	24-05465	24-05465	24-05465	24-05465	24-05465	24-05465
Quotation No.:				Chemtest Sample ID.:	1770503	1770504	1770505	1770506	1770507	1770512	1770513	
Order No.: 18167-AC				Client Sample Ref.:	WS01	WS01	WS02	WS02	WS03	WS01	WS03	
				Client Sample ID.:	WS01	WS01	WS02	WS02	WS03	WS01	WS03	
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
				Top Depth (m):	0.20	0.60	0.10	0.60	0.40	1.00	2.00	
				Date Sampled:	22-Feb-2024	22-Feb-2024	22-Feb-2024	22-Feb-2024	22-Feb-2024	22-Feb-2024		
				Time Sampled:	12:00	12:00	12:00	12:00	12:00			
				Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM			
Determinand	HWOL Code	Accred.	SOP	Units	LOD							
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0			
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10			
Organic Matter BS1377		N	2930	%	0.10	3.9	5.7	5.3	3.2			

Results - 2 Stage WAC

Project: Ysgol Gymraeg Santes Tydfil, Merthyr									
Chemtest Job No:		24-05465							
Chemtest Sample ID:		1770503							
Sample Ref:		WS01							
Sample ID:		WS01							
Sample Location:		0.20							
Top Depth(m):		22-Feb-2024							
Bottom Depth(m):									
Sampling Date:									
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	M	%						
Loss On Ignition	2610	M	%						
Total BTEX	2760	M	mg/kg						
Total PCBs (7 Congeners)	2815	M	mg/kg						
TPH Total WAC	2670	M	mg/kg						
Total (Of 17) PAH's	2700	N	mg/kg						
pH at 20C	2010	M							
Acid Neutralisation Capacity	2015	N	mol/kg						
Eluate Analysis				8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1		Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg	
Arsenic	1455	U	0.0010	0.0007	0.0020	0.0071	0.5	2	25
Barium	1455	U	0.13	0.17	0.26	1.6	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	0.0011	0.0007	0.0022	0.0073	0.5	10	70
Copper	1455	U	0.0015	0.0007	0.0030	0.0017	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0076	0.0012	0.015	0.019	0.5	10	30
Nickel	1455	U	0.0006	< 0.0005	0.0011	0.0006	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.0010	< 0.0005	0.0019	0.0011	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.005	0.005	0.010	0.046	4	50	200
Chloride	1220	U	5.7	< 1.0	11	< 10	800	15000	25000
Fluoride	1220	U	0.17	0.12	< 1.0	1.3	10	150	500
Sulphate	1220	U	12	1.7	24	29	1000	20000	50000
Total Dissolved Solids	1020	N	130	36	250	460	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	4.3	< 2.5	< 50	< 50	500	800	1000
Solid Information				Leachate Test Information					
Dry mass of test portion/kg		0.175		Leachant volume 1st extract/l		0.320			
Moisture (%)		15		Leachant volume 2nd extract/l		1.400			
				Eluant recovered from 1st extract/l		0.196			

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: Ysgol Gymraeg Santes Tydfil, Merthyr										
Chemtest Job No:		24-05465								
Chemtest Sample ID:		1770506								
Sample Ref:		WS02								
Sample ID:		WS02								
Sample Location:		0.60								
Top Depth(m):		22-Feb-2024								
Bottom Depth(m):										
Sampling Date:										
Determinand	SOP	Accred.	Units							
Total Organic Carbon	2625	M	%							
Loss On Ignition	2610	M	%							
Total BTEX	2760	M	mg/kg							
Total PCBs (7 Congeners)	2815	M	mg/kg							
TPH Total WAC	2670	M	mg/kg							
Total (Of 17) PAH's	2700	N	mg/kg							
pH at 20C	2010	M								
Acid Neutralisation Capacity	2015	N	mol/kg							
Eluate Analysis										
Arsenic	1455	U	mg/l	2:1	8:1	2:1	Cumulative	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg	To evaluate	
Barium	1455	U	0.0006	mg/l	0.0012	mg/kg	mg/kg 10:1			
Cadmium	1455	U	0.068		0.027					
Chromium	1455	U	< 0.00011		< 0.00011	< 0.00011	< 0.00011			
Copper	1455	U	0.0011		0.0009	0.0022	0.0091			
Mercury	1455	U	0.0027		0.0020	0.0053	0.0028			
Molybdenum	1455	U	< 0.00005		< 0.00005	< 0.00005	< 0.00005			
Nickel	1455	U	0.0068		0.0014	0.013	0.019			
Lead	1455	U	0.0011		0.0009	0.0021	0.0094			
Antimony	1455	U	< 0.0005		0.0007	< 0.0005	0.0062			
Selenium	1455	U	0.0009		< 0.0005	0.0019	0.0010			
Zinc	1455	U	< 0.0005		< 0.0005	< 0.0005	< 0.0005			
Chloride	1220	U	0.017		0.011	0.034	0.11	4	50	200
Fluoride	1220	U	< 1.0		< 1.0	< 10	< 10	800	15000	25000
Sulphate	1220	U	0.27		0.12	< 1.0	1.3	10	150	500
Total Dissolved Solids	1020	N	6.7		< 1.0	13	< 10	1000	20000	50000
Phenol Index	1920	U	140		40	280	500	4000	60000	100000
Dissolved Organic Carbon	1610	U	< 0.030		< 0.030	< 0.30	< 0.50	1	-	-
								54	800	1000
Landfill Waste Acceptance Criteria										
								Limits		
								Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
								3	5	6
								--	--	10
								6	--	--
								1	--	--
								500	--	--
								100	--	--
								--	>6	--
								--	To evaluate	To evaluate
								0.0050	To evaluate	To evaluate
								Cumulative	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg	
								mg/kg 10:1		
								0.011	0.5	25
								0.31	20	300
								< 0.00011	0.04	5
								0.0091	0.5	70
								0.0028	2	100
								< 0.00005	0.01	2
								0.019	0.5	30
								0.0094	0.4	40
								0.0062	0.5	50
								0.0010	0.06	5
								< 0.0005	0.1	7
								0.11	4	200
								< 10	800	25000
								1.3	150	500
								< 10	1000	50000
								500	60000	100000
								< 0.50	-	-
								500	800	1000

Leachate Test Information	
Leachant volume 1st extract/l	0.314
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.178

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	17

Results - 2 Stage WAC

Project: Ysgol Gymraeg Santes Tydfil, Merthyr									
Chemtest Job No:		24-05465							
Chemtest Sample ID:		1770507							
Sample Ref:		WS03							
Sample ID:		WS03							
Sample Location:		0.40							
Top Depth(m):		22-Feb-2024							
Bottom Depth(m):									
Sampling Date:									
Determinand	SOP	Accred.	Units						
Total Organic Carbon	2625	M	%						
Loss On Ignition	2610	M	%						
Total BTEX	2760	M	mg/kg						
Total PCBs (7 Congeners)	2815	M	mg/kg						
TPH Total WAC	2670	M	mg/kg						
Total (Of 17) PAH's	2700	N	mg/kg						
pH at 20C	2010	M							
Acid Neutralisation Capacity	2015	N	mol/kg						
Eluate Analysis					8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg	
Arsenic	1455	U	0.0003	0.0003	0.0003	0.0006	0.0031	0.5	2
Barium	1455	U	0.15	0.29	0.29	0.30	2.7	20	100
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1
Chromium	1455	U	0.0009	0.0009	0.0009	0.0018	0.0092	0.5	10
Copper	1455	U	0.0010	< 0.0005	< 0.0005	0.0020	0.0010	2	50
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2
Molybdenum	1455	U	0.047	0.0060	0.0060	0.094	0.10	0.5	10
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10
Antimony	1455	U	0.0006	< 0.0005	< 0.0005	0.0012	0.0006	0.06	0.7
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5
Zinc	1455	U	0.005	0.003	0.003	0.010	0.028	4	50
Chloride	1220	U	3.4	< 1.0	< 1.0	< 10	< 10	800	15000
Fluoride	1220	U	0.63	0.27	0.27	1.3	3.1	10	150
Sulphate	1220	U	17	3.3	3.3	34	47	1000	20000
Total Dissolved Solids	1020	N	120	41	41	240	490	4000	60000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.030	< 0.30	< 0.50	1	-
Dissolved Organic Carbon	1610	U	4.4	< 2.5	< 2.5	< 50	< 50	500	800
Solid Information					Leachate Test Information				
Dry mass of test portion/kg					Leachant volume 1st extract/l				
Moisture (%)					Leachant volume 2nd extract/l				
					Eluant recovered from 1st extract/l				

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity at 25°C and Total Dissolved Solids (TDS) in Waters	Conductivity Meter	
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2010	pH Value of Soils	pH at 20°C	pH Meter	
2015	Acid Neutralisation Capacity	Acid Reserve	Titration	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2140	Calorific Value	Calorific Value	Bomb Calorimeter	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.	
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.	
2620	LOI 440	LOI 440 Trommel Fines	Determination of the proportion by mass that is lost from a soil by ignition at 440°C.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8–C10 Aromatics: >C5–C7,>C7–C8,>C8–C10	Water extraction / Headspace GCxGC FID detection	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2815	Polychlorinated Biphenyls (PCB) ICES7 Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS. Reported PCB 101 results may contain contributions from PCB 90 due to inseparable chromatography.	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	
2930	Organic Matter	Organic Matter	Acid Dichromate digestion/Titration	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

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

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable
- PL - Prepared Leachate
- PW - Processed Water

Report Information

RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

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

ANNEX H
Laboratory Soil Geotechnical Test
Results



Results Summary

Apex Testing Solutions Limited

Sturmi Way
Village Farm Industrial Estate
Pyle
Bridgend
CF33 6BZ

Telephone: 01656 746762

E-mail: andrew.grogan@apex-drilling.com

laura.davis@apex-drilling.com

<u>Reporting Details</u>		<u>Key Information</u>	
Company Name:	TFW Group Ltd	Site Name:	Ysgol Gymraeg Santes
Address:	5 Deryn Court Wharfdale Road Cardiff CF23 7HA	Job Number:	D24087
Contact Name:	Aaron	Date Received:	22/02/2024
Contact Number:		Job Coordinator:	A. Grogan

Item No.	Tests Undertaken	Number of Tests
1	Water Content - ISO 17892 2014+A1:2022	2
2	Atterburg Limits (4 point) - BS1377-2: 1990	2

Results Issued: 27/02/2024

Comments

Results herein relate only to samples received in the laboratory and where not sampled by Apex Testing Solutions personnel relate to the samples as received.

Where tests are UKAS accredited any Opinion and/or Interpretation expressed herein are outside the scope of the UKAS Accreditation. The reports shall not be reproduced in full without the written approval of the laboratory.

Please contact the job coordinator should any further information be required.

TEST REPORT
Determination Of Water Content
ISO 17892-1: 2014+A1:2022

Project No:	D24087	Client:	TFW Group Ltd
Project Name:	18167 - Ysgol Gymraeg Santes Tudful	Address:	5 Deryn Court Wharfdale Road Cardiff CF23 7HA
ATS Sample No:	35954		

Site Ref / Hole ID:	WS01	Depth (m):	1.50
Sample No:		Sample Type:	Disturbed
Sampling Certificate Received:	No	Material Description:	Brownish grey slightly gravelly CLAY
Location in Works:	N/a	Material Source:	Ex-Site
Date Sampled:	Unknown	Material Supplier:	Ex-Site
Sampled By:	Client	Specification:	ISO 17892-1
Date Received:	22 February 2024	Date Tested:	23 February 2024

Test Results

Moisture Content (%)

21.9

Remarks:

QA Ref.

EN ISO 17892-
1:2014 A1:2022



Apex Testing Solutions

Sturmi Way, Village Farm Industrial Est,
Pyle, Bridgend, CF33 6BZ

Tel: 01656 746762 Fax: 01656 749096



7771

Approver

L Davis

Date

27/02/2024

Fig

MC

L Davis, Quality Manager

TEST REPORT
LIQUID LIMIT, PLASTIC LIMIT & PLASTICITY INDEX
BS 1377:Part 2:1990. Clause 4.3/5.3/5.4

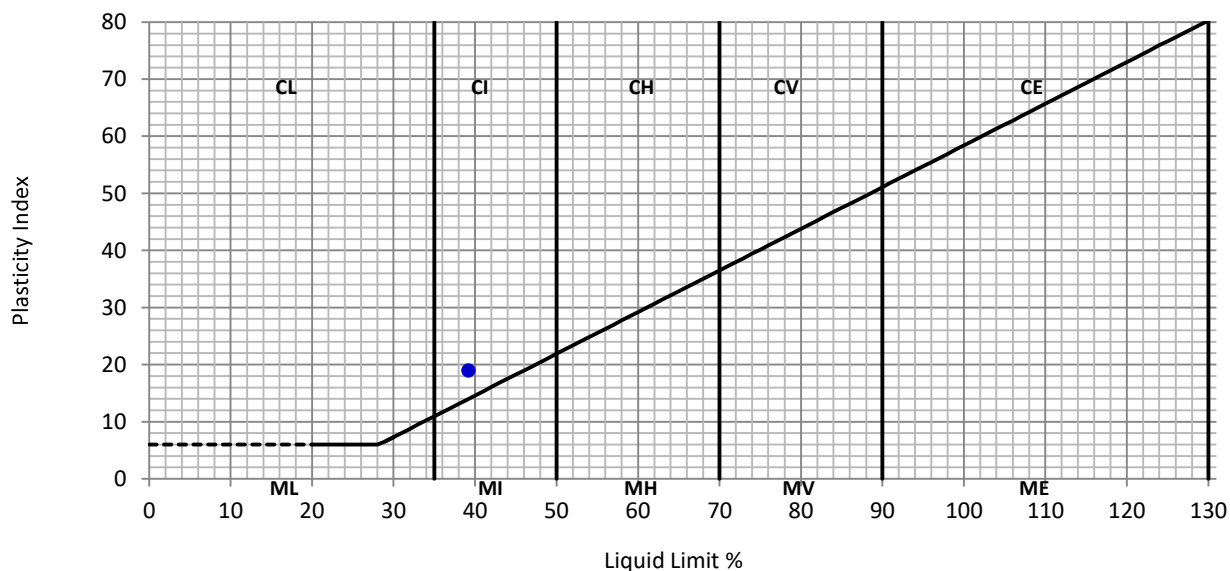
Project No:	D24087	Client:	TFW Group Ltd
Project Name:	18167 - Ysgol Gymraeg Santes Tudful	Address:	5 Deryn Court Wharfdale Road Cardiff CF23 7HA
ATS Sample No:	35954		

Site Ref / Hole ID:	WS01	Depth (m):	1.50
Sample No:		Sample Type:	Disturbed
Sampling Certificate Received:	No	Material Description:	Brownish grey slightly gravelly CLAY
Location in Works:	N/a	Material Source:	Ex-Site
Date Sampled:	Unknown	Material Supplier:	Ex-Site
Sampled By:	Client	Specification:	BS1377
Date Received:	22 February 2024	Date Tested:	26 February 2024

Test Results

Liquid Limit	39	%
Plastic Limit	20	%
Plasticity Index	19	%

Preparation:	4.2.4 Sieved Specimen
Proportion retained on 425µm sieve:	13 %



Remarks:

TEST REPORT
Determination Of Water Content
ISO 17892-1: 2014+A1:2022

Project No:	D24087	Client:	TFW Group Ltd
Project Name:	18167 - Ysgol Gymraeg Santes Tudful	Address:	5 Deryn Court Wharfdale Road Cardiff CF23 7HA
ATS Sample No:	35955		

Site Ref / Hole ID:	WS02	Depth (m):	2.50
Sample No:		Sample Type:	Disturbed
Sampling Certificate Received:	No	Material Description:	Brownish grey slightly sandy slightly gravelly CLAY
Location in Works:	N/a	Material Source:	Ex-Site
Date Sampled:	Unknown	Material Supplier:	Ex-Site
Sampled By:	Client	Specification:	ISO 17892-1
Date Received:	22 February 2024	Date Tested:	23 February 2024

Test Results

Moisture Content (%)

19.6

Remarks:

QA Ref.

EN ISO 17892-1:2014 A1:2022



Apex Testing Solutions

Sturmi Way, Village Farm Industrial Est,
Pyle, Bridgend, CF33 6BZ

Tel: 01656 746762 Fax: 01656 749096



7771

Approver

L Davis

Date

27/02/2024

Fig

MC

L Davis, Quality Manager

TEST REPORT
LIQUID LIMIT, PLASTIC LIMIT & PLASTICITY INDEX
BS 1377:Part 2:1990. Clause 4.3/5.3/5.4

Project No: D24087
Project Name: 18167 - Ysgol Gymraeg Santes Tudful
ATS Sample No: 35955

Client: TFW Group Ltd
Address: 5 Deryn Court
 Wharfdale Road
 Cardiff
 CF23 7HA

Site Ref / Hole ID: WS02

Depth (m): 2.50

Sample No:

Sample Type: Disturbed

Sampling Certificate Received: No

Material Description: Brownish grey slightly sandy slightly gravelly CLAY

Location in Works: N/a

Material Source: Ex-Site

Date Sampled: Unknown

Material Supplier: Ex-Site

Sampled By: Client

Specification: BS1377

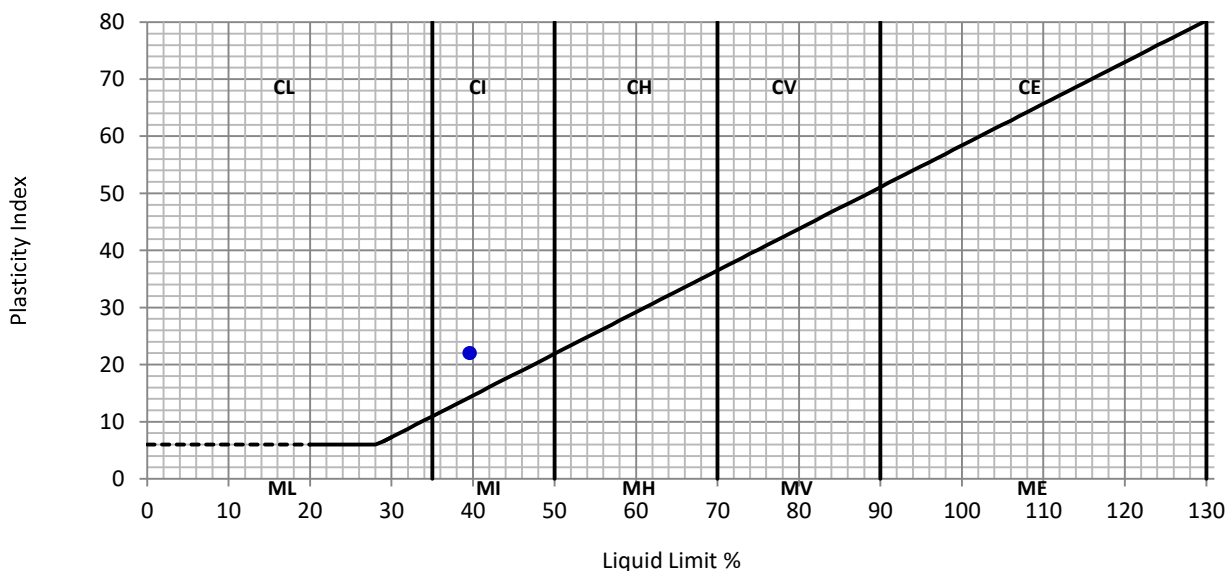
Date Received: 22 February 2024

Date Tested: 26 February 2024

Test Results

Liquid Limit	40	%
Plastic Limit	18	%
Plasticity Index	22	%

Preparation:	4.2.4 Sieved Specimen
Proportion retained on 425µm sieve:	19 %



Remarks:

QA Ref.

BS1377 - 2
Rev. 3.0



Apex Testing Solutions

Sturmi Way, Village Farm Industrial Est, Pyle,
 Bridgend, CF33 6BZ
 Tel: 01656 746762 Fax: 01656 749096



7771

Approver

L Davis

L Davis, Quality Manager

Date

27/02/2024

Fig.

ATT

ANNEX I
Gas Monitoring Results

GROUND GAS & GROUNDWATER MONITORING RESULTS

Site Name: Ysgol Gymraeg Santes Tydfil Merthyr

Project Number: 18167

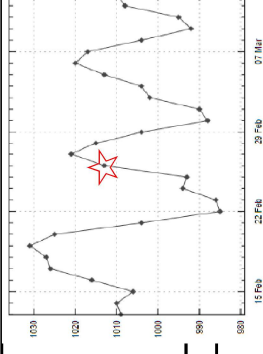
Date: 26/02/2024

Engineer: AC

Weather: Raining

Visit: 1 of 6

Baro Pressure Trend: Rising

[illegible]

GROUND GAS & GROUNDWATER MONITORING RESULTS

Site Name: Ysgol Gymraeg Santes Tydfil Merthyr

Project Number: 18167

Date: 12/03/2024

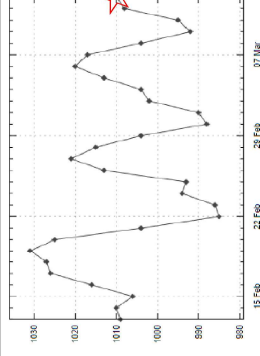
Engineer: AC

Weather: Cloudy

Visit: 2 of 6

Baro Pressure Trend: Rising

Equipment/Serial: G506329

[illegible]



Site Name: Ysgol Gymraeg Santes Tydfil, Merthyr

Project Number: 18167

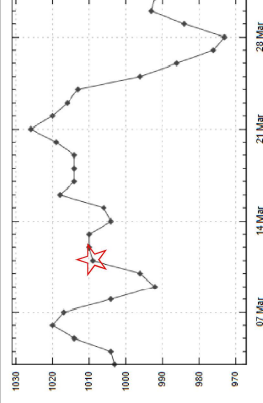
Date: 11/03/2024

Engineer: AC

Weather: Fine

Visit: 3 of 6

Baro Pressure Trend: Rising

[illegible]

GROUND GAS & GROUNDWATER MONITORING RESULTS

Site Name: Ysgol Gymraeg Santes Tydfil Merthyr

Project Number: 18167

Date: 08/04/2024

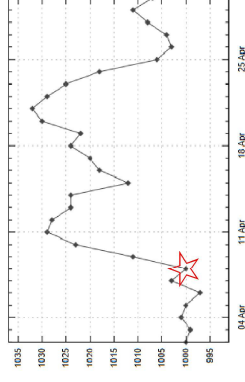
Engineer: AC

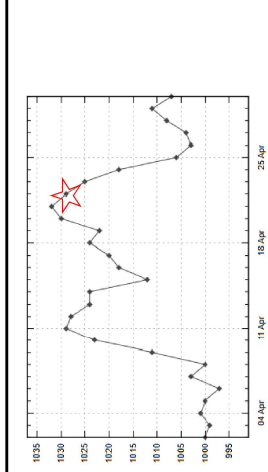
Weather: Raining

Visit: 4 of

Baro Pressure Trend: Falling

Equipment/Serial: G506329

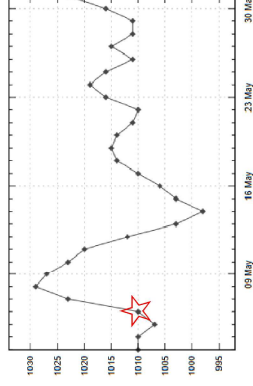
[illegible]

[illegible]

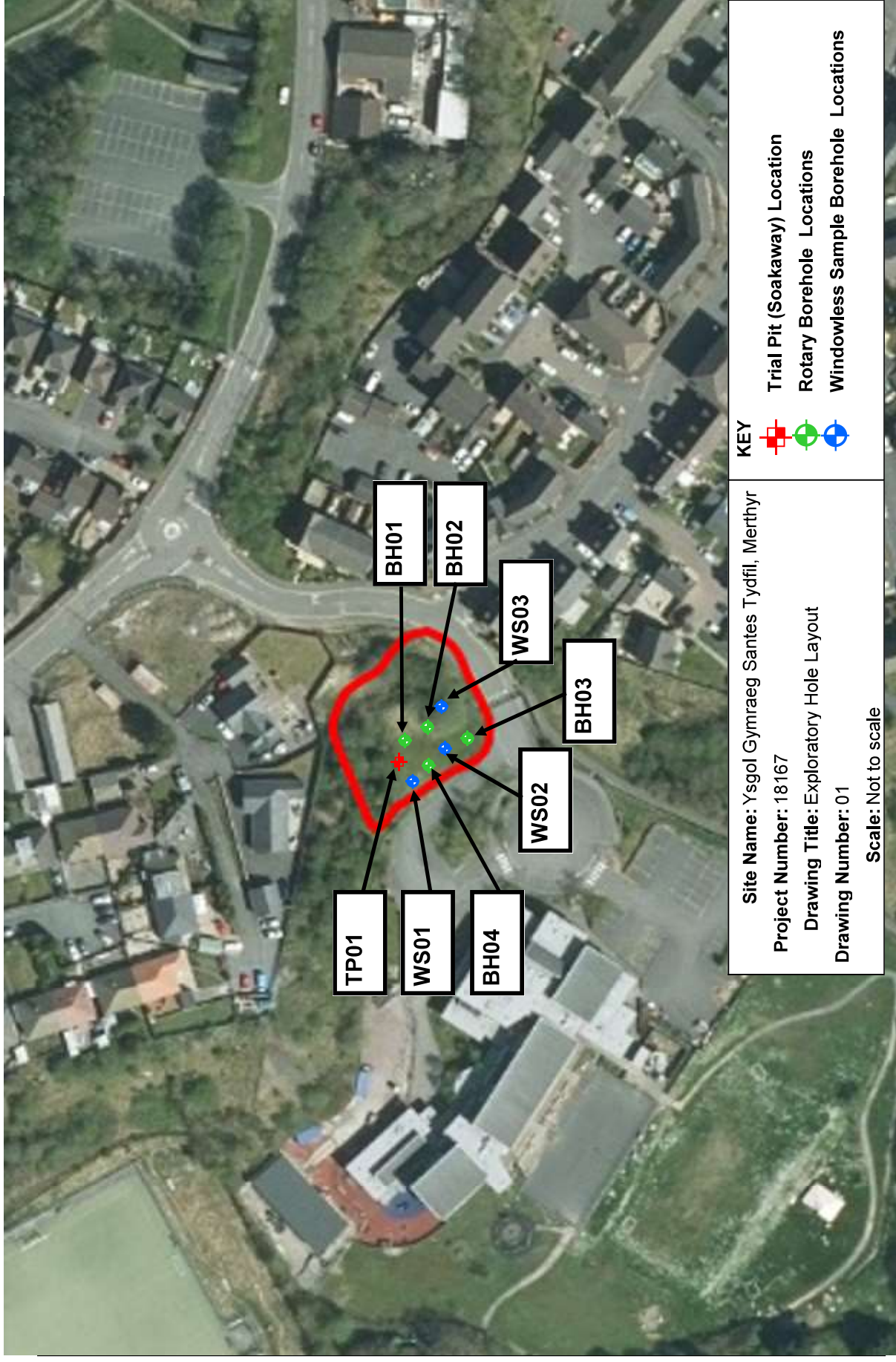


Site Name: Ysgol Gymraeg Santes Tydfil, Merthyr
Project Number: 18167
Date: 06/05/2024
Engineer: AC
Weather: Fine
Visit: 6 of 6

Baro Pressure Trend: Rising

[illegible]

Drawings





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