WATCHING BRIEF AND VALIDATION RECORD

Project No:	C5984	**Date of Visit:**	08/10/2025
Site Name:	GWERNAFFIELD ROAD, MOLD	**Weather Conditions:**	Dry / Cloudy
Client:	ANWYL HOMES	**Site Manager:**	SM (EG)
Engineer:	MAS	**Visit Time:**	08:50 – 13:15

Description of Works Visit

MAS arrived on site and signed in. Spoke to Geraint (Anwyl) and said BSL were there to do a watching brief on both fields and take a water sample in the Northern parcel.

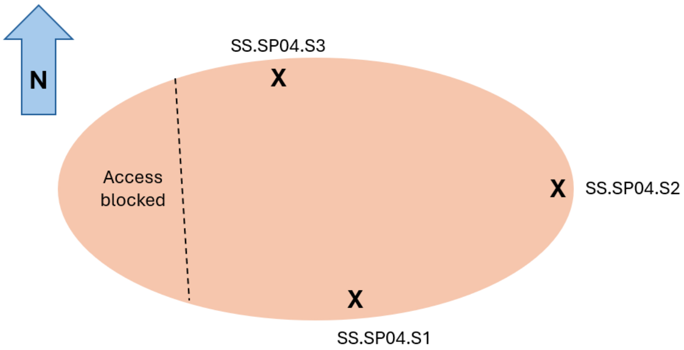
Northern Parcel

- The trench in the northwestern corner of site was still present with trench supports. There was little water in the trench.
- East of the excavation there was a stockpile of associated arisings.
- Two pumps in the road were in use and pumping groundwater into the trench in the southern-central area. This was being filtered through bedding gravel and straw in the historical sluice area.
- A trench (circa 0.50m bgl) was excavated in the road to install a small drain pipe. This was to pump foul water from the houses to the pump station then offsite.
- The eastern and central area was being used for material storage.
- The large stockpile of contaminated subsoil was still in the southwestern area.
- The link road was in use and connected to the southern parcel.
- There was waterlogging in the southern area due to bad weather the previous weeks.
- Roads and Sewers had to pull off the northern field due to the waterlogging, so were moving back to finish the work in the following weeks.
- The badger set has been levelled.
- One set of water samples was taken from the water filtration area – named W201N

Form No	Revision	Date
CMR 19	0.0	May 20

Southern Parcel

- MAS walked the site and noted all stockpiles and main site features.
- SS.SP04.S1, S2, and S3 were taken from the riddled subsoil in the northeastern area of site.



SS.SP04

Testing requirements:	
The material was tested in line with the remedial strategy for the below contaminants: • Asbestos screening • BSL Default Soil Suite: Arsenic, Cadmium, Chromium (total and hex), Copper, Nickel, Mercury, Lead, Zinc, Selenium, speciated polycyclic hydrocarbons (PAH 16), water soluble sulphate (2:1 Extract), soil organic matter and pH.	
Screening criteria:	Residential without plant uptake (1% SOM)
Suitable usage/intended use	Chemically suitable as general fill on the receiver site (Quarry Road East, Bebington)
Testing requirements:	
The water was tested for the below contaminants: • BSL Default Water Suite: Metals, sulphates, carbonates and PAHs	
Screening criteria:	Environmental Quality Standards (EQS)
Comments:	Lead levels are below the relevant screening criteria. Elevated levels of Nitrate (N03) have been identified within the groundwater, however these are thought to be naturally occurring and are unlikely to pose a risk to end users.

Northern Parcel Photographs

Photograph 1: Trench excavation in northeastern area

Photograph 2: Trench supports with little water

Photograph 3: Flagged stockpiles in northeastern corner

Photograph 4: Pump 1 in use at northern road area

Photograph 5: Material storage area in central site

Photograph 6: Material stockpiles in eastern site area

Photograph 7: Wood material still present on bund

Photograph 8: Subsoil stockpile in southeastern area

Photograph 9: Waterlogging in southern site area

Photograph 10: Waterlogging in southern site area

Photograph 11: Water filtration area

Photograph 12: Water travelling through bedding gravel and straw to historical sluice

Photograph 13: Pump 2 in southern road area

Photograph 14: Small stockpiles in southern area

Photograph 15: Link road and cleared badger set area

Photograph 16: Road trench in the western road area

Southern Parcel Photographs

Photograph 1: Parking area next to new welfare

Photograph 2: New welfare area

Photograph 3: Plots started in the northern site area

Photograph 4: Plots started in the northwestern site area

Photograph 5: Plots started in the northwestern site area

Photograph 6: Excavation with gravel fill near link road in the northwestern site area

Photograph 7: Pump in northern area next to link road

Photograph 8: Entry to northern parcel

Photograph 9: Facing south

Photograph 10: Facing southeast

Photograph 11: Crush import in northeastern area

Photograph 12: Material storage next to welfare in northeastern area

Photograph 13: Material storage next to welfare in northeastern area

Photograph 14: Waterlogging in northeastern site area

Photograph 15: Stockpiles in central site area

Photograph 16: Sod and topsoil stockpiles in southern central area

Photograph 17:

Photograph 18: Riddling subsoil for export

Photograph 19: Sampled location of SS.SP04.S1

Photograph 20: Foundation inspection pit in southern site area

Photograph 21: Foundation inspection pit in southern site area

Photograph 22: Roads and sewers welfare in southwestern corner

Photograph 23: Completed drain in southwestern area

Photograph 24: Material storage in southwestern site area

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Summary Assessment Sheet - Human Health

Controlled Waters Assessment Summary			Surface/Groundwater Body:			Groundwater
			Location:			W201N
			Well Screen Stratum:			
Contaminant	**Screening Level (EQS/DWS) (ug/l)**	**No. Samples**	**Min. Value**	**Max. Value**	**No. Samples ≥ Screening Level**	
pH	-	1	7.20	7.20	-	7
Electrical Conductivity	-	1	760.00	760.00	-	760
Hardness	-	1	415.00	415.00	-	415
Disolved Organic Carbon (DOC)	-	1	1.74	1.74	-	2
Arsenic	10	1	0.18	0.18	0	0
Boron	1000	1	31.00	31.00	0	31
Cadmium	0.08	1	0.02	0.02	0	0
Calcium	250	1	150.00	150.00	0	150
Chromium (III)	4.7	1	0.00	<LOD	0	<5.0
Chromium (VI)	3.4	1	0.00	<LOD	0	<5.0
Copper	1	1	7.40	7.40	1	7
Lead	1.2	1	0.50	0.50	0	1
Manganese	50	1	3.30	3.30	0	3
Mercury	0.07	1	0.00	<LOD	0	<0.05
Nickel	4	1	0.60	0.60	0	1
Selenium	10	1	2.00	2.00	0	2
Zinc	10.9	1	31.00	31.00	1	31
Ammonium (NH4)	500	1	15.00	15.00	0	15
Chloride	250000	1	32000.00	32000.00	0	32000
Sulphate	250000	1	34700.00	34700.00	0	34700
Sulphide	0.25	1	0.00	<LOD	0	<5.0
Nitrate (as N03)	50000	1	86800.00	86800.00	1	86800
Nitrate (as N02)	10	1	0.00	<LOD	0	<5.0
Naphthalene	2	1	0.00	<LOD	0	<0.01
Acenaphthylene	5.8	1	0.00	<LOD	0	<0.01
Anthracene	0.1	1	0.00	<LOD	0	<0.01
Fluoranthene	0.0063	1	0.00	<LOD	0	<0.01
Benzo(b)fluoranthene	0.1	1	0.00	<LOD	0	<0.01
Benzo(k)fluoranthene	0.1	1	0.00	<LOD	0	<0.01
Benzo(a)pyrene	0.0017	1	0.00	<LOD	0	<0.01
Indeno(1,2,3,cd)pyrene	0.1	1	0.00	<LOD	0	<0.01
Benzo(ghi)perylene	0.1	1	0.00	<LOD	0	<0.01
Mean Average pH	**7.2**					
Mean Average Hardness	**415.0**					
	Lowest of EQS and DWS					**Values in RED are > the relevant screening levels and further assessment is required.**
						Exceedance of the screening levels alone may not mean a risk is posed.
Job Number:	**C5984**					No WQT - there are no generic Water Quality Targets availble (EQS, DWS or WHO guidelines).
Client:	**Anwyl Homes**					
Site:	**Gwernaffield Road, Mold**					

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Summary Assessment Sheet - Human Health

Human Health Assessment Summary - Soils Test Data						Stratum:	Subsoil	Subsoil	Subsoil
						Location:	SS.SP04.S1	SS.SP04.S2	SS.SP04.S3
						Depth:			
						Date:	08.10.2025	08.10.2025	08.10.2025
Contaminant	**GAC (mg/kg)**	**No. Samples**	**Min. Value**	**Max. Value**	**No. Samples ≥GAC**				
Moisture Content	-	3	4.80	8.00	-		5	8	5
Soil Organic Matter	-	3	1.40	1.70	-		1.4	1.4	1.7
pH	-	3	7.80	7.80	-		7.8	7.8	7.8
Water Soluble Sulphate (2:1 Leachate Equivalent) (mg/l)	Note mg/l	3	6.85	10.60	-		10.6	6.9	8.9
Arsenic	37	3	9.80	11.00	0		11.0	9.8	11.0
Cadmium	11	3	0.20	0.30	0		0.3	0.2	0.3
Chromium (III)	910	3	28.00	28.00	0		28.0	28.0	28.0
Hexavalent Chromium (VI)	6	3	< LOD	<LOD	0		< 1.8	< 1.8	< 1.8
Copper	2400	3	26.00	32.00	0		26.0	29.0	32.0
Lead	200	3	52.00	63.00	0		58.0	52.0	63.0
Mercury	1.2	3	< LOD	<LOD	0		< 0.3	< 0.3	< 0.3
Nickel	130	3	35.00	36.00	0		35.0	35.0	36.0
Selenium	250	3	< LOD	<LOD	0		< 1.0	< 1.0	< 1.0
Zinc	3700	3	78.00	87.00	0		84.0	78.0	87.0
Cyanide (free)	34	3	0.00	<LOD	0		-	-	-
Phenol (total)	120	3	0.00	<LOD	0		-	-	-
Naphthalene	2.3	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Acenaphthylene	170	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Acenaphthene	210	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Fluorene	170	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Phenanthrene	95	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Anthracene	2400	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Fluoranthene	280	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Pyrene	620	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	7	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Chrysene	15	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	2.6	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	77	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	2.2	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	27	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	0.24	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	320	3	< LOD	<LOD	0		< 0.05	< 0.05	< 0.05
Asbestos Detected (Detected or Not-Detected)	Y	3	0.00	0.00	0		Not-detected	Not-detected	Not-detected
Asbestos Quantification (% w/w)	0.001	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aliphatic >EC5-EC6	42	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aliphatic >EC6-EC8	100	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aliphatic >EC8-EC10	27	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aliphatic >EC10-EC12	130	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aliphatic >EC12-EC16	1100	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aliphatic >EC16-EC35	65000	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aliphatic >EC35-EC40	65000	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC5-EC7	70	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC7-EC8	130	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC8-EC10	34	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC10-EC12	74	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC12-EC16	140	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC16-EC21	260	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC21-EC35	1100	0	0.00	<LOD	0				
Petroleum Hydrocarbons Aromatic >EC35-EC40	1100	0	0.00	<LOD	0				
Benzene	0.09	0	0.00	<LOD	0				
Toluene	130	0	0.00	<LOD	0				
Ethyl benzene	47	0	0.00	<LOD	0				
o-Xylene	60	0	0.00	<LOD	0				
m- & p-Xylene	115	0	0.00	<LOD	0				
MTBE	49	0	0.00	<LOD	0				
Chloroethene (Vinyl Chloride)	0.00064	0	0.00	<LOD	0				
1,2-Dichloroethane (1,2-DCA)	0.007	0	0.00	<LOD	0				
1,1,1-Trichloroethane	8.8	0	0.00	<LOD	0				
1,1,2,2-Tetrachloroethane	1.6	0	0.00	<LOD	0				
1,1,1,2-Tetrachloroethane	1.2	0	0.00	<LOD	0				
Tetrachloroethene (PCE)	0.18	0	0.00	<LOD	0				
Tetrachloromethane (carbon tetrachloride)	0.026	0	0.00	<LOD	0				
Trichloroethene (TCE)	0.016	0	0.00	<LOD	0				
Trichloromethane (chloroform)	0.91	0	0.00	<LOD	0				
Chlorobenzene	0.45	0	0.00	<LOD	0				
1, 2 Dichlorobenzene	23	0	0.00	<LOD	0				
1, 3 Dichlorobenzene	0.40	0	0.00	<LOD	0				
1, 4 Dichlorobenzene	61	0	0.00	<LOD	0				
1, 2, 3 Trichlorobenzene	1.50	0	0.00	<LOD	0				
1, 2, 4 Trichlorobenzene	2.60	0	0.00	<LOD	0				
1, 3, 5 Trichlorobenzene	0.33	0	0.00	<LOD	0				
1, 2, 3, 4 Tetrachlorobenzene	15	0	0.00	<LOD	0				
1, 2, 3, 5 Tetrachlorobenzene	0.66	0	0.00	<LOD	0				
1, 2, 4, 5 Tetrachlorobenzene	0.33	0	0.00	<LOD	0				
Pentachlorobenzene	5.8	0	0.00	<LOD	0				
Hexachlorobenzene	1.8	0	0.00	<LOD	0				
Hexachlorobutadiene	0.29	0	0.00	<LOD	0				
ADD CoC	0.0	0	0.00	<LOD	0				
ADD CoC	0.0	0	0.00	<LOD	0				
Mean Average SOM	**1.5**								
Mean Average pH	**7.8**								

Assessment Scenario Selected: Residential with Homegrown Produce 1% SOM
Job Number: C5984
Client: Anwyl Homes
Site: Gwernaffield Road, Mold
Stratum: Natural

Values in RED are > the relevant screening levels and further assessment is required. Exceedance of the screening levels alone may not mean a risk is posed.

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Analytical Report Number : 25-054774

Project / Site name:	Gwernaffield Road Mold	**Samples received on:**	09/10/2025
Your job number:	C5984	**Samples instructed on/ Analysis started on:**	09/10/2025
Your order number:	6940	**Analysis completed by:**	16/10/2025
Report Issue Number:	1	**Report issued on:**	16/10/2025
Samples Analysed:	3 soil samples - 1 water sample		

Signed:

Trevor Hill
Customer Service
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.

Analytical Report Number: 25-054774
Project / Site name: Gwernaffield Road Mold
Your Order No: 6940

Lab Sample Number				711138	711139	711140
Sample Reference				SS.SP04.S1	SS.SP04.S2	SS.SP04.S3
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				08/10/2025	08/10/2025	08/10/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Stone Content	%	0.1	NONE	20	< 0.1	16.4
Moisture Content	%	0.01	NONE	4.8	8	5.2
Total mass of sample received	kg	0.1	NONE	1.3	0.9	1.3

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN
Analysis completed	N/A	N/A	N/A	15/10/2025	15/10/2025	15/10/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.8	7.8	7.8
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	21	14	18
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	10.6	6.85	8.9
Organic Matter (automated)	%	0.1	MCERTS	1.4	1.4	1.7

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80

Analytical Report Number: 25-054774
Project / Site name: Gwernaffield Road Mold
Your Order No: 6940

Lab Sample Number				711138	711139	711140
Sample Reference				SS.SP04.S1	SS.SP04.S2	SS.SP04.S3
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				08/10/2025	08/10/2025	08/10/2025
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	9.8	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.2	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	28	28	28
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	28	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	29	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	58	52	63
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	35	35	36
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	84	78	87

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

Analytical Report Number: 25-054774
Project / Site name: Gwernaffield Road Mold

Your Order No: 6940

Lab Sample Number	711141
Sample Reference	W201N
Sample Number	None Supplied
Water Matrix	Other water
Depth (m)	None Supplied
Date Sampled	08/10/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
General Inorganics				
pH (L099)	pH Units	N/A	NONE	7.2
Electrical Conductivity at 20°C	µS/cm	10	NONE	760
Sulphate as SO_4	mg/l	0.045	NONE	34.7
Sulphide	µg/l	5	NONE	< 5.0
Chloride	mg/l	0.15	NONE	32
Ammoniacal Nitrogen as NH_4^+	µg/l	15	NONE	15
Dissolved Organic Carbon (DOC)	mg/l	0.1	NONE	1.74
Nitrate as N	mg/l	0.01	NONE	19.6
Nitrate as NO_3	mg/l	0.05	NONE	86.8
Nitrite as NO_2	µg/l	5	NONE	< 5.0
Hardness - Total	mgCaCO3/l	1	NONE	415
Speciated PAHs				
Naphthalene	µg/l	0.01	NONE	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	0.15	NONE	0.18
Cadmium (dissolved)	µg/l	0.02	NONE	0.02
Chromium (dissolved)	µg/l	0.2	NONE	0.4
Copper (dissolved)	µg/l	0.5	NONE	7.4
Lead (dissolved)	µg/l	0.2	NONE	0.5
Manganese (dissolved)	µg/l	0.05	NONE	3.3
Mercury (dissolved)	µg/l	0.05	NONE	< 0.05
Nickel (dissolved)	µg/l	0.5	NONE	0.6
Selenium (dissolved)	µg/l	0.6	NONE	2
Zinc (dissolved)	µg/l	0.5	NONE	31

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Your Order No: 6940

Lab Sample Number	711141
Sample Reference	W201N
Sample Number	None Supplied
Water Matrix	Other water
Depth (m)	None Supplied
Date Sampled	08/10/2025
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Boron (dissolved)	µg/l	10	NONE	31
Calcium (dissolved)	mg/l	0.012	NONE	150
Chromium (hexavalent)	µg/l	5	NONE	< 5.0
Chromium (III)	µg/l	5	NONE	< 5.0

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

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* 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 *
711138	SS.SP04.S1	None Supplied	None Supplied	Brown sandy loam with vegetation and stones
711139	SS.SP04.S2	None Supplied	None Supplied	Brown sand with gravel
711140	SS.SP04.S3	None Supplied	None Supplied	Brown loam and sand with vegetation and stones

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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
Organic matter (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
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	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
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
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	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
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080-PL/L130B	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
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
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited matrices: SW, PW, GW, except B - SW,GW, Hg - SW,PW, Al - SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	NONE
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029-PL	W	NONE
Electrical Conductivity at 20°C in water	Determination of electrical conductivity in water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE	In-house method	L031B	W	NONE
Dissolved Organic Carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR Analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, FSE, LL; PrW, DI PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

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Project / Site name: Gwernaffield Road Mold

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 Hardness of water	Determination of total hardness of water by calculation from calcium and magnesium. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045B	W	NONE
Nitrate as N in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Nitrate in water	Determination of nitrate by reaction with sodium salicylate followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08	L078-PL	W	NONE
Chromium(III) in water	In-house method by calculation from total Cr and Cr(VI)	In-house method by calculation	L080-PL	W	NONE
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5-diphenylcarbazide, followed by colorimetry. Accredited matrices: SW, PW, GW, FSE, LL	In-house method by continuous flow analyser	L080-PL	W	NONE
Chloride in water	Determination of chloride in water by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house based on MEWAM Method ISBN 0117516260	L082B	W	NONE
Ammonium as NH4 in water	Determination of ammonium/ammonia/ammoniacal nitrogen by the colorimetric salicylate/nitroprusside method using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
Nitrite in water	Determination of nitrite in water by addition of sulphanilamide and NED followed by colorimetry using discrete analyser. Accredited matrices: SW, PW, GW, FSE, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082B	W	NONE
pH of water at 20°C (automated)	Determination of pH of water by electrochemical measurement. Accredited matrices: SW, PW, GW, FSE, LL	In-house method	L099-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAHs) in water by extraction in dichloromethane followed by GC-MS. Accredited matrices (PAHs): SW, PW, GW	In-house method based on USEPA 8270	L102B	W	NONE
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited matrices: SW, PW, GW, PrW, DI PrW, FSE, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	NONE

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