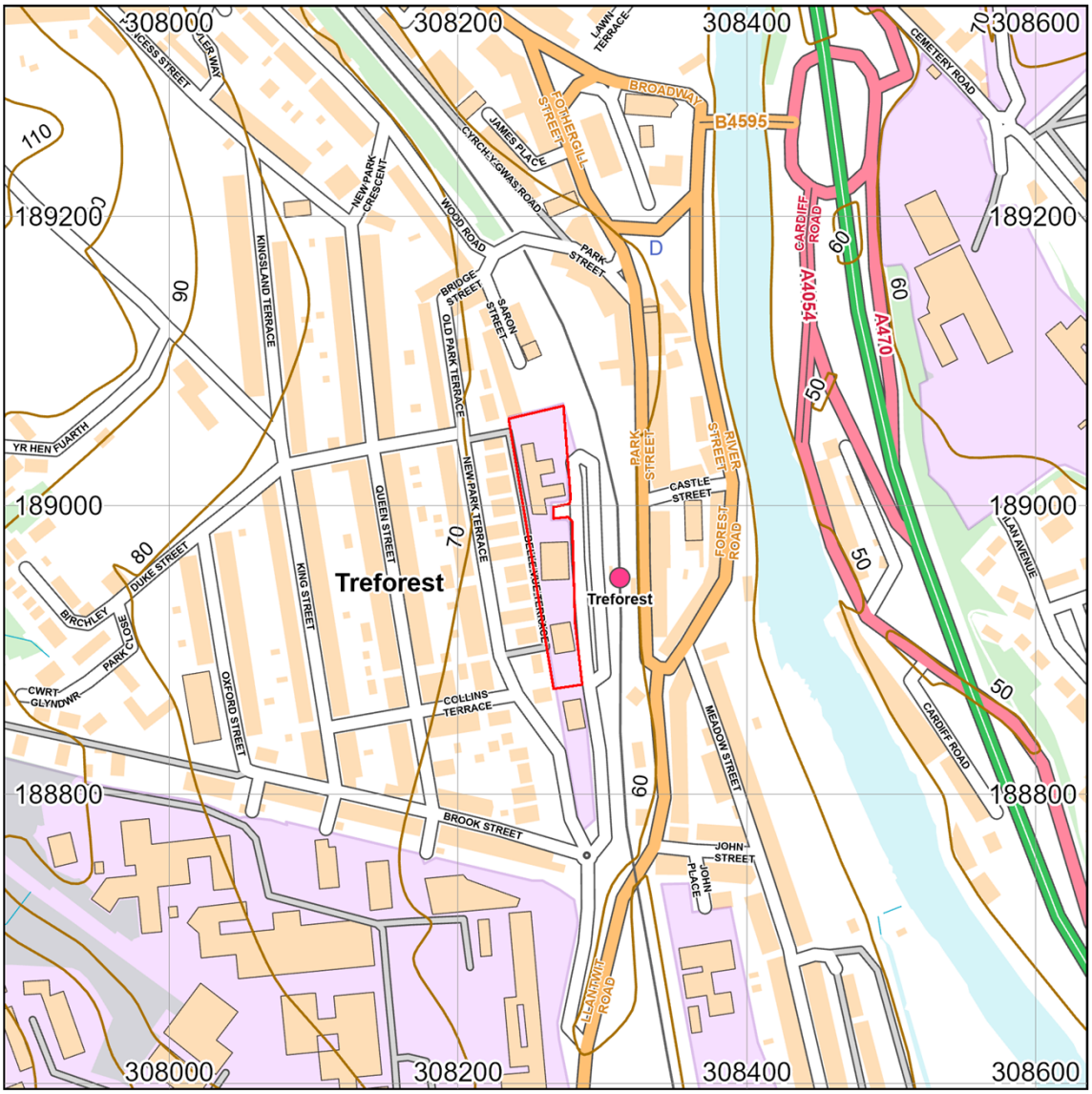
Search location



Contains OS data © Crown Copyright and database right 2026. OS OpenMap Local:
Search location indicated in red

This report describes a site located at National Grid Reference 308260, 188971. Note that for sites of irregular shape, this point may lie outside the site boundary. Where the client has submitted a site plan the assessment will be based on the area given.

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Radon Report: UK

When extensions are made to existing buildings in high radon areas, or new buildings are constructed in these areas, the Building Regulations for England, Wales, Scotland and Northern Ireland require that protective measures are taken against radon entering the building.

This report provides information on whether radon protective measures are required. Depending on the probability of buildings having high radon levels, the Regulations may require either:

1. No protective measures
2. Basic protective measures
3. Full protective measures

This is an advisory report on the requirement for radon protective measures in new buildings, conversions and extensions. The report also indicates whether a site is located within a radon Affected Area

Requirement for radon protective measures

The determination below follows advice in *BR211 Radon: Guidance on protective measures for new buildings (2023 edition), which also provides guidance on what to do if the* result *indicates that protective measures are required.*

Is the property in an area where radon protective measures are required for new buildings or extensions to existing ones as described in publication BR211 (2023 edition) Radon: Guidance on protective measures for new buildings?

FULL RADON PROTECTIVE MEASURES ARE REQUIRED FOR THE REPORT AREA.

More details of the protective measures required are available in *BR211 Radon: Guidance on protective measures for new buildings (2023 Edition)*.

Whether or not the radon level in a building is above or below the radon Action Level can only be established by having the building tested. The UKHSA provides a radon testing service which can be accessed at www.ukradon.org or by telephone (01235 822622).

If you require further information or guidance, you should contact your local authority building control officer or approved inspector.

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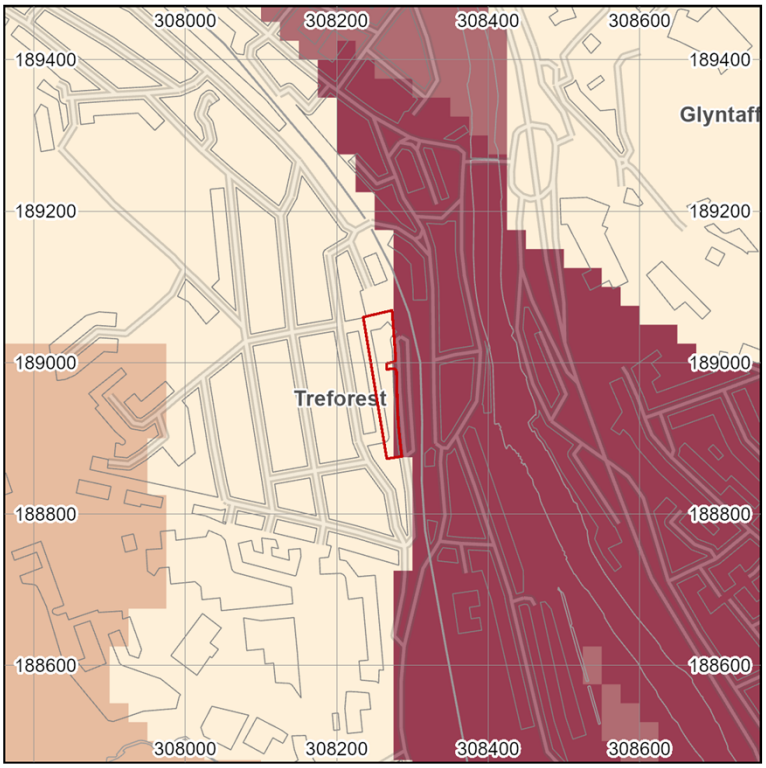
Radon Affected Area



	% Homes estimated to be at or above the action level
	0-1%
	1-3%
	3-5%
	5-10%
	10-30%
	30-100%

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Scale: 1:10 000 (1cm = 100 m)
Search area indicated in red

Is the property in a radon Affected Area as defined by the UK Health Security Agency (UKHSA) and if so what percentage of homes are estimated to be at or above the Action Level? **YES**

Additional Information

THE PROPERTY IS IN A RADON AFFECTED AREA WHERE 10 TO 30% OF HOMES ARE ESTIMATED TO BE AT OR ABOVE THE ACTION LEVEL.

The UKHSA recommends a radon 'Action Level' of 200 Becquerels per cubic metre of air (Bq m^{-3}) for the annual average of the radon gas concentration in a home. Where 1% or more of homes are estimated to be at or above the Action Level the area should be regarded as a radon Affected Area.

This report informs you whether the property is in a radon Affected Area and the percentage of homes that are estimated to be at or above the radon Action Level at this location. Being in an Affected Area does not necessarily mean there is a high radon level within the property; the only way to determine the radon level is to carry out a radon measurement.

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The UKHSA advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels at or above the Action Level (200 Bq m^{-3}) should be remediated. Householders with levels between the Target Level (100 Bq m^{-3}) and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers. Whether or not a home is in fact above or below the Action Level or Target Level can only be established by having the building tested. The UKHSA provides a validated radon testing service which can be accessed at www.ukradon.org.

The information in this report provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as Law Society CON29 Enquiries of the Local Authority (2016); 3.14 Radon Gas: Do records indicate that the property is in a “Radon Affected Area” as identified by the UKHSA. The data can also be used to advise house buyers and sellers in Scotland and Northern Ireland.

If you are buying a new build property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

If you are buying a currently occupied property in a radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were at or above the radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and if the results of re-testing confirmed the effectiveness of the measures.

Further information on radon is available from the UKHSA at www.ukradon.org.

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What is radon?

Radon is a naturally occurring radioactive gas, which is produced by the radioactive decay of radium which, in turn, is derived from the radioactive decay of uranium. Uranium is found in small quantities in all soils and rocks, although the amount varies from place to place. Radon released from rocks and soils is quickly diluted in the atmosphere. Concentrations in the open air are normally very low and do not present a hazard. Radon that enters enclosed spaces such as some buildings (particularly basements), caves, mines, and tunnels may reach high concentrations in some circumstances. The construction method and degree of ventilation will influence radon levels in individual buildings. A person's exposure to radon will also vary according to how particular buildings and spaces are used.

Inhalation of the radioactive decay products of radon gas increases the chance of developing lung cancer. If individuals are exposed to high concentrations for significant periods of time, there may be cause for concern. In order to limit the risk to individuals, the Government has adopted an Action Level for radon in homes of 200 becquerels per cubic metre (Bq m^{-3}). The Government advises householders that, where the radon level is at or above the Action Level, measures should be taken to reduce the concentration.

Radon in workplaces

The Ionising Radiation Regulations 2017 require employers to take action when radon is present above a defined level in the workplace. Advice may be obtained from your local Health and Safety Executive Area Office or the Environmental Health Department of your local authority. The BRE publishes a guide (BR293)**: Radon in the workplace.** BRE publications may be obtained from the BRE Bookshop, Tel: 01923 664262, email: bookshop@bre.co.uk website: www.brebookshop.com

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Contact Details

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- Geological observations and interpretations are made according to the prevailing understanding of the subject at the time. The quality of such observations and interpretations may be affected by the availability of new data, by subsequent advances in knowledge, improved methods of interpretation, and better access to sampling locations.
- Raw data may have been transcribed from analogue to digital format, or may have been acquired by means of automated measuring techniques. Although such processes are subjected to quality control to ensure reliability where possible, some raw data may have been processed without human intervention and may in consequence contain undetected errors.
- Detail, which is clearly defined and accurately depicted on large-scale maps, may be lost when small-scale maps are derived from them.
- Although samples and records are maintained with all reasonable care, there may be some deterioration in the long term.
- The most appropriate techniques for copying original records are used, but there may be some loss of detail and dimensional distortion when such records are copied.
- Data may be compiled from the disparate sources of information at BGS's disposal, including material donated to BGS by third parties, and may not originally have been subject to any verification or other quality control process.
- Data, information and related records, which have been donated to BGS, have been produced for a specific purpose, and that may affect the type and completeness of the data recorded and any interpretation. The nature and purpose of data collection, and the age of the resultant material may render it unsuitable for certain applications/uses. You must verify the suitability of the material for your intended usage.
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- The topography shown on any map extracts is based on the latest OS mapping and is not necessarily the same as that used in the original compilation of the BGS geological map, and to which the geological linework available at that time was fitted.
- Note that for some sites, the latest available records may be historical in nature, and while every effort is made to place the analysis in a modern geological context, it is possible in some cases that the detailed geology at a site may differ from that described.

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Ordnance Survey

Report issued by
BGS Enquiry Service

APPENDIX C

CONSULTANTS COAL MINING REPORT FROM THE MINING REMEDIATION AUTHORITY

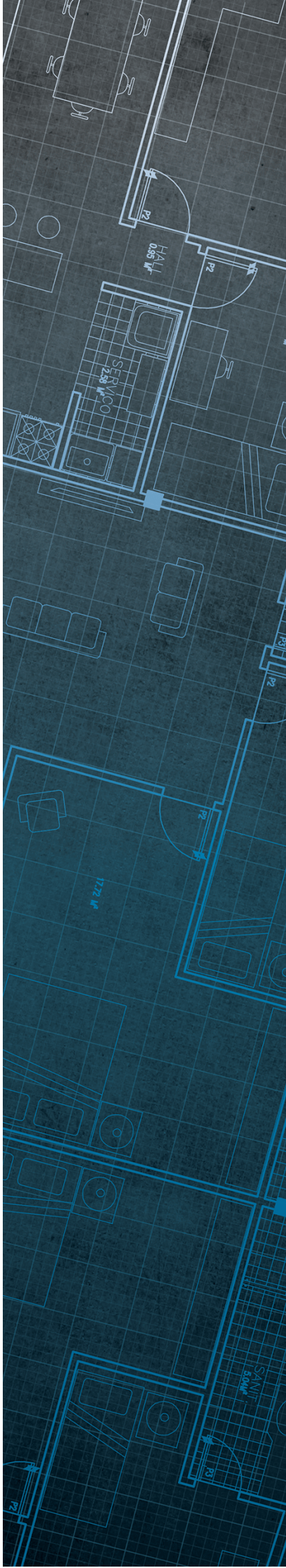
The Coal Authority

Consultants

Coal Mining Report

The Sidings
Treforest
Pontypridd
Rhondda Cynon Taf
CF37 1SL

Date of enquiry:	**18 March 2026**
Date enquiry received:	**18 March 2026**
Issue date:	**18 March 2026**
Our reference:	**51003559460001**
Your reference:	**14581/LP**



Consultants

Coal Mining Report

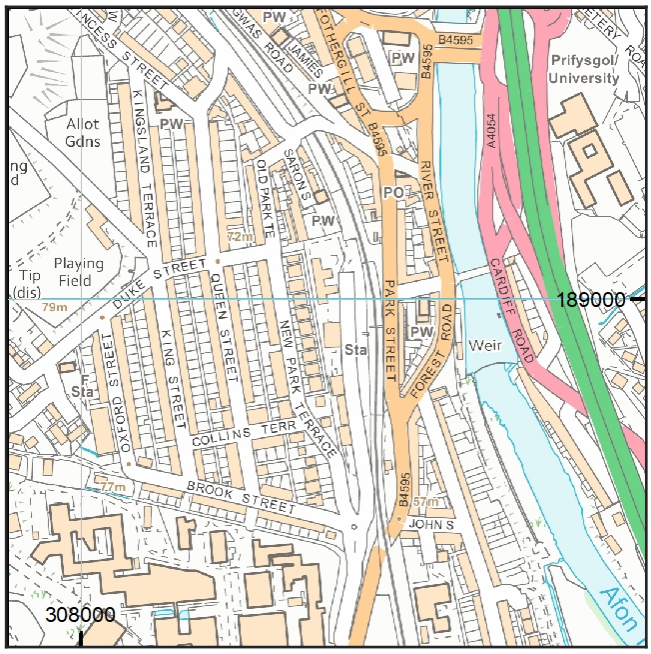
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

INTEGRAL GEOTECHNIQUE (WALES) LTD.

Enquiry address

The Sidings
Treforest
Pontypridd
Rhondda Cynon Taf
CF37 1SL



Approximate position of property

Map data

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How to contact us

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200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

reports@miningremediation.gov.uk

Section 1 – Mining activity and geology

Past underground mining
No past mining recorded.

Probable unrecorded shallow workings
None.

Spine roadways at shallow depth
No spine roadway recorded at shallow depth.

Mine entries
None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers
None available.

Outcrops
No outcrops recorded.

Geological faults, fissures and breaklines
No faults, fissures or breaklines recorded.

Opencast mines
None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips
None recorded within 500 metres of the enquiry boundary.

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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
6.9	North-East

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.

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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 in an area where a notice to withdraw support was given in 1981.

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.

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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 email us at reports@miningremediation.gov.uk.

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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 **email us at reports@miningremediation.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.

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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.

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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.

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The Coal Authority

Summary of findings

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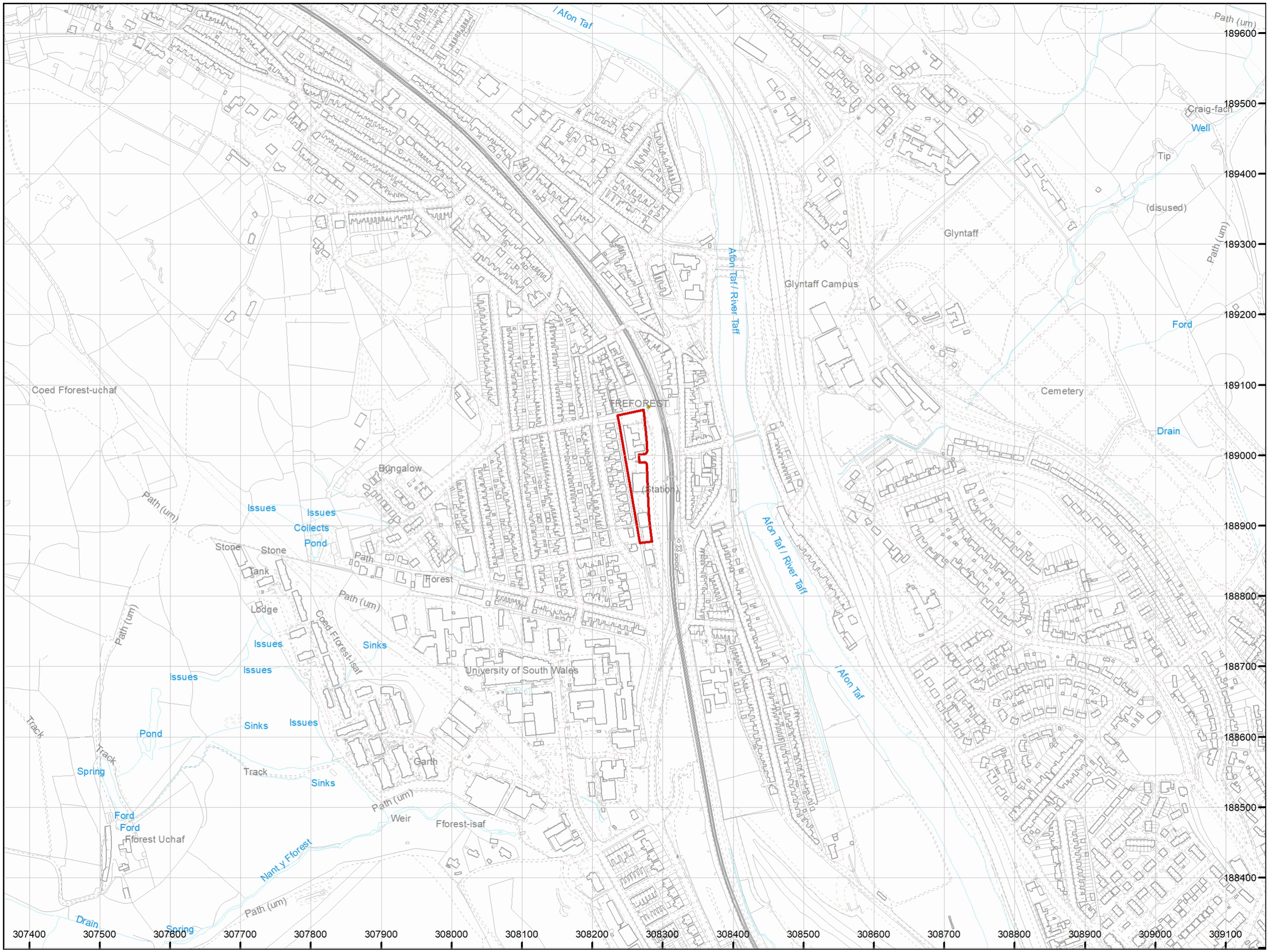
The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown

Site investigations



How to contact us
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reports@miningremediation.gov.uk

APPENDIX D

WINDOWLESS SAMPLE BOREHOLE LOGS

Intégral Géotechnique
Intégral House, 7 Beddau Way
Castlegate Business Park
Caerphilly CF83 2AX
Tel. 029 20807991
Fax. 029 20862176
mail@integralgeotec.com

Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS01** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 31/03/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
					0.18			BITUMINOUS MATERIAL
		0.30	ES		0.40			(Medium dense to dense) pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
		0.70	S	50 (10,13/50 for 95mm)	0.70			Dense to very dense brown sandy GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
								End of Borehole at 0.70 m

Remarks:

Refusal at 0.70m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

AGS

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Intégral House, 7 Beddau Way
Castlegate Business Park
Caerphilly CF83 2AX
Tel. 029 20807991
Fax. 029 20862176
mail@integralgeotec.com

Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS02** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101+86+76mm	Depth of Casing:	Dates 31/03/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
								(Medium dense) pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
	0.90 ▼				0.90			
		1.00	D					Loose brown sandy slightly clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone (MADE GROUND).
		1.00	S	N=8 (2,1/2,2,1,3)				
		2.00	S	N=3 (2,2/1,1,0,1)				*Becomes very loose at 2.00m depth.*
		3.00	S	50 (8,10/50 for 105mm)	3.00			*Becomes dense to very dense at 3.00m depth.*
								End of Borehole at 3.00 m

Remarks:

Refusal at 3.00m bgl.
Ground saturated below 0.90m depth.
Continuous collapse of borehole above 0.90m depth

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

AGS

Intégral Géotechnique
Intégral House, 7 Beddau Way
Castlegate Business Park
Caerphilly CF83 2AX
Tel. 029 20807991
Fax. 029 20862176
mail@integralgeotec.com

Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS03** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 31/03/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.16			BITUMINOUS MATERIAL
		0.50	ES					(Medium dense to dense) pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
		0.75	ES		0.70			Dense to very dense brown gravelly slightly clayey fine to coarse SAND with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
		0.80	S	50 (10,12/50 for 160mm)	0.80			End of Borehole at 0.80 m

Remarks:

Refusal at 0.80m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

AGS

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Caerphilly CF83 2AX
Tel. 029 20807991
Fax. 029 20862176
mail@integralgeotec.com

Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS04** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 31/03/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
					0.19			BITUMINOUS MATERIAL
								Dense to very dense brown sandy slightly clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
		0.70	S	50 (9,9/50 for 170mm)	0.70			End of Borehole at 0.70 m

Remarks:

Refusal at 0.70m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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	Project Name: **The Sidings**	Project No.: **14581**	Borehole No.: **WS05** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 31/03/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.06			Concrete Paving Slab
					0.15			(Loose to medium dense) brown fine to coarse SAND (MADE GROUND)
		0.30	ES					Medium dense to dense pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
					0.60			Dense to very dense brown sandy clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
		0.80	D					
		0.90	S	50 (9,10/50 for 115mm)	0.90			End of Borehole at 0.90 m

Remarks:

Refusal at 0.90m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS06** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 76mm	Depth of Casing:	Dates 31/03/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
								Grass over soft brown slightly gravelly CLAY with rootlets and a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone. Contain inclusions of rubber (MADE GROUND).
					0.40			(Medium dense to dense) brown sandy GRAVEL with a low cobble content. Gravel is fine to coarse of sub-rounded to rounded sandstone and rare angular coal. Cobbles are sub-rounded of sandstone.
					0.90			Dense to very dense brown gravelly fine to coarse SAND. Gravel is fine to coarse sub-rounded to rounded of sandstone.
		1.40	S	N=50 (2,5/50 for 245mm)	1.40			End of Borehole at 1.40 m

1
2
3
4
5

Remarks:

Refusal at 1.40m bgl.
No groundwater encountered.
Borehole drilled through base of SA01 upon completion of soil infiltration test.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS07** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 01/04/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.11			BITUMINOUS MATERIAL
					0.30			Dense pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
		0.60	D					Dense to very dense brown sandy clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
		0.70	S	50 (8,10/50 for 180mm)	0.70			End of Borehole at 0.70 m

Remarks:

Refusal at 0.70m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS08** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 01/04/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.12			BITUMINOUS MATERIAL
								Dense pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
					0.40			
		0.50	ES					Medium dense black slightly gravelly silty fine to coarse SAND. Gravel is fine to coarse angular to sub-angular of coal, rare sandstone, brick and slag (MADE GROUND).
					0.60			
								Dense to very dense brown sandy clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
		0.90	D					
		1.00	S	N=50 (10,11/50 for 245mm)	1.00			End of Borehole at 1.00 m

Remarks:

Refusal at 1.00m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS09** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 01/04/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			Grass over soft brown slightly gravelly CLAY with rootlets. Gravel is fine to coarse sub-angular to rounded of sandstone
								Very poor recovery from GL to 0.90m depth
								Stiff brown sandy gravelly CLAY. Gravel is fine to coarse sub-rounded to rounded of sandstone.
		0.90	S	50 (9,9/50 for 180mm)	0.90			*Becomes very stiff at 0.90m depth.*
								End of Borehole at 0.90 m

Remarks:

Refusal at 0.90m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS10** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101mm	Depth of Casing:	Dates 01/04/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20	ES					Grass over soft to firm brown gravelly CLAY with rootlets. Gravel is fine to coarse angular to sub-rounded of sandstone and rare concrete (MADE GROUND).
					0.60			Loose to medium dense brown fine to coarse SAND (MADE GROUND)
					0.70			Dense to very dense brown sandy slightly clayey GRAVEL. Gravel is fine to coarse sub-rounded to rounded of sandstone.
		0.90	S	50 (10,13/50 for 85mm)	0.90			End of Borehole at 0.90 m

Remarks:

Refusal at 0.90m bgl.
No groundwater encountered.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS11** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101+86mm	Depth of Casing:	Dates 01/04/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
					0.10			BITUMINOUS MATERIAL
								Dense pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
					0.50			Medium dense black slightly gravelly silty fine to coarse SAND. Gravel is fine to coarse angular to sub-angular of coal, rare sandstone, brick and slag (MADE GROUND).
					0.70			Dense brown gravelly clayey fine to coarse SAND with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
	1.00 ▼	1.00	S	N=22 (8,6/5,5,4,8)				
		1.90	S	N=50 (8,10/50 for 230mm)	1.90			*Becomes dense to very dense at 1.90m depth.*
								End of Borehole at 1.90 m

Remarks:

Refusal at 1.90m bgl.
Ground saturated below 1.00m depth.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS12** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101+86+76mm	Depth of Casing:	Dates 01/04/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
					0.13			BITUMINOUS MATERIAL
								Dense pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
					0.80			Medium dense brown gravelly clayey fine to coarse SAND with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
		1.00	S	N=15 (2,4/3,4,5,3)				
		1.10	D					
	1.50 ▼							
		2.00	S	N=7 (1,1/0,1,3,3)				*Becomes loose at 2.00m depth.*
					2.10			Loose becoming dense to very dense brown sandy slightly clayey GRAVEL. Gravel is fine to coarse sub-rounded to rounded of sandstone.
		2.50	S	50 (10,13/50 for 180mm)	2.50			End of Borehole at 2.50 m

Remarks:

Refusal at 2.50m bgl.
Ground saturated below 1.50m depth.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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Project Name: **The Sidings**		Project No.: **14581**	Borehole No.: **WS13** Sheet 1 of 1
Location: Treforest	Client: Trivallis	Coordinates:	Hole Type: WLS
Equipment: Dart 540	Diameter of Casing:	Level:	Scale 1:25
Diameter of Boring: 101+86+76mm	Depth of Casing:	Dates 01/04/2026 -	Logged By: AG

Well	Water Strikes	Samples & In situ Testing: Depth (m)	Type	Results	Depth (m)	Level (m AOD)	Legend	Stratum Description
								Medium dense pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
					0.40			
					0.50			Medium dense grey slightly sandy GRAVEL. Gravel is coarse of sub-angular to sub-rounded sandstone (MADE GROUND).
								Loose brown sandy clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone. Contains inclusions of plastic (MADE GROUND).
		1.00	S	N=6 (2,2/1,2,2,1)	1.00			*No recovery from 1.00m to 3.00m depth.*
		2.00	S	N=4 (2,2/1,2,0,1)				
		3.00	S	50 (1,1/50 for 160mm)	3.00			End of Borehole at 3.00 m

Remarks:
Refusal at 3.00m bgl.
No groundwater encountered.

Key:
D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
SPT - Standard Penetration Test (split spoon)
CPT - Standard Penetration Test (solid cone)
W - Water sample
U - Undisturbed sample
TCR - Total Core Recovery
SCR - Solid Core Recovery
RQD - Rock Quality Designation

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APPENDIX E

HAND EXCAVATED TRIAL PIT LOGS

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Project Name:	Project No.:	Trial Pit No.:
The Sidings	**14581**	**SA01** Sheet 1 of 1

Location:	Client:	Logged By:	Scale
Treforest	Trivallis	AG	1:25

Equipment: Hand Excavated

Coordinates:

Dimensions 0.30m

Depth : 1.00m 0.30m

Date Excavated: 31/03/2026

Level:

Samples & In-situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
						Grass over soft brown slightly gravelly CLAY with rootlets and a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone. Contain inclusions of rubber (MADE GROUND).
			0.40			(Medium dense to dense) brown sandy GRAVEL with a low cobble content. Gravel is fine to coarse of sub-rounded to rounded sandstone and rare angular coal. Cobbles are sub-rounded of sandstone.
			0.90			(Dense) brown gravelly fine to coarse SAND. Gravel is fine to coarse sub-rounded to rounded of sandstone.
			1.00			End of Trialpit at 1.00 m

Remarks:
Terminated at 1.00m bgl.
Soil infiltration test undertaken

Groundwater: No groundwater encountered.

Stability: Generally stable in the short term.

Key:
D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
W - Water sample

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Project Name:	Project No.:	Trial Pit No.:
The Sidings	**14581**	**SA02** Sheet 1 of 1

Location:	Client: Trivallis	Logged By:	Scale
Treforest		AG	1:25

Equipment: Hand Excavated

Coordinates:

Date Excavated: 31/03/2026

Level:

Dimensions

Depth : 0.60m

0.30m

0.30m

Samples & In-situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
						Grass over soft brown slightly gravelly CLAY with rootlets. Gravel is fine to coarse sub-rounded to rounded of sandstone (MADE GROUND).
			0.20			(Dense) brown sandy slightly clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
			0.60			End of Trialpit at 0.60 m

Remarks:

Terminated at 0.60m bgl due to hard excavation.
Soil infiltration test undertaken.

Groundwater: No groundwater encountered.

Stability: Generally stable in the short term.

Key:

D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
W - Water sample

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Project Name:	Project No.:	Trial Pit No.:
The Sidings	**14581**	**SA03** Sheet 1 of 1

Location:	Client:	Logged By:	Scale
Treforest	Trivallis	AG	1:25

Equipment: Hand Excavated

Coordinates:

Dimensions 0.30m

Depth : 0.70m (0.30m)

Date Excavated: 01/04/2026

Level:

Samples & In-situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
Depth (m)	Type	Results				
			0.10			BITUMINOUS MATERIAL
			0.20			(Medium dense) brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone and rare bituminous material (MADE GROUND).
0.30	ES					(Medium dense to dense) pinkish brown sandy GRAVEL. Gravel is fine to coarse angular to sub-angular of sandstone (MADE GROUND).
			0.40			(Dense) brown sandy slightly clayey GRAVEL with a low cobble content. Gravel is fine to coarse sub-rounded to rounded of sandstone. Cobbles are sub-rounded of sandstone.
			0.70			End of Trialpit at 0.70 m

Remarks:
Terminated at 0.70m bgl due to hard excavation.
Soil infiltration test undertaken.

Groundwater: Groundwater seeping at the base of the pit at 0.70m depth.

Stability: Generally stable in the short term.

Key:
D - Small disturbed sample
B - Bulk disturbed sample
ES - Environmental soil sample
W - Water sample

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APPENDIX F

SOIL INFILTRATION TEST RESULTS

BRE365 SOIL INFILTRATION RATE TEST - SA01

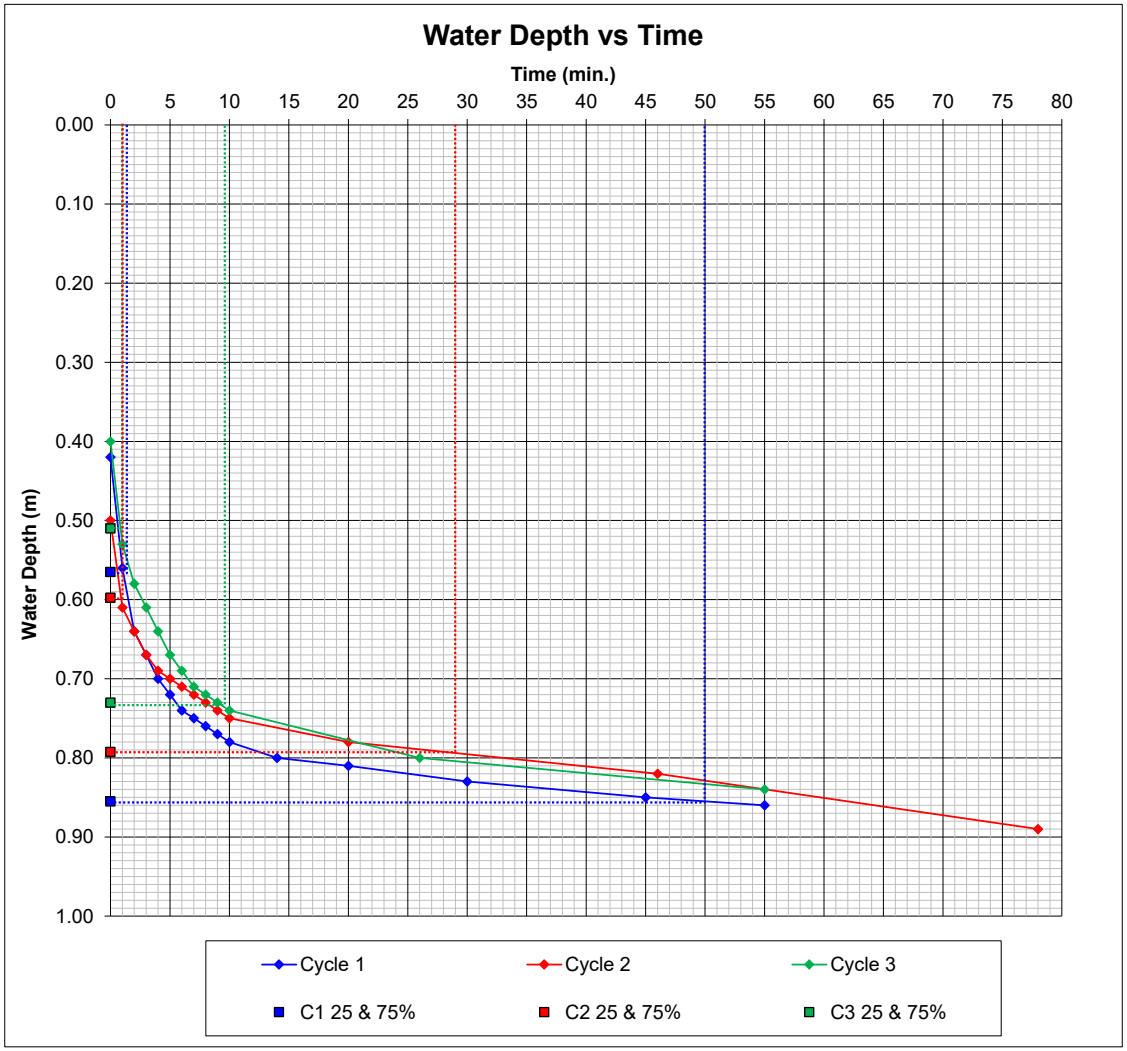
14581 The Sidings, Treforest

Trial Pit Information	
Length (m)	0.30
Width (m)	0.30
Depth (m)	1.00
Groundwater	Dry
Weather Conditions	Sunny
Date	31-Mar-26

Remarks

1. Terminated at 1.00m bgl.
2. No groundwater encountered.

Cycle 1		Cycle 2		Cycle 3	
Time (min)	Depth (m)	Time (min)	Depth (m)	Time (min)	Depth (m)
0	0.42	0	0.50	0	0.40
1	0.56	1	0.61	1	0.53
2	0.64	2	0.64	2	0.58
3	0.67	3	0.67	3	0.61
4	0.70	4	0.69	4	0.64
5	0.72	5	0.70	5	0.67
6	0.74	6	0.71	6	0.69
7	0.75	7	0.72	7	0.71
8	0.76	8	0.73	8	0.72
9	0.77	9	0.74	9	0.73
10	0.78	10	0.75	10	0.74
14	0.80	20	0.78	26	0.80
20	0.81	46	0.82	55	0.84
30	0.83	78	0.89		
45	0.85				
55	0.86				



Final Excavation Depth (m)	Cycle 1	Cycle 2	Cycle 3
At end of testing cycle	1.00	0.89	0.84
Water Depths (m)			
Water depth at start of test	0.42	0.50	0.40
Water depth at end of test	0.86	0.89	0.84
Effective depth (measured)	0.44	0.39	0.44
% Effective storage depth	0.76	1.00	1.00
Effective Storage Depths (m)			
Effective storage depth (100%)	0.58	0.39	0.44
Effective storage depth (75%)	0.44	0.29	0.33
Effective storage depth (50%)	0.29	0.20	0.22
Effective storage depth (25%)	0.15	0.10	0.11
Outflow Time (min)			
Time for measured outflow	55	78	55
Time for 100% outflow	n/a	n/a	n/a
Time for 75-25% outflow	48	28	9
Volume of Outflow (m^3)			
Over measured effective depth	0.04	0.04	0.04
Over 100% effective depth	0.05	0.04	0.04
From 75% - 25% effective depth	0.03	0.02	0.02
Surface Area (m^2)			
For 100% effective storage	0.79	0.56	0.62
For 50% effective storage	0.44	0.32	0.35
Over measured depth	0.62	0.56	0.62
Soil Infiltration Rate (m/s)	**Cycle 1**	**Cycle 2**	**Cycle 3**
Over 100% effective depth	n/a	n/a	n/a
Over measured depth	1.9E-05	1.3E-05	1.9E-05
Over 75% - 25% effective depth	**2.1E-05**	**3.2E-05**	**1.0E-04**

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BRE365 SOIL INFILTRATION RATE TEST - SA02

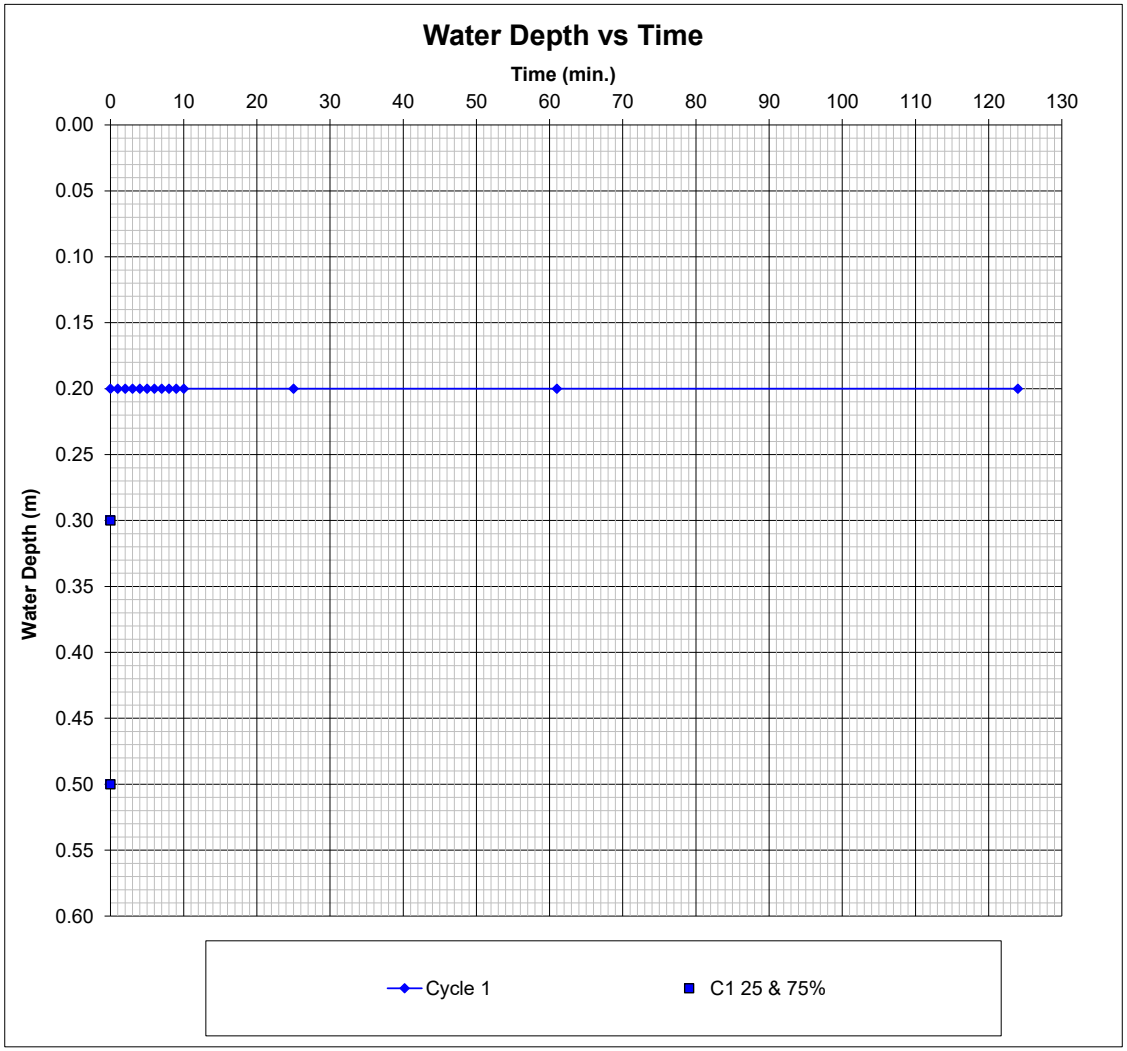
14581 The Sidings, Treforest

Trial Pit Information	
Length (m)	0.30
Width (m)	0.30
Depth (m)	0.60
Groundwater	Dry
Weather Conditions	Sunny
Date	31-Mar-26

Remarks

1. Terminated at 0.60m due to hard excavation.
2. No groundwater encountered.
3. Negligible infiltration observed.

Cycle 1		Cycle 2		Cycle 3	
Time (min)	Depth (m)	Time (min)	Depth (m)	Time (min)	Depth (m)
0	0.20				
1	0.20				
2	0.20				
3	0.20				
4	0.20				
5	0.20				
6	0.20				
7	0.20				
8	0.20				
9	0.20				
10	0.20				
25	0.20				
61	0.20				
124	0.20				



Final Excavation Depth (m)	Cycle 1	Cycle 2	Cycle 3
At end of testing cycle	0.60		
Water Depths (m)			
Water depth at start of test	0.20		
Water depth at end of test	0.20		
Effective depth (measured)	0.00		
% Effective storage depth	0.00		
Effective Storage Depths (m)			
Effective storage depth (100%)	0.40		
Effective storage depth (75%)	0.30		
Effective storage depth (50%)	0.20		
Effective storage depth (25%)	0.10		
Outflow Time (min)			
Time for measured outflow	124		
Time for 100% outflow	n/a		
Time for 75-25% outflow	n/a		
Volume of Outflow (m^3)			
Over measured effective depth	0.00		
Over 100% effective depth	0.04		
From 75% - 25% effective depth	0.02		
Surface Area (m^2)			
For 100% effective storage	0.57		
For 50% effective storage	0.33		
Over measured depth	0.09		
Soil Infiltration Rate (m/s)	**Cycle 1**	**Cycle 2**	**Cycle 3**
Over 100% effective depth	n/a		
Over measured depth	0.0E+00		
Over 75% - 25% effective depth	**n/a**		

Intégral Géotechnique

BRE365 SOIL INFILTRATION RATE TEST - SA03

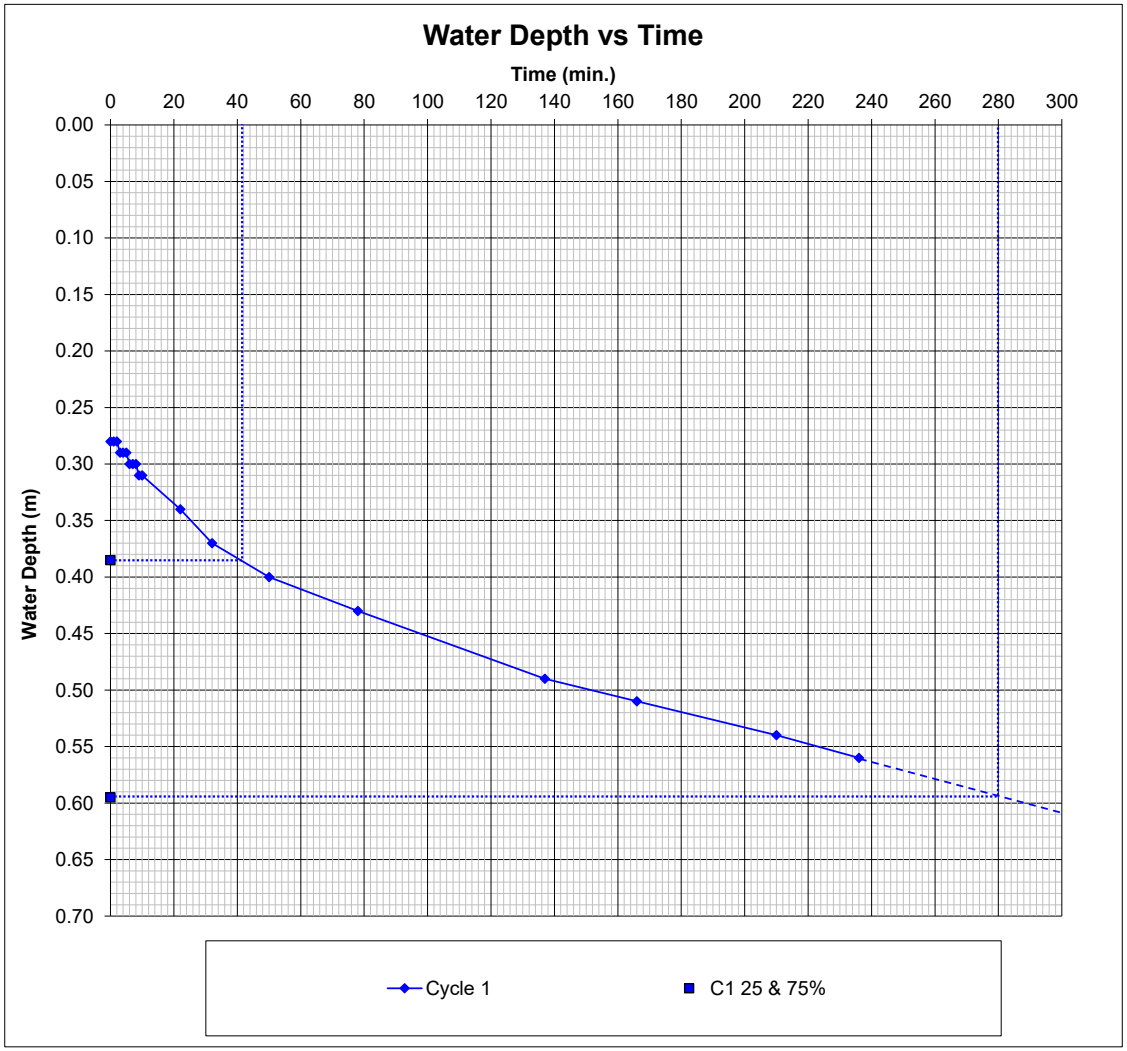
14581 The Sidings, Treforest

Trial Pit Information	
Length (m)	0.30
Width (m)	0.30
Depth (m)	0.70
Groundwater	0.70
Weather Conditions	Sunny
Date	01-Apr-26

Remarks

1. Terminated at 0.70m due to hard excavation
2. Groundwater seeping at the base of the pit.
3. Infiltration rate based on extrapolating existing information.

Cycle 1		Cycle 2		Cycle 3	
Time (min)	Depth (m)	Time (min)	Depth (m)	Time (min)	Depth (m)
0	0.28				
1	0.28				
2	0.28				
3	0.29				
4	0.29				
5	0.29				
6	0.30				
7	0.30				
8	0.30				
9	0.31				
10	0.31				
22	0.34				
32	0.37				
50	0.40				
78	0.43				
137	0.49				
166	0.51				
210	0.54				
236	0.56				



Final Excavation Depth (m)	Cycle 1	Cycle 2	Cycle 3
At end of testing cycle	0.70		
Water Depths (m)			
Water depth at start of test	0.28		
Water depth at end of test	0.56		
Effective depth (measured)	0.28		
% Effective storage depth	0.67		
Effective Storage Depths (m)			
Effective storage depth (100%)	0.42		
Effective storage depth (75%)	0.32		
Effective storage depth (50%)	0.21		
Effective storage depth (25%)	0.11		
Outflow Time (min)			
Time for measured outflow	236		
Time for 100% outflow	n/a		
Time for 75-25% outflow	239		
Volume of Outflow (m^3)			
Over measured effective depth	0.03		
Over 100% effective depth	0.04		
From 75% - 25% effective depth	0.02		
Surface Area (m^2)			
For 100% effective storage	0.59		
For 50% effective storage	0.34		
Over measured depth	0.43		
Soil Infiltration Rate (m/s)	**Cycle 1**	**Cycle 2**	**Cycle 3**
Over 100% effective depth	n/a		
Over measured depth	4.2E-06		
Over 75% - 25% effective depth	**3.9E-06**		

Intégral Géotechnique

APPENDIX G

LABORATORY CHEMICAL TEST RESULTS

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Analytical Report Number : 26-018186

Replaces Analytical Report Number: 26-018186, issue no. 1
Additional analysis undertaken.
Asbestos Quantification added to samples 883426/428 & 429 as per client's request.

Project / Site name:	The Sidings, Treforest	**Samples received on:**	07/04/2026
Your job number:	14581	**Samples instructed on/ Analysis started on:**	10/04/2026
Your order number:	14581/AG	**Analysis completed by:**	24/04/2026
Report Issue Number:	2	**Report issued on:**	28/04/2026
Samples Analysed:	11 soil samples		



Signed:

Rachel Chappell
Key Account Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883424	883425	883426	883427	883428
Sample Reference				WS01	WS03	WS05	SA03	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.30	0.50	0.30	0.30	0.20
Date Sampled				31/03/2026	31/03/2026	31/03/2026	01/04/2026	01/04/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Mass of stone >10mm	%	0.1	NONE	48.8	67.8	56	41.8	52.1
Moisture Content	%	0.01	NONE	4.3	2.8	6.3	3.7	8.5
Total mass of sample received	kg	0.1	NONE	1.1	1.2	1.1	1.2	1.2
Whole Sample Crushed	N/A	N/A	NONE	-	Crushed	Crushed	-	Crushed
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	KMC	KMC	KMC	KMC	PKU
Analysis completed	N/A	N/A	N/A	17/04/2026	17/04/2026	17/04/2026	17/04/2026	17/04/2026
Actinolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	Not-detected
Amosite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	Not-detected
Anthophyllite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	-	-	Detected	-	Detected
Crocidolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	Not-detected
Tremolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	Not-detected
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	< 0.001	-	< 0.001
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	Loose Fibres	-	Loose Fibres
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	8.8	9.2	9.9	9.1	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO_4	mg/kg	50	MCERTS	1500	2100	3000	1200	770
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	91	110	950	70	53
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	45.5	56.3	473	35.2	26.5
Sulphide	mg/kg	1	MCERTS	9.5	8.2	11	2	7.7
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.2	0.1	0.3	0.6	1.5
Loss on Ignition @ 450°C	%	0.2	MCERTS	1.8	1.1	2.2	1.3	4.4
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883424	883425	883426	883427	883428
Sample Reference				WS01	WS03	WS05	SA03	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.30	0.50	0.30	0.30	0.20
Date Sampled				31/03/2026	31/03/2026	31/03/2026	01/04/2026	01/04/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.26
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.06
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.18
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.16
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.08	1.4
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.46
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	0.13	3.1
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	0.11	2.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	1.9
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.07	1.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.08	0.09	2.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	1.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.06	1.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	1.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.38
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.06	1.3
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	20.2
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	5	5.3	6.6	3.3	11
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.5	0.44	0.45	0.19	0.51
Boron (total)	mg/kg	1	MCERTS	5.1	5.2	6.5	4	4.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.2	< 0.2	0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	U/S [*U/S g]
Chromium (hexavalent) by IC	mg/kg	1.8	NONE	-	-	-	-	< 1.80
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	7.9	10	12	7.8	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	8.5	3	9.7	3.7	28
Lead (aqua regia extractable)	mg/kg	1	MCERTS	10	5.5	11	5	28
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.5	5.4	7.6	4.7	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.7	1.9	1.1	< 1.0	1.7
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	7.5	8.4	14	7.2	22
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	30	14	38	23	59

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Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883424	883425	883426	883427	883428
Sample Reference				WS01	WS03	WS05	SA03	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.30	0.50	0.30	0.30	0.20
Date Sampled				31/03/2026	31/03/2026	31/03/2026	01/04/2026	01/04/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC16 - EC35 $_{EH_CU_1D_AL}$	mg/kg	10	MCERTS	< 10	< 10	< 10	63	13
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	63	13
TPHCWG - Aliphatic >EC35 - EC44 $_{EH_CU_1D_AL}$	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	100	19
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	63	13
TPHCWG - Aliphatic >EC5 - EC44 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	< 10	< 10	< 10	160	32
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	< 10	< 10	< 10	87	18
TPHCWG - Aromatic >EC35 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	93	< 10
TPHCWG - Aromatic >EC35 - EC44 $_{EH_CU_1D_AR}$	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	170	< 8.4
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	87	18
TPHCWG - Aromatic >EC5 - EC44 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	< 10	< 10	< 10	260	18
TPH Total >EC5 - EC44 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	< 10	< 10	< 10	420	49

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883429	883430	883431	883432	883433
Sample Reference				WS08	WS03	WS05	WS12	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.50	0.75	0.80	1.10	0.90
Date Sampled				01/04/2026	31/03/2026	31/03/2026	01/04/2026	01/04/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Mass of stone >10mm	%	0.1	NONE	< 0.1	< 0.1	< 0.1	22.9	18
Moisture Content	%	0.01	NONE	18	9.7	10	11	5
Total mass of sample received	kg	0.1	NONE	1	0.5	1	1	0.9
Whole Sample Crushed	N/A	N/A	NONE	-	-	-	-	-
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	PKU	-	-	-	-
Analysis completed	N/A	N/A	N/A	17/04/2026	-	-	-	-
Actinolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	Detected	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	< 0.001	-	-	-	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	-	-	-	-
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	7.9	-	8.1	7.8	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Total Sulphate as SO_4	mg/kg	50	MCERTS	710	-	-	-	-
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	52	-	31	26	260
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	25.8	-	15.3	12.8	132
Sulphide	mg/kg	1	MCERTS	13	-	-	-	-
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	-	-	-	-
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	-	< 0.5	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	6	-	-	-	-
Loss on Ignition @ 450°C	%	0.2	MCERTS	25	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-

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Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883429	883430	883431	883432	883433
Sample Reference				WS08	WS03	WS05	WS12	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.50	0.75	0.80	1.10	0.90
Date Sampled				01/04/2026	31/03/2026	31/03/2026	01/04/2026	01/04/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	1.5	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.18	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	0.55	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	0.39	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	6.6	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	1.1	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	9.7	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	7.9	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.8	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	4.1	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	5.2	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.8	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.4	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.1	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.64	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2	-	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	50.9	-	-	-	-
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	-	-	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1	-	-	-	-
Boron (total)	mg/kg	1	MCERTS	5.5	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1	-	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	U/S *U/S g	-	-	-	-
Chromium (hexavalent) by IC	mg/kg	1.8	NONE	< 1.80	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	430	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	160	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.1	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	33	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	230	-	-	-	-

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Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883429	883430	883431	883432	883433
Sample Reference				WS08	WS03	WS05	WS12	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.50	0.75	0.80	1.10	0.90
Date Sampled				01/04/2026	31/03/2026	31/03/2026	01/04/2026	01/04/2026
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC10 - EC12 $_{EH_CU_1D_AL}$	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPHCWG - Aliphatic >EC12 - EC16 $_{EH_CU_1D_AL}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPHCWG - Aliphatic >EC16 - EC21 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	12	-	-	-	-
TPHCWG - Aliphatic >EC16 - EC35 $_{EH_CU_1D_AL}$	mg/kg	10	MCERTS	180	-	-	-	-
TPHCWG - Aliphatic >EC21 - EC35 $_{EH_CU_1D_AL}$	mg/kg	8	MCERTS	170	-	-	-	-
TPHCWG - Aliphatic >EC35 - EC44 $_{EH_CU_1D_AL}$	mg/kg	8.4	NONE	53	-	-	-	-
TPHCWG - Aliphatic >EC5 - EC35 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	180	-	-	-	-
TPHCWG - Aliphatic >EC5 - EC44 $_{EH_CU+HS_1D_AL}$	mg/kg	10	NONE	230	-	-	-	-
TPHCWG - Aromatic >EC5 - EC7 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aromatic >EC7 - EC8 $_{HS_1D_AR}$	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aromatic >EC8 - EC10 $_{HS_1D_AR}$	mg/kg	0.02	MCERTS	< 0.020	-	-	-	-
TPHCWG - Aromatic >EC10 - EC12 $_{EH_CU_1D_AR}$	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPHCWG - Aromatic >EC12 - EC16 $_{EH_CU_1D_AR}$	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPHCWG - Aromatic >EC16 - EC21 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	22	-	-	-	-
TPHCWG - Aromatic >EC21 - EC35 $_{EH_CU_1D_AR}$	mg/kg	10	MCERTS	79	-	-	-	-
TPHCWG - Aromatic >EC35 - EC40 $_{EH_CU_1D_AR}$	mg/kg	10	NONE	14	-	-	-	-
TPHCWG - Aromatic >EC35 - EC44 $_{EH_CU_1D_AR}$	mg/kg	8.4	NONE	30	-	-	-	-
TPHCWG - Aromatic >EC5 - EC35 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	100	-	-	-	-
TPHCWG - Aromatic >EC5 - EC44 $_{EH_CU+HS_1D_AR}$	mg/kg	10	NONE	130	-	-	-	-
TPH Total >EC5 - EC44 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	360	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883434
Sample Reference				WS07
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.60
Date Sampled				01/04/2026
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Mass of stone >10mm	%	0.1	NONE	1
Moisture Content	%	0.01	NONE	8
Total mass of sample received	kg	0.1	NONE	0.8
Whole Sample Crushed	N/A	N/A	NONE	-

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	-
Analysis completed	N/A	N/A	N/A	-
Actinolite detected	Type	N/A	ISO 17025	-
Amosite detected	Type	N/A	ISO 17025	-
Anthophyllite detected	Type	N/A	ISO 17025	-
Chrysotile detected	Type	N/A	ISO 17025	-
Crocidolite detected	Type	N/A	ISO 17025	-
Tremolite detected	Type	N/A	ISO 17025	-
Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.3
Total Cyanide	mg/kg	1	MCERTS	-
Total Sulphate as SO_4	mg/kg	50	MCERTS	-
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	44
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	22.1
Sulphide	mg/kg	1	MCERTS	-
Elemental Sulphur	mg/kg	5	MCERTS	-
Ammoniacal Nitrogen as N	mg/kg	0.5	MCERTS	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-
Loss on Ignition @ 450°C	%	0.2	MCERTS	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-

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Analytical Report Number: 26-018186
Project / Site name: The Sidings, Treforest
Your Order No: 14581/AG

Lab Sample Number				883434
Sample Reference				WS07
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.60
Date Sampled				01/04/2026
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Speciated PAHs				
Naphthalene	mg/kg	0.05	MCERTS	-
Acenaphthylene	mg/kg	0.05	MCERTS	-
Acenaphthene	mg/kg	0.05	MCERTS	-
Fluorene	mg/kg	0.05	MCERTS	-
Phenanthrene	mg/kg	0.05	MCERTS	-
Anthracene	mg/kg	0.05	MCERTS	-
Fluoranthene	mg/kg	0.05	MCERTS	-
Pyrene	mg/kg	0.05	MCERTS	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-
Chrysene	mg/kg	0.05	MCERTS	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-
Total PAH				
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-
Boron (total)	mg/kg	1	MCERTS	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-
Chromium (hexavalent) by IC	mg/kg	1.8	NONE	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-

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Analytical Report Number: 26-018186
Project / Site name: The Siding, Treforest
Your Order No: 14581/AG

Lab Sample Number				883434
Sample Reference				WS07
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.60
Date Sampled				01/04/2026
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Petroleum Hydrocarbons				
TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-
TPHCWG - Aliphatic >EC16 - EC35 EH_CU_1D_AL	mg/kg	10	MCERTS	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-
TPHCWG - Aliphatic >EC35 - EC44 EH_CU_1D_AL	mg/kg	8.4	NONE	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-
TPHCWG - Aliphatic >EC5 - EC44 EH_CU+HS_1D_AL	mg/kg	10	NONE	-
TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-
TPHCWG - Aromatic >EC35 - EC40 EH_CU_1D_AR	mg/kg	10	NONE	-
TPHCWG - Aromatic >EC35 - EC44 EH_CU_1D_AR	mg/kg	8.4	NONE	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-
TPHCWG - Aromatic >EC5 - EC44 EH_CU+HS_1D_AR	mg/kg	10	NONE	-
TPH Total >EC5 - EC44 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: **26-018186**
Project / Site name: **The Sidings, Treforest**
Your Order No: **14581/AG**

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample	Analysis completed	Analyst ID
883426	WS05	0.3	269	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**	24/04/2026	PKU
883428	WS10	0.2	241	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**	24/04/2026	PKU
883429	WS08	0.5	264	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**	24/04/2026	PKU

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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Analytical Report Number : 26-018186
Project / Site name: The Siding, Treforest

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
883424	WS01	None Supplied	0.3	Brown sand with gravel and stones
883425	WS03	None Supplied	0.5	Brown sand with gravel and stones
883426	WS05	None Supplied	0.3	Brown sand with gravel and stones
883427	SA03	None Supplied	0.3	Brown gravelly sand with stones
883428	WS10	None Supplied	0.2	Brown clay and loam with gravel and stones
883429	WS08	None Supplied	0.5	Brown clay and sand with gravel and clinker
883430	WS03	None Supplied	0.75	Brown sand with gravel
883431	WS05	None Supplied	0.8	Brown clay and sand with gravel
883432	WS12	None Supplied	1.1	Brown clay and sand with gravel and stones
883433	WS08	None Supplied	0.9	Brown sand with stones
883434	WS07	None Supplied	0.6	Brown clay and sand with gravel and stones

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Analytical Report Number : 26-018186
Project / Site name: The Sidings, Treforest

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010-PL	D	MCERTS
Moisture Content (Wet Weight)	Moisture content (% wet weight), determined gravimetrically (up to 30°C)	In-house-procedure based on BS EN 12880:2000	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Elemental sulphur in soil	Determination of elemental sulphur in soil by extraction in acetonitrile followed by HPLC	In-house method: Sample is extracted in acetonitrile prior to analysis by HPLC	L021B	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047-PL	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID with carbon banding aliphatic and aromatic	In-house method	L076B	D	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil (Summed Bands)	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).	Calculation	L076B/L088-PL	D/W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 26-018186
Project / Site name: The Sidings, Treforest

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil	Determination of total petroleum hydrocarbons in soil by HS-GC/MS with carbon banding aliphatic and aromatic	In-house method	L088-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE
Whole Sample Crushed	Either: Client specific preparation instructions - sample(s) crushed whole prior to analysis OR Sample unsuitable for standard preparation and therefore crushed whole prior to analysis	In house method, applicable to dry samples only	L019B	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references	HSE Report No: 83/1996, HSG 248 (2021), HSG 264 (2012) & SCA Blue Book (draft)	A006B	D	ISO 17025
Hexavalent chromium in soil by Ion Chromatography	Determination of hexavalent chromium in alkaline soil extract by use of ion chromatography with spectrophotometric detection	In-house method	L130B	W	NONE
Ammoniacal Nitrogen as N in soil	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method,10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

*U/S g- Unsuitable for analysis due to high colour intensity.

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Analytical Report Number : 26-018186
Project / Site name: The Sidings, Treforest

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container/Insufficient material provided c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
SA03	None Supplied	S	883427	c	Sulphide in soil	L010-PL	c
WS01	None Supplied	S	883424	c	Monohydric phenols in soil	L080-PL	c
WS01	None Supplied	S	883424	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS01	None Supplied	S	883424	c	Sulphide in soil	L010-PL	c
WS01	None Supplied	S	883424	c	Total cyanide in soil	L080-PL	c
WS01	None Supplied	S	883424	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS01	None Supplied	S	883424	c	Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil	L088-PL	c
WS03	None Supplied	S	883425	c	Monohydric phenols in soil	L080-PL	c
WS03	None Supplied	S	883425	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS03	None Supplied	S	883425	c	Sulphide in soil	L010-PL	c
WS03	None Supplied	S	883425	c	Total cyanide in soil	L080-PL	c
WS03	None Supplied	S	883425	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS03	None Supplied	S	883425	c	Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil	L088-PL	c
WS05	None Supplied	S	883426	c	Monohydric phenols in soil	L080-PL	c
WS05	None Supplied	S	883426	c	Speciated PAHs and/or Semi-volatile organic compounds in soil	L064B	c
WS05	None Supplied	S	883426	c	Sulphide in soil	L010-PL	c
WS05	None Supplied	S	883426	c	Total cyanide in soil	L080-PL	c
WS05	None Supplied	S	883426	c	Total petroleum hydrocarbons with carbon banding by GC-FID in soil	L076B	c
WS05	None Supplied	S	883426	c	Total petroleum hydrocarbons with carbon banding by HS-GC/MS in soil	L088-PL	c
WS08	None Supplied	S	883429	c	Sulphide in soil	L010-PL	c
WS10	None Supplied	S	883428	c	Sulphide in soil	L010-PL	c

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The results included within the report are representative of the samples submitted for analysis.

APPENDIX H

LABORATORY GEOTECHNICAL TEST RESULTS

Laboratory Report

UKAS TESTING 2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES A PHENNA GROUP COMPANY

Contract Number: 85908

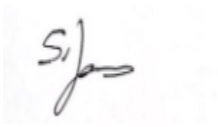
Client Ref: **14581**
Client PO: **14581/AG**

Date Received: **09-04-2026**
Date Completed: **24-04-2026**
Report Date: **24-04-2026**

Client: **Integral Geotechnique (Wales) Limited**

Contract Title: **The Sidings, Treforest**
For the attention of: **Aidan Gamble**

This report has been checked and approved by:



Shaun Jones
Laboratory manager

Description	Qty
Determination of water content BS EN ISO 17892-1:2014 - * UKAS	4
1 point Liquid & Plastic Limit.. BS EN ISO 17892-12 - * UKAS	4

Notes: **Observations and Interpretations are outside the UKAS Accreditation**
*** - denotes test included in laboratory scope of accreditation**
 # - denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This test report/certificate shall not be reproduced except in full, without the approval of GEO Site & Testing Services Ltd. Any opinions or interpretations stated - within this report/certificate are excluded from the laboratories UKAS accreditation.

Approved Signatories:
Brendan Evans (Business Support Co-ordinator) - Darren Bourne (Quality Senior Technician) - Jason Jenkins (Business Development Manager)
Luke Williams (Senior Laboratory Technician) - Paul Evans (Director) - Richard John (Quality/Technical Manager)
Shaun Jones (Laboratory manager) - Shaun Thomas (Site Manager) - Vince Williams (Site Technician)
Wayne Honey (HR & HSE Manager)

GEO Site & Testing Services Ltd
Unit 3-4 Heol Aur, Dafen Ind Est, Llanelli, Carmarthenshire SA14 8QN
Tel: 01554 784 040 Fax: 01554 784 040 info@gstl.co.uk https://gstl.co.uk

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	WATER CONTENT, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX BS 1377-2:2022 Clause 5.3 BS EN ISO 17892-12:2018+A2:2022 1 Point Liquid Limit BS EN ISO 17892-1:2014+A1:2022 Determination of Water Content	
Contract Number	85908	
Project Name	The Sidings, Treforest	
Date Tested	23/04/2026	
	DESCRIPTIONS	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Descriptions
WS05	1	D	0.80	-		Brown fine to medium gravelly silty sandy CLAY
WS12	1	D	1.10	-		Brown fine to medium gravelly silty sandy CLAY
WS08	1	D	0.90	-		Brown fine to medium gravelly silty sandy CLAY
WS07	1	D	0.60	-		Brown fine to medium gravelly silty sandy CLAY
				-		
				-		
				-		
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				-		

Operator
Jason. S

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	WATER CONTENT, LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX BS 1377-2:2022 Clause 5.3 BS EN ISO 17892-12:2018+A2:2022 1 Point Liquid Limit BS EN ISO 17892-1:2014+A1:2022 Determination of Water Content	
Contract Number	85908	
Project Name	The Sidings, Treforest	
Date Tested	23/04/2026	
Test Comments	80g/30° Fall cone used	

Sample/Hole Reference	Sample Number	Sample Type	Depth (m)			Water Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing 0.425mm %	Factor Applied	Remarks
WS05	1	D	0.80	-		10.3	25	12	13	91	1.024	CL Low Plasticity
WS12	1	D	1.10	-		13.9	30	14	16	88	1.027	CL Low Plasticity
WS08	1	D	0.90	-		11.0	28	12	16	84	1.024	CL Low Plasticity
WS07	1	D	0.60	-		10.7	26	12	14	86	1.029	CL Low Plasticity
				-								
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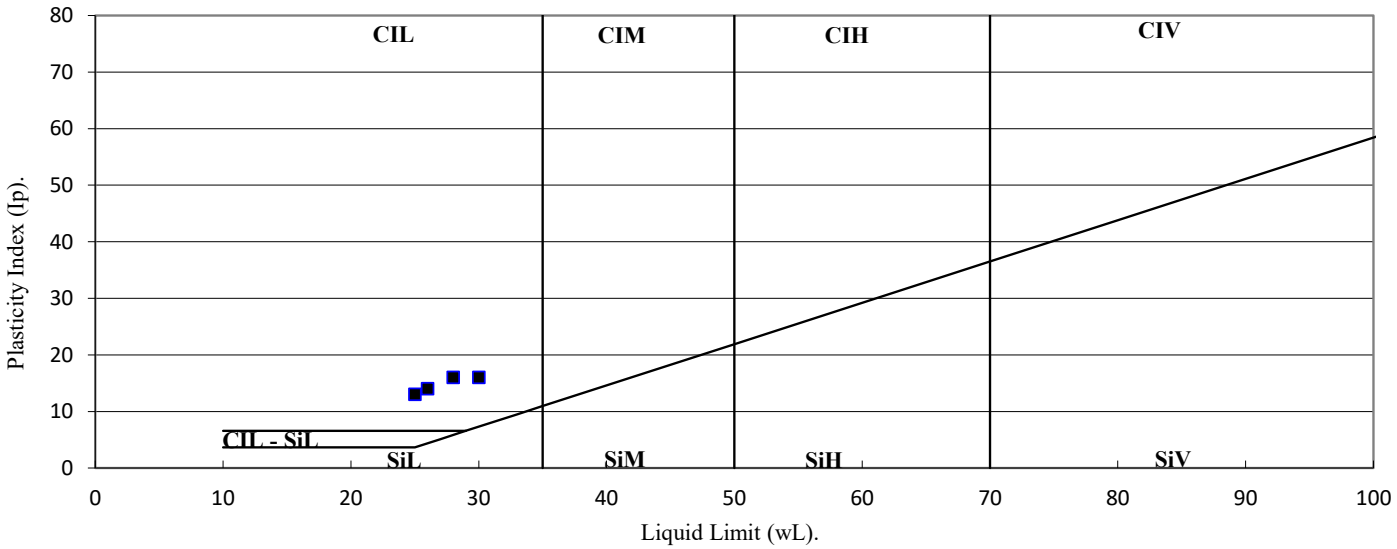
SYMBOLS : NP = Non Plastic

PLASTICITY CHART
BS EN ISO 14688-2:2018 Clause 4.4



***For sample descriptions please see sample descriptions sheet**

Operator
Jason. S

APPENDIX I

SUMMARY OF LABORATORY CHEMICAL TEST RESULTS (MADE GROUND)

SUMMARY OF LABORATORY SOIL TEST RESULTS

METALS AND SEMI-METALS

Job No.: 14581
Site: The Sidings, Treforest
Soil Type: Made Ground
Soil Organic Matter: 1%

No.	Location	Depth (m)	Arsenic (mg/kg)	Boron (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (Elemental) (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
1	**WS01**	**0.30**	5	5.1	0.5	< 0.2	7.9	< 1.8	8.5	10	< 0.3	8.5	1.7	7.5	30
2	**WS03**	**0.50**	5.3	5.2	0.44	< 0.2	10	< 1.8	3	5.5	< 0.3	5.4	1.9	8.4	14
3	**WS05**	**0.30**	6.6	6.5	0.45	0.2	12	< 1.8	9.7	11	< 0.3	7.6	1.1	14	38
4	**SA03**	**0.30**	3.3	4	0.19	< 0.2	7.8	< 1.8	3.7	5	< 0.3	4.7	< 1.0	7.2	23
5	**WS10**	**0.20**	11	4.3	0.51	0.2	15	< 1.8	28	28	< 0.3	14	1.7	22	59
6	**WS08**	**0.50**	21	5.5	1.1	1	24	< 1.8	430	160	< 0.3	30	1.1	33	230
	Screening Criteria Value		**40.0**	**11000.0**	**1.7**	**85.0**	**-**	**6.0**	**7100.0**	**235.0**	**1.2**	**180.0**	**430.0**	**1200.0**	**40000.0**
	Source of Screening Criteria Value		S4UL	S4UL	S4UL	S4UL	-	S4UL	S4UL	C4SL	S4UL	S4UL	S4UL	S4UL	S4UL

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SUMMARY OF LABORATORY SOIL TEST RESULTS

INORGANIC CHEMICALS & OTHERS

Job No.: 14581
Site: The Sidings, Treforest
Soil Type: Made Ground
Soil Organic Matter: 1%

No.	Location	Depth (m)	Cyanide (mg/kg)	Loss on ignition, dried solids (%)	Moisture content at 30 C (%)	Phenol (mg/kg)	pH (pH units)	Water Soluble Sulphate (g/l)	Sulphate Total as SO4 (mg/kg)	Sulphide (mg/kg)	Elemantal Sulphur (mg/kg)	TOC by Ignition in O2 (%)	Equivalent SOM (%)	Asbestos in Soil	Asbestos Quantification (%)
1	**WS01**	**0.30**	< 1.0	1.80	4.30	< 1.0	8.80	0.0455	1500.00	9.50	< 5.0	0.20	0.34	Not-detected	#N/A
2	**WS03**	**0.50**	< 1.0	1.10	2.80	< 1.0	9.20	0.0563	2100.00	8.20	< 5.0	0.10	0.17	Not-detected	#N/A
3	**WS05**	**0.30**	< 1.0	2.20	6.30	< 1.0	9.90	0.4730	3000.00	11.00	< 5.0	0.30	0.52	**Detected**	< 0.001
4	**SA03**	**0.30**	< 1.0	1.30	3.70	< 1.0	9.10	0.0352	1200.00	2.00	< 5.0	0.60	1.03	Not-detected	#N/A
5	**WS10**	**0.20**	< 1.0	4.40	8.50	< 1.0	7.80	0.0265	770.00	7.70	< 5.0	1.50	2.58	**Detected**	< 0.001
6	**WS08**	**0.50**	< 1.0	25.00	18.00	< 1.0	7.90	0.0258	710.00	13.00	< 5.0	6.00	10.32	**Detected**	< 0.001
	Screening Criteria Value		**34.0**	-	-	**440.0**	-	-	-	-	-	-	-	-	**0.001**
	Source of Screening Criteria Value		ATRISK	-	-	S4UL	-	-	-	-	-	-	-	-	IOM

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SUMMARY OF LABORATORY SOIL TEST RESULTS

Job No.: 14581
Site: The Sidings, Treforest
Soil Type: Made Ground
Soil Organic Matter: 1%

POLYAROMATIC HYDROCARBONS (PAH)

No.	Location	Depth (m)	Acenaphthene (mg/kg)	Acenaphthylene (mg/kg)	Anthracene (mg/kg)	Benzo(a)anthracene (mg/kg)	Benzo(a)pyrene (mg/kg)	Benzo(b)fluoranthene (mg/kg)	Benzo(ghi)perylene (mg/kg)	Benzo(k)fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo(ah)anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno(123cd)pyrene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)
1	WS01	0.30	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2	WS03	0.50	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
3	WS05	0.30	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.08	< 0.05	< 0.05	< 0.05	< 0.05	0.07	< 0.05	< 0.05	< 0.05	< 0.05	0.07
4	SA03	0.30	< 0.05	< 0.05	< 0.05	< 0.05	0.06	0.09	0.06	< 0.05	0.07	< 0.05	0.13	< 0.05	< 0.05	< 0.05	0.08	0.11
5	WS10	0.20	0.18	0.06	0.46	1.9	1.9	2.6	1.3	1.1	1.7	**0.38**	3.1	0.16	1.3	0.26	1.4	2.6
6	WS08	0.50	0.55	0.18	1.1	3.8	**3.4**	**5.2**	2	1.8	4.1	**0.64**	9.7	0.39	2.1	1.5	6.6	7.9
	Screening Criteria Value		**3000.0**	**2900.0**	**31000.0**	**11.0**	**3.2**	**3.9**	**360.0**	**110.0**	**30.0**	**0.31**	**1500.0**	**2800.0**	**45.0**	**2.3**	**1300.0**	**3700.0**
	Source of Screening Criteria Value		S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL

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SUMMARY OF LABORATORY SOIL TEST RESULTS

Job No.: 14581
Site: The Sidings, Treforest
Soil Type: Made Ground
Soil Organic Matter: 1%

PETROLEUM HYDROCARBONS

No.	Location	Depth (m)	Aliphatic C5-C6 (mg/kg)	Aliphatic C6-C8 (mg/kg)	Aliphatic C8-C10 (mg/kg)	Aliphatic C10-C12 EPH (mg/kg)	Aliphatic C12-C16 EPH (mg/kg)	Aliphatic C16-C35 EPH (mg/kg)	Aliphatic C35-C44 EPH (mg/kg)	Aromatic C5-C7 (mg/kg)	Aromatic C7-C8 (mg/kg)	Aromatic C8-C10 (mg/kg)	Aromatic C10-C12 EPH (mg/kg)	Aromatic C12-C16 EPH (mg/kg)	Aromatic C16-C21 EPH (mg/kg)	Aromatic C21-C35 EPH (mg/kg)	Aromatic C35-C40 EPH (mg/kg)
1	**WS01**	**0.30**	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	< 10	< 8.4	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	< 10	< 10	< 10
2	**WS03**	**0.50**	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	< 10	< 8.4	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	< 10	< 10	< 10
3	**WS05**	**0.30**	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	< 10	< 8.4	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	< 10	< 10	< 10
4	**SA03**	**0.30**	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	63	100	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	< 10	87	93
5	**WS10**	**0.20**	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	13	19	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	< 10	18	< 10
6	**WS08**	**0.50**	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	180	53	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	22	79	14
	Screening Criteria Value		**42.0**	**100.0**	**27.0**	**130.0**	**1100.0**	**65000.0**	**65000.0**	**0.4**	**880.0**	**47.0**	**250.0**	**1800.0**	**1900.0**	**1900.0**	**1900.0**
	Source of Screening Criteria Value		S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL	S4UL

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APPENDIX J

SUMMARY OF LABORATORY CHEMICAL TEST RESULTS (IN-SITU NATURAL GROUND)

SUMMARY OF LABORATORY SOIL TEST RESULTS

INORGANIC CHEMICALS & OTHERS

Job No.: 14581
Site: The Sidings, Treforest
Soil Type: In-Situ Natural Ground
Soil Organic Matter: 1%

No.	Location	Depth (m)	Cyanide (mg/kg)	Loss on ignition, dried solids (%)	Moisture content at 30 C (%)	Phenol (mg/kg)	pH (pH units)	Water Soluble Sulphate (g/l)	Sulphate Total as SO4 (mg/kg)	Sulphide (mg/kg)	Elemental Sulphur (mg/kg)	TOC by Ignition in O2 (%)	Equivalent SOM (%)	Asbestos in Soil	Asbestos Quantification (%)
1	**WS05**	**0.80**	-	-	10.00	-	8.10	0.0153	-	-	-	-	<0.1	-	#N/A
2	**WS12**	**1.10**	-	-	11.00	-	7.80	0.0128	-	-	-	-	<0.1	-	#N/A
3	**WS08**	**0.90**	-	-	5.00	-	8.10	0.1320	-	-	-	-	<0.1	-	#N/A
4	**WS07**	**0.60**	-	-	8.00	-	8.30	0.0221	-	-	-	-	<0.1	-	#N/A
	Screening Criteria Value		**34.0**	-	-	**440.0**	-	-	-	-	-	-	-	-	**0.001**
	Source of Screening Criteria Value		ATRISK	-	-	S4UL	-	-	-	-	-	-	-	-	IOM

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FIGURES

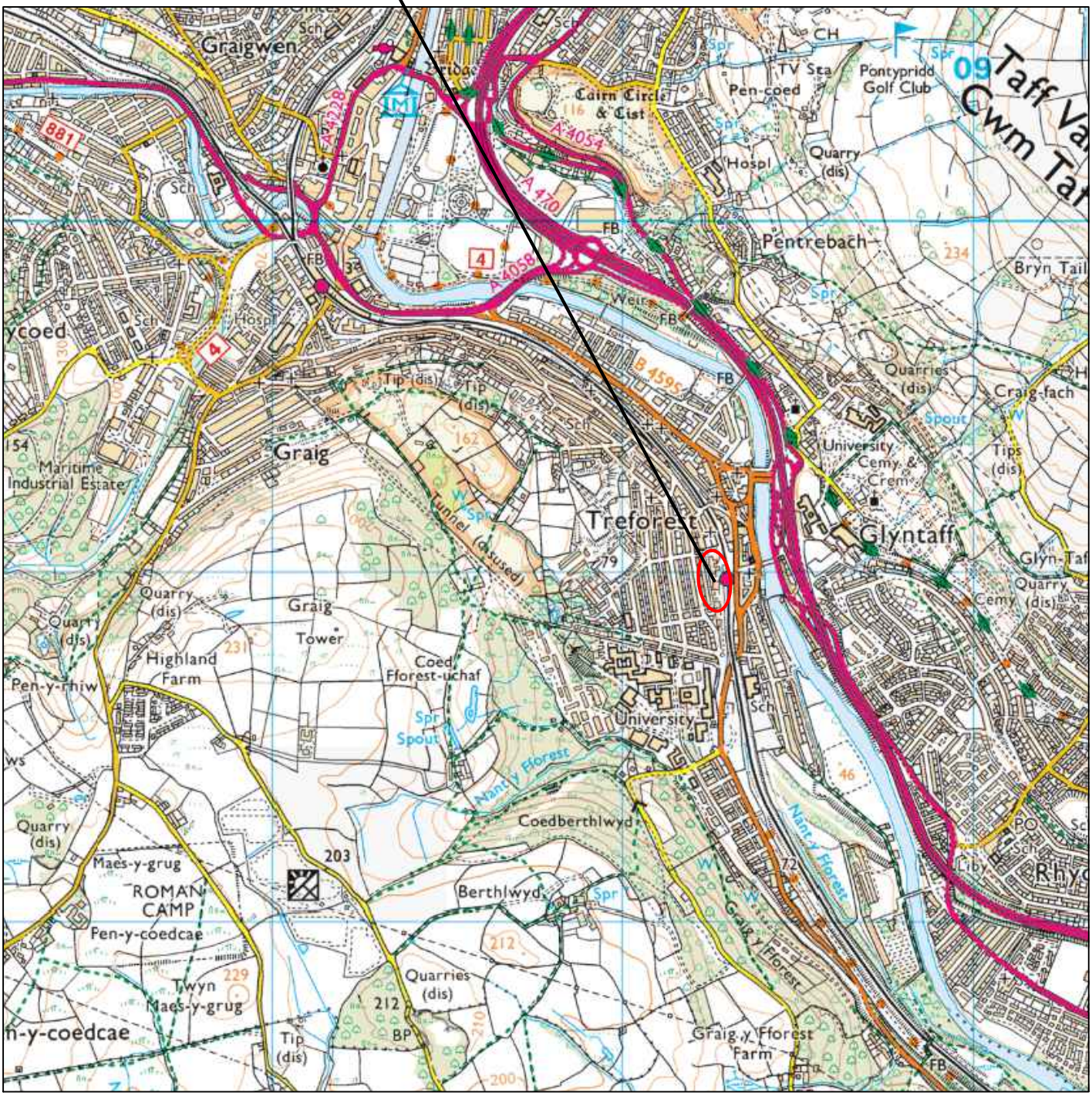

Figure 1: Site Location

Project: The Sidings Treforest	Job no.: 14581	**Intégral** Géotechnique	Integral House, 7 Beddau Way, Castlegate Business Park, Caerphilly, CF83 2AX. Tel: 029 2080 7991
Client: Trivallis	Scale: NTS		



Figure 2: Existing Site Plan

Project: The Sidings, Treforest	Job No.: 14581	Intégral Géotechnique	Integral House, 7 Beddau Way, Castlegate Business Park, Caerphilly, CF83 2AX. Tel: 029 2080 7991
Client: Trivallis	Scale: 1:600 at A3		



Figure 3: Exploratory Hole Location Plan

Project: The Sidings, Treforest	Job No.: 14581	Intégral Géotechnique	Integral House, 7 Beddau Way, Castlegate Business Park, Caerphilly, CF83 2AX. Tel: 029 2080 7991
Client: Trivallis	Scale: 1:600 at A3		