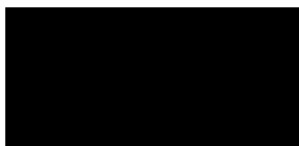




Intrusive Contamination Site Investigation Report

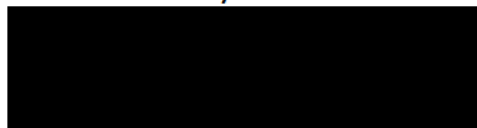
LOCATION	Terfynfa, Smelt Road, Wrexham LL11 3SH
ISSUE DATE	May 2026
FOR	David Warman
CLIENT REF.	
OUR REF.	G26124

Prepared by



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Appendix 1 – Site Plans

Appendix 2 – Contamination Testing

1. Introduction

In accordance with your instruction, Geoinvestigate Limited has carried out an additional intrusive investigation at Terfynfa, Smelt Road, Wrexham, LL11 3SH.

The purpose of this ground investigation was to undertake targeted contamination testing to further assess ground conditions across the site, particularly within areas of proposed gardens and soft landscaping. This work was commissioned in response to Local Planning Authority requirements associated with previous remediation undertaken at the site due to its historical use, and to assess whether the proposed development may impact or disturb existing remedial measures.

2. Scope of Investigation

2.1 Scope of Works

Given the above, the following investigation was carried out to assess the potential risks to the proposed development:

- Five (5) hand excavated trial pits (re. TPA to TPE) to depths of up to 0.7m to provide samples for contamination analysis.
- Contamination analyses of ten (10) samples of topsoil/made ground recovered from between depths of 0.10m and 0.50m. Analysis was variably undertaken for a general suite including potential metal/metalloid contaminants, polycyclic aromatic hydrocarbons (PAHs), asbestos and petroleum hydrocarbons (including BTEX*). Chemical analyses were based on the attending engineer's assessment of soils and ground conditions at the site together with the requirements for the Local Planning Authority.
- Provision of a factual and interpretative report including site plan, trial pit logs, contamination soil analysis results, advice on the contamination and advice regarding any remediation and validation works that may be necessary.

The trial pit positions are shown on the plan provided in Appendix 1.

The excavations were sampled and logged at site by a geoenvironmental engineer and the ground conditions encountered are described on the trial pit logs also provided in Appendix 1.

The results of the contamination testing are included in Appendix 3 (Chemtech Environmental Ltd. report no. 26-04674).

2.2 Sampling Rationale

The sample locations were specifically selected to investigate areas of the site proposed to comprise garden spaces and soft landscaped areas, in order to assess the suitability of these areas for the proposed end use.

3. Investigation Findings

3.1 Ground Conditions

3.1.1 Hand Excavated Trial Pits

Trial pits TPA to TPE all encountered broadly similar conditions across the site. The trial pits encountered very clayey sand topsoil to between 0.10m and 0.20m underlain by slightly gravelly sand, with gravel constituents of sandstone to a depth of 0.70m where all trial pits were terminated.

Each of the trial pits remained stable and dry on completion.

4. Contamination Testing

The topsoil showed no obvious visual or olfactory evidence of potential contamination or contaminative materials. However, given the site's history, the potential for contamination to have affected the site could not be ruled out without soil analyses.

Based on the findings of the site works, ten (10) samples of topsoil and natural subsoil from depths of between 0.10m and 0.50m recovered from across the site. These samples were tested for a range of substances, depending on their origin, the requirements of the investigation, and the assessment of the attending engineer. Test suites variably included metals/metalloids, PAHs, asbestos, and petroleum hydrocarbons (including BTEX).

The results of the contamination testing are included in Appendix 3 of this report (Chemtech Environmental Ltd. Report 26-04674 and have been used in the following contamination risk assessment.

5. Risk Assessment

5.1 Method

Geoinvestigate Ltd. uses a combination of assessment criterion provided by the Environment Agency, DEFRA and by the Chartered Institute of Environmental Health in order to assess the presence of potentially harmful chemicals within soils and water. These include: Environment Agency Environmental Quality Standards (EQSs), Site Specific Assessment Criteria (SSAC) generated using CLEA software version 1.06 site specific risk assessment modelling, DEFRA Category 4 Screening Levels (C4SLs), and Land Quality Management / Chartered Institute of Environmental Health (LQM/CIEH) Safe for Use Levels (S4ULs).

As the site is to be developed as a residential dwelling, it falls within the residential end-use category. As it is possible that persons living on the site may cultivate vegetables / fruit for consumption, consideration to this end is also necessary.

No site-specific assessment criteria (SSAC) have been created for the site as no unusual circumstances (i.e., occupation periods etc.) are considered to be present/likely at the site that would render the generic residential assessment criteria unsuitable.

The results of the contamination testing that has been carried out have been compared to the soil quality values from the above sources. Where they fall below these limit values, they have been deemed safe for a residential end use.

An appraisal of the chemical results and relevant limits is set out in the Contamination Risk Assessment that follows.

5.2 Contamination Risk to Sensitive Receptors

5.2.1 Human Health

Topsoil was encountered to a maximum depth of 0.20m, this was underlain by a granular natural sand strata.

No visual and/or olfactory evidence of contamination was found in any of the encountered soils, including no visible evidence of asbestos contamination.

As discussed earlier in the report, levels of determinands have been compared to the soil assessment criteria for residential end-use, as published by DEFRA and LQM/CIEH, with DEFRA C4SLs taking priority where more than one target value exists due to their “more pragmatic whist still strongly precautionary” nature (quote from SP1010 C4SL Policy companion Document).

A mean Soil Organic Matter Content (SOM) of 5.12% was returned from the soil analyses. Therefore, the LQM/CIEH GAC for PAHs and other hydrocarbons were chosen using the highest Soil Organic Matter (SOM) option of 6.0%, which is considered the most representative (and a conservative) value for the samples returned.

A summary of the results is shown in Table 1 on the following page.

Table 1: Summary of Chemical Determinands in Soil

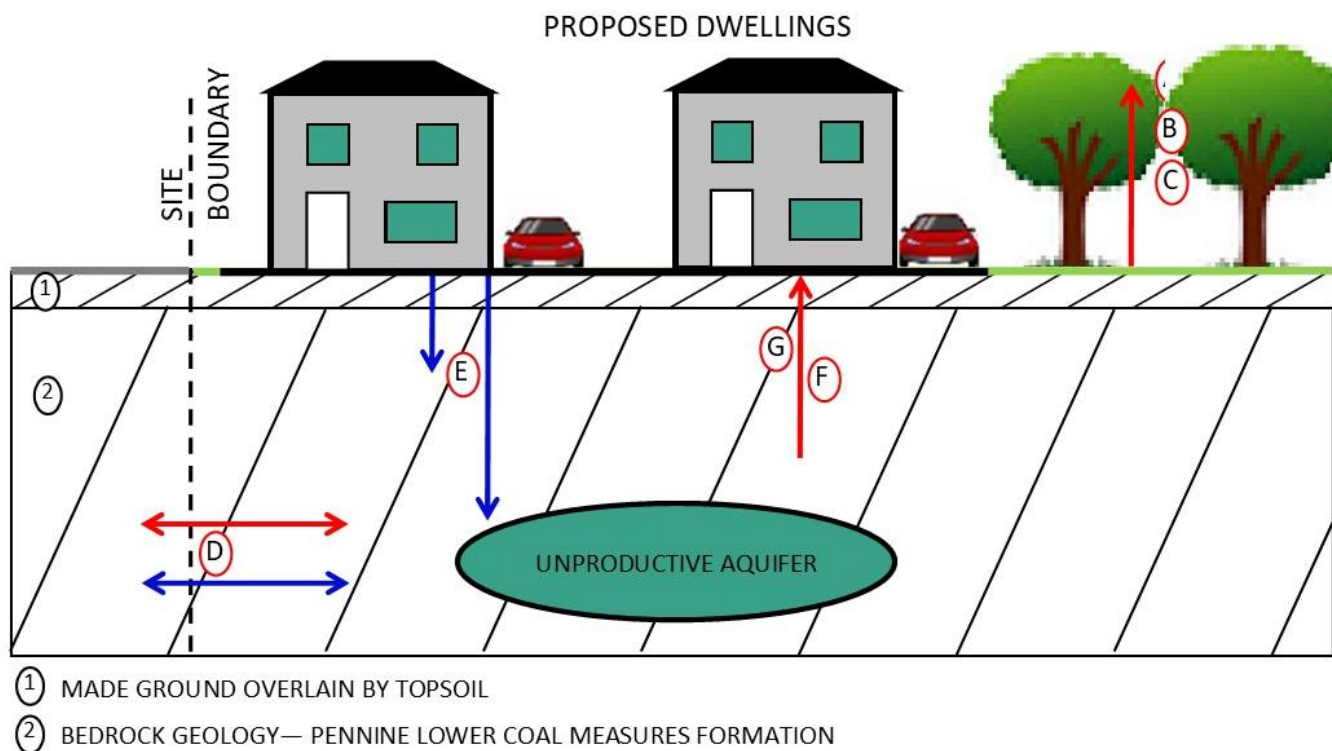
Determinand	Units	Limits of Detection	Total Samples	Returned Concentrations		Threshold Ranges S4UL / C4SL	
				Min	Max	Min	Max
pH	pH Unit	N/a	9	7.7	8.7	-	-
Water Soluble Sulphate as SO4 (2:1)	g/l	<1.25	9	20.2	50.1	-	-
Moisture Content	%	< 0.01	9	6.4	19	-	-
Organic Matter	%	< 0.1	9	1.64	10	-	-
Metals							
Arsenic	mg/kg	<1	9	5.60	7.60	37	37
Boron (Water Soluble)	mg/kg	< 1	9	1.50	2.66	290	290
Cadmium	mg/kg	< 0.2	9	<0.2	< 0.2	11	11
Copper	mg/kg	< 4	9	8.30	25.90	2400	2400
Chromium III	mg/kg	< 2	9	9.12	19.70	910	910
Hexavalent Chromium	mg/kg	< 1.8	9	<1.8	< 1.8	6	6
Free Cyanide	mg/kg	< 1	9	<1	< 1	140	140
Total Cyanide	mg/kg	< 1	9	<1	< 1	140	140
Lead	mg/kg	< 1	9	13.10	69.60	200	200
Mercury (Aqua regia extractable)	mg/kg	< 0.3	9	<0.3	< 0.3	410	410
Nickel	mg/kg	< 1	9	8.10	24.00	120	180
Selenium	mg/kg	< 1	9	<1	< 1	250	250
Zinc	mg/kg	< 1	9	28.40	76.40	3700	3700
Asbestos Screen	-	-	9	Not Detected		Detection	
Organics							
Total Phenols (Monohydric)	mg/kg	< 1	9	<1	< 1	120	380
Naphthalene	mg/kg	< 0.05	9	<0.05	< 0.05	2.3	13
Acenaphthylene	mg/kg	< 0.05	9	<0.05	< 0.05	170	920
Acenaphthene	mg/kg	< 0.05	9	<0.05	< 0.05	210	1100
Fluorene	mg/kg	< 0.05	9	<0.05	< 0.05	170	860
Phenanthrene	mg/kg	< 0.05	9	<0.05	0.025	95	440
Anthracene	mg/kg	< 0.05	9	<0.05	< 0.05	2400	11000
Fluoranthene	mg/kg	< 0.05	9	<0.05	0.157	280	890
Pyrene	mg/kg	< 0.05	9	<0.05	0.195	620	2000
Benzo(a)anthracene	mg/kg	< 0.05	9	<0.05	0.128	7.2	13
Chrysene	mg/kg	< 0.05	9	<0.05	0.147	15	27
Benzo(b)fluoranthene	mg/kg	< 0.05	9	<0.05	0.259	2.6	3.7
Benzo(k)fluoranthene	mg/kg	< 0.05	9	<0.05	0.082	77	100
Benzo(a)pyrene	mg/kg	< 0.05	9	<0.05	0.175	5	5
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.05	9	<0.05	0.179	27	41
Dibenzo(a,h)anthracene	mg/kg	< 0.05	9	<0.05	0.033	0.24	0.3
Benzo(g,h,i)perylene	mg/kg	< 0.05	9	<0.05	0.171	320	350
Total PAH(16)	mg/kg	< 0.08	9	<0.05	1.55	-	-
>C5-C6 Aliphatic (HS_1D_AL)	mg/kg	< 0.02	9	<0.01	< 0.02	42	160
>C6-C8 Aliphatic (HS_1D_AL)	mg/kg	< 0.02	9	<0.01	< 0.02	100	530
>C8-C10 Aliphatic (HS_1D_AL)	mg/kg	< 0.02	9	<0.01	< 0.02	100	530
>C10-C12 Aliphatic (EH_2D_AL)	mg/kg	< 0.05	9	<1	1.9	27	150
>C12-C16 Aliphatic (EH_2D_AL)	mg/kg	< 1	9	<2	2.1	130	760
>C16-C21 Aliphatic (EH_2D_AL)	mg/kg	< 2	9	<8	3.9	1100	4300
>C21-C35 Aliphatic (EH_2D_AL)	mg/kg	< 8	9	<8	20.6	65000	110000
>C35-C44 Aliphatic (EH_2D_AL)	mg/kg	< 8	9	<8.4	0.7	65000	110000
>C5-C7 Aromatic (HS_1D_AR)	mg/kg	< 8.4	9	<10	< 8.4	65000	110000
>C7-C8 Aromatic (HS_1D_AR)	mg/kg	< 8.5	9	<0.01	< 8.5	-	-
>C8-C10 Aromatic (HS_1D_AR)	mg/kg	< 10	9	<0.01	< 10	-	-
>C10-C12 Aromatic (EH_2D_AR)	mg/kg	< 0.01	9	<0.02	3.2	70	300
>C12-C16 Aromatic (EH_2D_AR)	mg/kg	< 0.01	9	3.4	9.8	130	660
>C16-C21 Aromatic (EH_2D_AR)	mg/kg	< 1	9	<2	5.9	34	190
>C21-C35 Aromatic (EH_2D_AR)	mg/kg	< 1	9	6.1	40	74	380
>C35-C44 Aromatic (EH_2D_AR)	mg/kg	< 2	9	<8	10.6	140	660
VOCs / SVOCs							
Benzene	ug/kg	< 2	9	<5	< 2	0.87	3.7
Toluene	ug/kg	< 5	9	<5	< 5	130	660
Ethylbenzene	ug/kg	< 2	9	<5	< 2	47	260
m,p-Xylene	ug/kg	< 2	9	<5	< 2	59	320
oXylenes	ug/kg	< 2	9	<5	< 2	60	330

The analyses have returned low/negligible concentrations without exception, within acceptable concentrations, for the end use. As such, the site is deemed to be fit for purpose for its proposed residential land use, and no remedial works will be required prior to redevelopment.

6. Conceptual Ground Hazard Model (CGHM)

The conceptual ground hazard model (CGHM) presented below shows the potential hazards and pollutant linkages which have been considered at the site, all of which are considered to have been satisfactorily disproven.

Figure 1: CGHM – Conceptual cross section of site including a Source, Pathway and Receptor Model



IDENTIFIED RECEPTORS and ASSOCIATED PATHWAY

- A—** End Users through Direct Contact / Inhalation / Ingestion. Buildings and hard standing will encompass most of the site, removing any pathway to end users through direct contact in these areas.
- B—** Plants and Trees through uptake, possible given the intended end use of the site.
- C—** End Users through cultivation and consumption of vegetables / fruit. Possible given the intended end use of the site.
- D—** Neighbouring Sites through lateral migration (in soil and water, including surface water run off).
- E—** Ground water through leaching of sub-soil.
- F—** Buildings and services through direct contact. Buildings and hard standing will encompass some of the site, removing any pathway to end users through direct contact in these areas.
- G—** End users and buildings through ground gas migration. Buildings and hard standing will encompass some of the site, removing any pathway to end users through direct contact in these areas.

Linkages A to F disproven due to low/negligible chemical analysis results

Gas monitoring not considered necessary due to shallow made ground encountered on site

7. Conclusions

7.1 Soil Contamination

Soil analysis results have confirmed that no noteworthy or significant contamination risks are present to identified receptors either within or in the vicinity of the site (including controlled waters). The findings of the additional investigation indicate that contaminant concentrations within the assessed areas are suitable for the proposed end use and do not indicate the presence of contamination requiring remediation measures or further corrective works.

In consideration of the above and taking into account the previous remediation historically undertaken at the site, it is considered that the proposed development is unlikely to adversely impact existing remedial measures. On this basis, the preparation and implementation of a formal remediation strategy is not considered necessary for the proposed development.

Though unlikely, if the development plan were to change significantly, or obvious evidence were uncovered during groundworks of potential contamination that has hitherto not been encountered, then both Geoinvestigate Ltd. and the local planning authority should be notified and, if appropriate, redevelopment works halted/postponed while further assessment and/or remediation work is undertaken.

END OF REPORT

The findings and contents of this (intrusive) Site Investigation Report pertain solely to the study area(s) outlined herein and are based solely on the findings of the excavations undertaken as part of the current exercise unless otherwise stated. The findings and/or recommendations of this report do not take into account any ground conditions that may be present but have hitherto not been encountered and as such further investigation and/or a reconsideration of the findings of this report should be undertaken if such conditions are subsequently encountered or an alternative development plan or land use is subsequently proposed.

This report considers various environmental and/or geological risks posed to the site and/or proposed development and offers advice accordingly as guidance only. The findings of this report will remain valid provided no change of ground or groundwater conditions, either natural or anthropogenic, take place and no warrantee is offered or implied.

No copying of this report or any part of its contents is permitted without written permission of Geoinvestigate Ltd. nor should the report be made available to any third party without similar prior arrangement.

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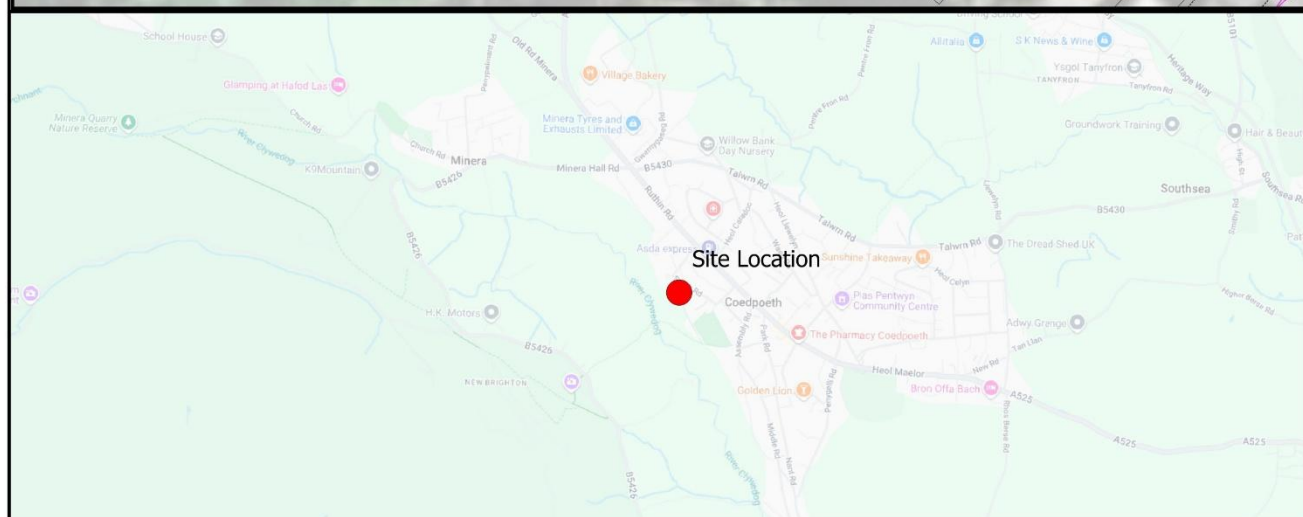
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APPENDIX 1

Site Plans and Exploratory Hole Logs



CLIENT David Wardman		TITLE Exploratory Hole Location Plan			Legend  Hand Dug Trial Pit
PROJECT Terfynfa, Smelt Road, Wrexham LL11 3SH		Notes:			
PROJECT NUMBER G26124		SCALE: NTS	DRAWN: KR DATE: 15/11/22	CHECK: KR DATE: 12/06/24	
				REV: 0 DATE: 12/06/24	

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		Client Ref: Our Ref: G26124 Date: 14/04/2026 Location: Terfynfa, Wrexham LL11 3SH Comments:				TP-A Sheet No 1 of 1 Drilled by: JP&RG Logged by: JP	
		Trial Pit Log					
Depth (m)	Description of Strata	Thickness	Legend	Sample	Test Type Result	Depth to Water	Depth (m)
0.20	TURF and TOPSOIL. Loose black very clayey sand.	200		O	Cv kN/m ²		0.10 0.20
0.70	Loose light brown slightly gravelly SAND Gravel is fine to coarse of sandstone	500		O			0.30 0.40 0.50 0.60 0.70
	Trial Pit terminated at 0.70m. Underlain by membrane						
Remarks: Trial Pit excavated to a maximum depth of 0.70 mbgl Trial Pit remained open and dry on completion				Key: O Disturbed sample Cv Shear vane W Water sample		TP-A	

		Client Ref: Our Ref: G26124 Date: 14/04/2026 Location: Terfynfa, Wrexham LL11 3SH Comments:				TP -B Sheet No 1 of 1 Drilled by: JP&RG Logged by: JP	
		Trial Pit Log					
Depth (m)	Description of Strata	Thickness	Legend	Sample	Test Type Result	Depth to Water	Depth (m)
0.20	TURF and TOPSOIL. Loose black very clayey sand.	200		O	Cv kN/m ²		0.10 0.20
0.70	Loose light brown slightly gravelly SAND Gravel is fine to coarse of sandstone	500		O			0.30 0.40 0.50 0.60 0.70
	Trial Pit terminated at 0.70m. Underlain by membrane						
Remarks: Trial Pit excavated to a maximum depth of 0.70 mbgl Trial Pit remained open and dry on completion				Key: O Disturbed sample Cv Shear vane W Water sample		TP -B	

		Client Ref: Our Ref: G26124 Date: 14/04/2026 Location: Terfynfa, Wrexham LL11 3SH Comments:				TP -C Sheet No 1 of 1 Drilled by: JP&RG Logged by: JP	
		Trial Pit Log					
Depth (m)	Description of Strata	Thickness	Legend	Sample	Test Type Result	Depth to Water	Depth (m)
0.20	TURF and TOPSOIL. Loose black very clayey sand.	200		O	Cv kN/m ²		0.10 0.20
0.70	Loose light brown slightly gravelly SAND Gravel is fine to coarse of sandstone	500		O			0.30 0.40 0.50 0.60 0.70
	Trial Pit terminated at 0.70m. Underlain by membrane						
Remarks: Trial Pit excavated to a maximum depth of 0.70 mbgl Trial Pit remained open and dry on completion				Key: O Disturbed sample Cv Shear vane W Water sample		TP -C	

		Client Ref: Our Ref: G26124 Date: 14/04/2026 Location: Terfynfa, Wrexham LL11 3SH Comments:				TP -D Sheet No 1 of 1 Drilled by: JP&RG Logged by: JP	
		Trial Pit Log					
Depth (m)	Description of Strata	Thickness	Legend	Sample	Test Type Result	Depth to Water	Depth (m)
0.10	TURF and TOPSOIL. Loose black very clayey sand.	100		O	Cv kN/m ²		0.10
0.70	Loose light brown slightly gravelly SAND Gravel is fine to coarse of sandstone	600		O			0.20
							0.30
							0.40
							0.50
							0.60
							0.70
Trial Pit terminated at 0.70m. Underlain by membrane							
Remarks: Trial Pit excavated to a maximum depth of 0.70 mbgl Trial Pit remained open and dry on completion				Key: O Disturbed sample Cv Shear vane W Water sample		TP -D	

		Client Ref: Our Ref: G26124 Date: 14/04/2026 Location: Terfynfa, Wrexham LL11 3SH Comments:				TP -E Sheet No 1 of 1 Drilled by: JP&RG Logged by: JP	
		Trial Pit Log					
Depth (m)	Description of Strata	Thickness	Legend	Sample	Test Type Result	Depth to Water	Depth (m)
0.10	TURF and TOPSOIL. Loose black very clayey sand.	100		O	Cv kN/m ²		0.10
0.70	Loose light brown slightly gravelly SAND Gravel is fine to coarse of sandstone	600		O			0.20
							0.30
							0.40
							0.50
							0.60
							0.70
Trial Pit terminated at 0.70m. Underlain by membrane							
Remarks: Trial Pit excavated to a maximum depth of 0.70 mbgl Trial Pit remained open and dry on completion				Key: O Disturbed sample Cv Shear vane W Water sample		TP -E	

APPENDIX 2

Chemtech Analytical Test Report

ANALYTICAL TEST REPORT

Report Number 26-04674, issue number 1

Contract name: Terfynfa Smelt Road Wrexham LL11-3SH

Client reference: Not Supplied

Clients name: Geo Investigate Ltd

Clients address: Geo Investigate Ltd
Unit 4 & 5 Terry Dicken Industrial Estate
Stokesley
TS9 7AE

Samples received: 22/04/2026

Analysis started: 22/04/2026

Analysis completed: 30/04/2026

Report issued: 30/04/2026

Key

U UKAS accredited test
M MCERTS & UKAS accredited test
(B) Analysis performed at Southampton Site
I/S Insufficient sample to carry out test
U/S Sample not suitable for testing
NAD No Asbestos Detected
Full key available on Information page



Approved by: Rachael Burton
Technical Support Manager

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
% Moisture reported as MCERTS drying at 30°C

Lab ref	Sample ID	Depth (m)	Sample description	Material removed	% Removed	% Moisture
101767	TPA 0.20m	0.20	Brown Sand with Gravel and Vegetation.	-	-	16.7
101768	TPA 0.50m	0.50	Brown Sand with Gravel and Vegetation.	-	-	9.1
101769	TPB 0.20m	0.20	Brown Sand with Gravel and Vegetation.	-	-	13.5
101770	TPB 0.50m	0.50	Brown Sand with Gravel and Vegetation.	-	-	7.6
101771	TPC 0.20m	0.20	Brown Sand with Gravel and Vegetation.	-	-	7.1
101772	TPC 0.50m	0.50	Brown Sand with Gravel and Vegetation.	-	-	7.7
101773	TPD 0.10m	0.10	Brown Sand with Gravel and Vegetation.	-	-	19.0
101774	TPD 0.50m	0.50	Brown Sand with Gravel and Vegetation.	-	-	6.4
101775	TPE 0.10m	0.10	Brown Sand with Gravel and Vegetation.	-	-	18.5
101776	TPE 0.50m	0.50	Brown Sand with Gravel and Vegetation.	-	-	10.1

SOILS

Lab Number					101767	101768	101769	101770	101771
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TPA 0.20m	TPA 0.50m	TPB 0.20m	TPB 0.50m	TPC 0.20m
Depth (m)					0.20	0.50	0.20	0.50	0.20
Sampling Date					14/04/2026	14/04/2026	14/04/2026	14/04/2026	14/04/2026
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Water Soluble Sulphate	CE061	M	20	mg/kg	50.1	26.3	27.9	22.3	20.2
Water Soluble Boron	CE063	N	0.5	mg/kg	2.05	2.28	2.17	1.92	2.03
Arsenic	CE264	M	2.3	mg/kg	6.8	6.9	5.8	7.2	7.4
Cadmium	CE264	M	1.1	mg/kg	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Chromium	CE264	U	1.3	mg/kg	11.2	9.7	9.3	11.4	12.5
Copper	CE264	M	1.2	mg/kg	17.3	8.9	15.8	9.3	10.7
Lead	CE264	U	2.4	mg/kg	36.6	13.4	27.9	13.1	27.3
Mercury	CE264	M	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Nickel	CE264	M	1.6	mg/kg	10.5	11.8	9.2	13.5	14.0
Selenium	CE264	M	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Zinc	CE264	M	2.4	mg/kg	58.1	28.4	52.5	36.0	39.1
Colourimetric									
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Total Monohydric Phenols	CE078	N	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chromium III	CE208	N	2	mg/kg	11.3	9.65	9.32	11.4	12.5
Thiocyanate	CE145	M	1	mg/kg	g < 1.0	g < 1.0	g 1.1	g < 1.0	g 1.2
Total Sulphide	CE284	N	4	mg/kg	fg < 4	fg < 4	fg < 4	fg 7	fg 5
Combustion									
Moisture Content	CE001	N	0.1	%	16.7	9.1	13.5	7.6	7.1
Soil Organic Matter	CE192	N	0.1	%	7.50	2.62	6.14	2.55	3.34
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
Fluorene	CE087	U	0.013	mg/kg	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013

SOILS

Lab Number					101767	101768	101769	101770	101771
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TPA 0.20m	TPA 0.50m	TPB 0.20m	TPB 0.50m	TPC 0.20m
Depth (m)					0.20	0.50	0.20	0.50	0.20
Sampling Date					14/04/2026	14/04/2026	14/04/2026	14/04/2026	14/04/2026
Test	Method	Accred	LoD	Units					
Phenanthrene	CE087	M	0.014	mg/kg	0.025	< 0.014	0.019	< 0.014	< 0.014
Anthracene	CE087	U	0.017	mg/kg	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
Fluoranthene	CE087	M	0.017	mg/kg	0.157	< 0.017	0.069	0.018	< 0.017
Pyrene	CE087	M	0.016	mg/kg	0.195	< 0.016	0.072	0.020	< 0.016
Benzo(a)anthracene	CE087	U	0.012	mg/kg	0.128	< 0.012	0.053	0.019	0.024
Chrysene	CE087	M	0.028	mg/kg	0.147	< 0.028	0.051	< 0.028	< 0.028
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	0.259	< 0.020	0.085	< 0.020	0.036
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	0.082	< 0.025	0.032	< 0.025	< 0.025
Benzo(a)pyrene	CE087	U	0.019	mg/kg	0.175	< 0.019	0.061	< 0.019	< 0.019
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	0.179	< 0.019	0.068	< 0.019	0.030
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	0.033	< 0.017	< 0.017	< 0.017	< 0.017
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	0.171	< 0.019	0.063	< 0.019	0.027
Total PAH(16)	CE087	N	0.28	mg/kg	1.55	< 0.280	0.572	< 0.280	< 0.280
BTEX									
Benzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	CE267	N	0.004	mg/kg	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
MTBE	CE267	N	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total BTEX	CE267	N	0.007	mg/kg	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
m,p-Xylene	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
oXylenes	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	1.2
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	0.8	< 0.5	0.7	< 0.5	1.0
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	1.7	< 0.7	1.5	0.7	1.5
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	5.9	< 4.0	< 4.0	< 4.0	6.9

SOILS

Lab Number					101767	101768	101769	101770	101771
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TPA 0.20m	TPA 0.50m	TPB 0.20m	TPB 0.50m	TPC 0.20m
Depth (m)					0.20	0.50	0.20	0.50	0.20
Sampling Date					14/04/2026	14/04/2026	14/04/2026	14/04/2026	14/04/2026
Test	Method	Accred	LoD	Units					
>C35-C44 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	0.7	< 0.5	< 0.5	< 0.5	< 0.5
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	1.9	1.2	1.7	1.1	2.2
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	7.1	3.6	6.2	3.9	6.8
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	4.0	< 2.0	3.5	2.1	3.3
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	31.9	6.4	23.7	7.6	25.0
>C35-C44 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	10.6	< 2.0	5.9	2.4	6.1
Wet Chem									
pH	CE004	M	0.1	pH units	8.3	8.7	8.0	8.4	7.7

SOILS

Lab Number					101772	101773	101774	101775	101776
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TPC 0.50m	TPD 0.10m	TPD 0.50m	TPE 0.10m	TPE 0.50m
Depth (m)					0.50	0.10	0.50	0.10	0.50
Sampling Date					14/04/2026	14/04/2026	14/04/2026	14/04/2026	14/04/2026
Test	Method	Accred	LoD	Units					
Asbestos									
Asbestos Identification	SUBCO N	SU	0	-	NAD	NAD	NAD	NAD	NAD
Metals									
Water Soluble Sulphate	CE061	M	20	mg/kg	29.1	35.4	23.2	29.7	< 20.0
Water Soluble Boron	CE063	N	0.5	mg/kg	1.65	2.61	1.50	2.66	1.96
Arsenic	CE264	M	2.3	mg/kg	7.6	6.6	5.6	5.7	7.4
Cadmium	CE264	M	1.1	mg/kg	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Chromium	CE264	U	1.3	mg/kg	12.1	10.5	19.7	9.1	10.3
Copper	CE264	M	1.2	mg/kg	10.3	25.9	8.3	20.5	12.9
Lead	CE264	U	2.4	mg/kg	35.6	47.2	69.6	41.6	19.9
Mercury	CE264	M	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Nickel	CE264	M	1.6	mg/kg	15.3	10.1	24.0	8.1	12.3
Selenium	CE264	M	3	mg/kg	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Zinc	CE264	M	2.4	mg/kg	44.1	76.4	38.9	69.3	38.7
Colourimetric									
Water Soluble Chromium VI	CE263	N	0.04	mg/kg	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
Total Monohydric Phenols	CE078	N	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Free Cyanide	CE077	N	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chromium III	CE208	N	2	mg/kg	12.1	10.5	19.7	9.12	10.3
Thiocyanate	CE145	M	1	mg/kg	g < 1.0	g 1.3	g < 1.0	g 1.7	g < 1.0
Total Sulphide	CE284	N	4	mg/kg	fg 6	fg < 4	fg < 4	fg 5	fg < 4
Combustion									
Moisture Content	CE001	N	0.1	%	7.7	19.0	6.4	18.5	10.1
Soil Organic Matter	CE192	N	0.1	%	3.28	10.0	1.64	8.98	4.76
Polyaromatic hydrocarbons									
Naphthalene	CE087	M	0.016	mg/kg	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016
Acenaphthylene	CE087	M	0.015	mg/kg	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015
Acenaphthene	CE087	M	0.013	mg/kg	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013
Fluorene	CE087	U	0.013	mg/kg	< 0.013	< 0.013	< 0.013	< 0.013	< 0.013

SOILS

Lab Number					101772	101773	101774	101775	101776
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TPC 0.50m	TPD 0.10m	TPD 0.50m	TPE 0.10m	TPE 0.50m
Depth (m)					0.50	0.10	0.50	0.10	0.50
Sampling Date					14/04/2026	14/04/2026	14/04/2026	14/04/2026	14/04/2026
Test	Method	Accred	LoD	Units					
Phenanthrene	CE087	M	0.014	mg/kg	< 0.014	0.015	< 0.014	< 0.014	< 0.014
Anthracene	CE087	U	0.017	mg/kg	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
Fluoranthene	CE087	M	0.017	mg/kg	< 0.017	0.040	< 0.017	< 0.017	< 0.017
Pyrene	CE087	M	0.016	mg/kg	< 0.016	0.039	< 0.016	< 0.016	< 0.016
Benzo(a)anthracene	CE087	U	0.012	mg/kg	< 0.012	0.061	0.016	0.019	0.019
Chrysene	CE087	M	0.028	mg/kg	< 0.028	0.057	< 0.028	< 0.028	< 0.028
Benzo(b)fluoranthene	CE087	M	0.02	mg/kg	< 0.020	0.082	< 0.020	0.021	< 0.020
Benzo(k)fluoranthene	CE087	M	0.025	mg/kg	< 0.025	0.040	< 0.025	< 0.025	< 0.025
Benzo(a)pyrene	CE087	U	0.019	mg/kg	< 0.019	0.049	< 0.019	< 0.019	< 0.019
Indeno(1,2,3-cd)pyrene	CE087	M	0.019	mg/kg	< 0.019	0.062	< 0.019	< 0.019	< 0.019
Dibenzo(a,h)anthracene	CE087	M	0.017	mg/kg	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017
Benzo(g,h,i)perylene	CE087	M	0.019	mg/kg	< 0.019	0.039	< 0.019	< 0.019	< 0.019
Total PAH(16)	CE087	N	0.28	mg/kg	< 0.280	0.482	< 0.280	< 0.280	< 0.280
BTEX									
Benzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	CE267	U	0.001	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes	CE267	N	0.004	mg/kg	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
MTBE	CE267	N	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total BTEX	CE267	N	0.007	mg/kg	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
m,p-Xylene	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
oXylenes	CE267	U	0.002	mg/kg	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Petroleum Hydrocarbons									
>C5-C6 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C6-C8 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C8-C10 Aliphatic (HS_1D_AL)	CE267	N	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
>C10-C12 Aliphatic (EH_2D_AL)	CE250	N	1	mg/kg	1.2	1.2	1.1	1.9	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	0.7	1.0	0.7	2.1	0.6
>C16-C21 Aliphatic (EH_2D_AL)	CE250	N	0.7	mg/kg	0.7	1.2	< 0.7	3.9	< 0.7
>C21-C35 Aliphatic (EH_2D_AL)	CE250	N	4	mg/kg	4.9	6.6	< 4.0	20.6	< 4.0

SOILS

Lab Number					101772	101773	101774	101775	101776
Client Reference					SOIL	SOIL	SOIL	SOIL	SOIL
Sample ID					TPC 0.50m	TPD 0.10m	TPD 0.50m	TPE 0.10m	TPE 0.50m
Depth (m)					0.50	0.10	0.50	0.10	0.50
Sampling Date					14/04/2026	14/04/2026	14/04/2026	14/04/2026	14/04/2026
Test	Method	Accred	LoD	Units					
>C35-C44 Aliphatic (EH_2D_AL)	CE250	N	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.5	< 0.5
>C5-C7 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C7-C8 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C8-C10 Aromatic (HS_1D_AR)	CE267	N	0.01	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
>C10-C12 Aromatic (EH_2D_AR)	CE250	N	0.6	mg/kg	0.9	1.8	< 0.6	3.2	< 0.6
>C12-C16 Aromatic (EH_2D_AR)	CE250	N	1	mg/kg	3.7	6.3	3.4	9.8	1.9
>C16-C21 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	< 2.0	3.0	< 2.0	5.9	< 2.0
>C21-C35 Aromatic (EH_2D_AR)	CE250	N	4.5	mg/kg	8.2	22.2	6.1	40.0	< 4.5
>C35-C44 Aromatic (EH_2D_AR)	CE250	N	2	mg/kg	< 2.0	5.7	< 2.0	8.2	< 2.0
Wet Chem									
pH	CE004	M	0.1	pH units	8.6	8.0	8.4	8.3	8.6

METHOD DETAILS

METHOD	TESTNAME	METHOD SUMMARY	ANALYSIS BASIS
CE267	VPH in Soil	HS-GCFID	As submitted sample
CE250	GCXGC in Soil	DCM Extraction and GCxGC-FID	As submitted sample
SUBCON	Asbestos Soil	HSG248	Air Dried Sample
CE061	W. Sol Metals	ICPOES	Air dried sample
CE063	Water soluble boron	ICPOES	Air dried sample
CE264	Metals by ICP in Soil	ICPOES	Air dried sample
CE267	BTEX in Soils	Analysis by HSGCFID	As submitted sample
CE263	ChromiumVI by Discrete Analyser in Soil	Gallery	Air dried sample
CE087	PAH in Soil	DCM Extraction and GCMS	As submitted sample
CE078	Phenols in Soil	Continuous Flow Analyser	As submitted sample
CE077	Cyanides in Soils	Continuous Flow Analyser	As submitted sample
CE208	Chromium Hexavalent in Soil	Colorimetry	Air dried sample
CE145	Thiocyanate	UV Spectrometer	Air dried sample
CE284	Sulphide By DA in Soil	Gallery Discrete Analyser	Air dried sample

DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

- a Sampling date not provided
- b Sampling time not provided (waters only)
- c Sample not received in appropriate containers
- d Storage Temperature
- e Headspace present in sample container
- f Sample exceeded sampling to receipt
- g Sample exceeded holding time(s)

Lab ref	Sample ID	Depth (m)	Deviating	Tests (Reason for deviation)
101767	TPA 0.20m	0.20	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101768	TPA 0.50m	0.50	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101769	TPB 0.20m	0.20	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101770	TPB 0.50m	0.50	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101771	TPC 0.20m	0.20	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101772	TPC 0.50m	0.50	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101773	TPD 0.10m	0.10	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101774	TPD 0.50m	0.50	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101775	TPE 0.10m	0.10	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)
101776	TPE 0.50m	0.50	Y	Sulphide By DA in Soil (f,g), Thiocyanate(g)

REPORT INFORMATION

Report No.:26-04674, issue number 1

Key

U	ISO17025 Accredited Result
M	ISO17025 and MCERTS Accredited Result
N	Do not currently hold accreditation
^	MCERTS accreditation not applicable for sample matrix
*	ISO17025 accreditation not applicable for sample matrix
S	Subcontracted
I/S	Insufficient Sample
U/S	Unsuitable sample
N/T	Not tested
<	Means "less than"
>	Means "greater than"

LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.

This report shall not be reproduced except in full, without prior written approval.

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

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

The results relate only to the sample received.

Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Moisture Content Calculated on a Wet Weight basis (at 30°C)

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

Where sampling was undertaken by Chemtech Environmental Limited it is outside the UKAS accreditation scope.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis (30°C). Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones and 'inert' material, where applicable.

'Client Reference', 'Sample ID', 'Sample Location', 'Sample Type', 'Depth', 'Sample Date' and 'Sample Time' information is provided by the customer

Sample Retention and Disposal

All soil samples will be retained for a period of 4 weeks from the point of receipt

All water samples will be retained for a period of 2 weeks from the point of Reporting

Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Unless specifically identified (noted as "(B)" in analyte name) all internal analysis performed at Durham site