

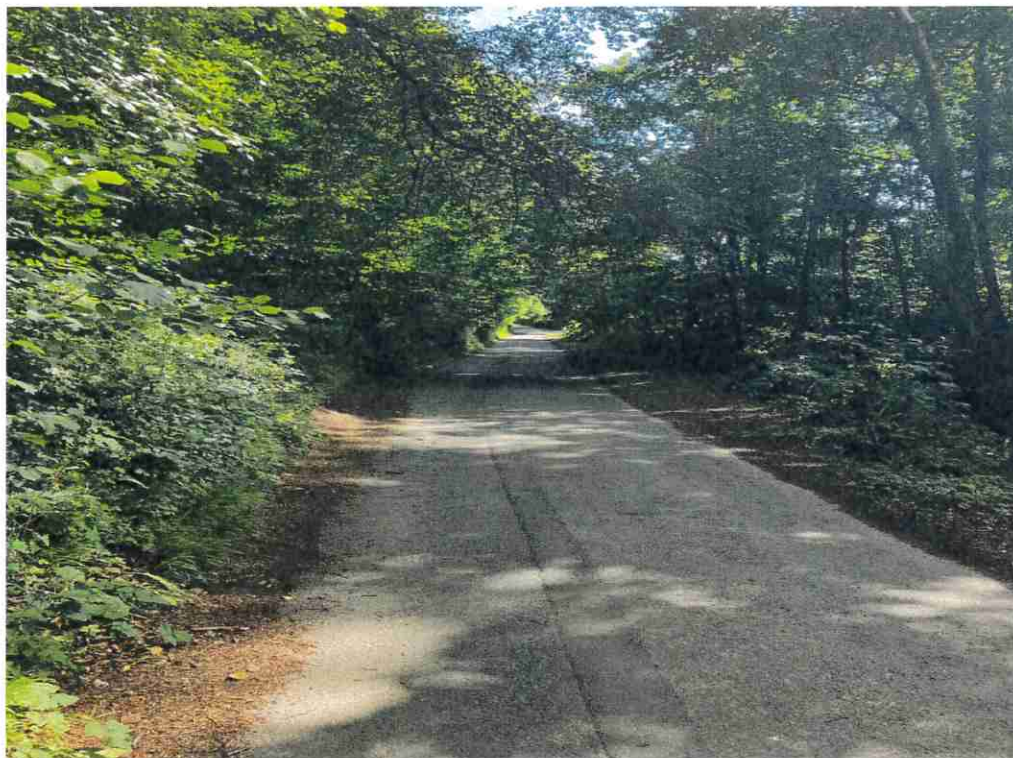


Plate No.: 1

Title.: Main access road to site.



Plate No.: 2

Title.: View of eastern portion of site from the site access road.



Contract No.: S3565

Report Date: 28/08/2025

Contract Name: Chalford Vale Recreation Centre, Stroud



Plate No.: 3

Title.: Potential asbestos containing material.



Plate No.: 4

Title.: Potential asbestos containing material.



Contract No.: S3565

Report Date: 28/08/2025

Contract Name: Chalford Vale Recreation Centre, Stroud



Plate No.: 5

Title.: Access to woodland at the east of site.



Plate No.: 6

Title.: Playing field composing the east of site.



Contract No.: S3565

Report Date: 28/08/2025

Contract Name: Chalford Vale Recreation Centre, Stroud



Plate No.: 7

Title.: Potential asbestos containing material noted during the walkover.



Plate No.: 8

Title.: Trial pit example and photo board.



Contract No.: S3565

Report Date: 28/08/2025

Contract Name: Chalford Vale Recreation Centre, Stroud



Plate No.: 9

Title.: Trial pit example and photo board.



Plate No.: 10

Title.: Trial pit example and photo board.



Contract No.: S3565

Report Date: 28/08/2025

Contract Name: Chalford Vale Recreation Centre, Stroud



Plate No.: 11

Title.: Trial pit reinstatement



Plate No.: 12

Title.: Trial pit reinstatement



Contract No.: S3565

Report Date: 28/08/2025

Contract Name: Chalford Vale Recreation Centre, Stroud



Plate No.: 13

Title.: Site condition following investigation



Plate No.: 14

Title.: Site condition following investigation



Contract No.: S3565

Report Date: 28/08/2025

Contract Name: Chalford Vale Recreation Centre, Stroud



Plate No.: 15

Title.: Additional SI location, STP206, for shallow PAH analysis.

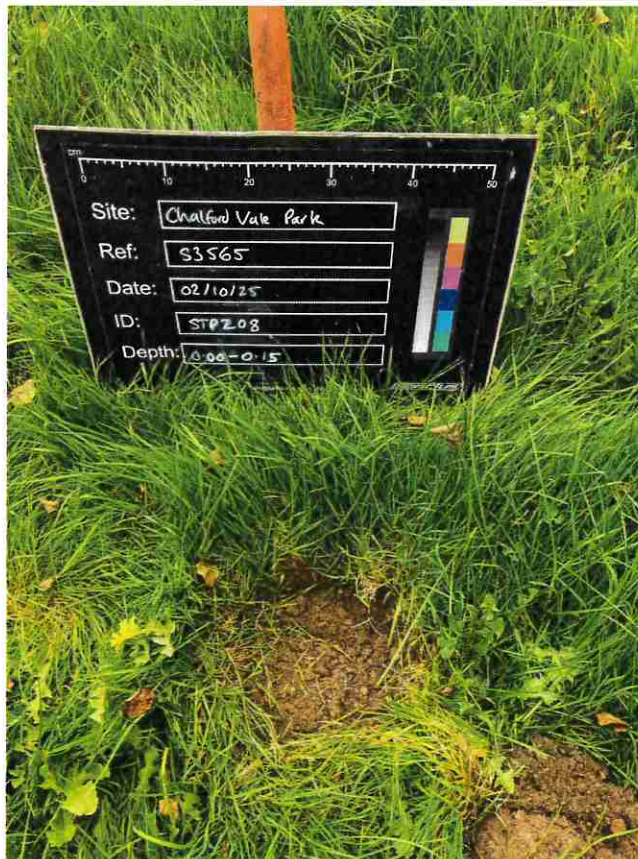


Plate No.: 16

Title.: Additional SI location, STP207, for shallow PAH analysis.



Contract No.: S3565

Report Date: 02/10/2025

Contract Name: Chalford Vale Recreation Centre, Stroud

Appendix D Environmental Laboratory Soil Analysis



4041



Environmental Science

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e: labs@sanctusltd.co.uk
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Analytical Report Number : 25-041714

Project / Site name:	Chalford Vale Recreation Ground	Samples received on:	07/08/2025
Your job number:	S3565	Samples instructed on/ Analysis started on:	07/08/2025
Your order number:	S3565	Analysis completed by:	11/08/2025
Report Issue Number:	1	Report issued on:	11/08/2025
Samples Analysed:	9 bulk samples		

Signed:

Rafał Szczepańczyk
Technical Reviewer
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.



4041



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Analytical Report Number: 25-041714

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number				639225	639226	639227	639228	639229
Sample Reference				pACM01+2	pACM03	pACM04	pACM05	pACM06
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)				0.40	0.40	0.30	0.10	0.40
Date Sampled				04/08/2025	04/08/2025	04/08/2025	05/08/2025	05/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Bulk Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Asbestos

Asbestos in bulks	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU	SPU
Analysis completed	N/A	N/A	N/A	11/08/2025	11/08/2025	11/08/2025	11/08/2025	11/08/2025
Actinolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Amosite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected	Detected
Crocidolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Tremolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Asbestos Cement	Asbestos Cement	Asbestos Cement	Asbestos Cement	Asbestos Cement
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U/S = Unsuitable Sample I/S = Insufficient Sample



4041



Environmental Science

Analytical Report Number: 25-041714

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number				639230	639231	639232	639233
Sample Reference				pACM07	pACM08	pACM09	pACM10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A
Depth (m)				0.40	0.40	0.40	0.00
Date Sampled				05/08/2025	05/08/2025	05/08/2025	05/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Bulk Analysis)	Units	Test Limit of detection	Test Accreditation Status				

Asbestos

Asbestos in bulks	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU
Analysis completed	N/A	N/A	N/A	11/08/2025	11/08/2025	11/08/2025	11/08/2025
Actinolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Amosite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	Detected	Detected	Detected	Detected
Crocidolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Tremolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Asbestos Cement	Asbestos Cement	Asbestos Cement	Asbestos Cement
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U/S = Unsuitable Sample I/S = Insufficient Sample



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Environmental Science

Analytical Report Number : 25-041714

Project / Site name: Chalford Vale Recreation Ground

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 Bulks	Asbestos Identification in bulk material 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

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



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Environmental Science

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Analytical Report Number : 25-041716

Replaces Analytical Report Number: 25-041716, issue no. 1

Report format change.

Semi Asbestos Quantification certificate added by laboratory.

Project / Site name:	Chalford Vale Recreation Ground	Samples received on:	07/08/2025
Your job number:	S3565	Samples instructed on/ Analysis started on:	07/08/2025
Your order number:	S3565	Analysis completed by:	13/08/2025
Report Issue Number:	2	Report issued on:	14/08/2025
Samples Analysed:	10 soil samples		

J. Wawrzeczek
Signed:

Joanna Wawrzeczek
Senior Reporting Specialist
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

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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: 25-041716
Project / Site name: Chalford Vale Recreation Ground
Your Order No: S3565

Lab Sample Number	639235	639236	639237	639238	639239
Sample Reference	STP02	STP04	STP06	STP07	STP08
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)	0.05-0.50	0.20-0.60	0.05-0.20	0.25-0.60	0.05-0.40
Date Sampled	04/08/2025	04/08/2025	04/08/2025	04/08/2025	04/08/2025
Time Taken	1200	1230	1300	1330	1330
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	13.5	< 0.1	< 0.1	60.5
Moisture Content	%	0.01	NONE	17	41	21	34	18
Total mass of sample received	kg	0.1	NONE	1.1	1.2	1.1	1.1	1.2

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MUA	MUA	MUA	MUA	MUA
Analysis completed	N/A	N/A	N/A	11/08/2025	13/08/2025	11/08/2025	11/08/2025	11/08/2025
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 Quantification (SemiQ -0.1%)	%	0.1	ISO 17025	< 0.10	2.29	-	-	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	Loose Fibrous Debris, Sheeting/Board Debris	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	9.2	10.4	8	8.1	7.9
Total Cyanide	mg/kg	1	MCERTS	21	< 1.0	< 1.0	1.2	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	2300	31000	930	1900	1100
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	580	2900	81	60	43
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.288	1.47	0.0405	0.0301	0.0216
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	288	1470	40.5	30.1	21.6
Elemental Sulphur	mg/kg	5	MCERTS	9.5	< 5.0	11	< 5.0	< 5.0
Organic Matter (automated)	%	0.1	MCERTS	5.7	1.6	4.8	11	6.7
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.3	0.9	2.8	6.3	3.9

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: 25-041716

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number	639235	639236	639237	639238	639239
Sample Reference	STP02	STP04	STP06	STP07	STP08
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)	0.05-0.50	0.20-0.60	0.05-0.20	0.25-0.60	0.05-0.40
Date Sampled	04/08/2025	04/08/2025	04/08/2025	04/08/2025	04/08/2025
Time Taken	1200	1230	1300	1330	1330
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.1	< 0.05	0.13	0.4	0.21
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.15	0.7	0.67
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.17	0.17
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.33	0.27
Phenanthrene	mg/kg	0.05	MCERTS	0.75	0.51	0.51	7.9	4.3
Anthracene	mg/kg	0.05	MCERTS	0.18	0.17	0.2	2.2	1.4
Fluoranthene	mg/kg	0.05	MCERTS	2.4	0.66	1.9	27	16
Pyrene	mg/kg	0.05	MCERTS	2.1	0.56	1.8	25	15
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.3	0.3	1.5	15	9.6
Chrysene	mg/kg	0.05	MCERTS	1.5	0.37	1.6	15	9.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.2	0.33	2.7	19	13
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.76	0.15	0.89	7.1	3.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.7	0.29	2.2	18	11
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1	0.14	1.2	7.3	4.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.25	< 0.05	0.29	1.3	1.2
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.2	0.15	1.4	8	5.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	15.5	3.63	16.4	154	95.7
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	110	5.5	6.8	15	8.1
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	41	12	13	48	27
Barium (aqua regia extractable)	mg/kg	1	MCERTS	860	91	120	540	250
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.6	0.56	1	7	3.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	2.2	1	1.5	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	2	< 0.2	0.6	0.9	0.6
Chromium (hexavalent)	mg/kg	1.8	MCERTS	U/S *U/S g	3	U/S *U/S g	< 1.8	U/S *U/S g
Chromium (VI) by IC	mg/kg	1.8	NONE	< 1.80	-	< 1.80	-	< 1.80
Chromium (III) by IC	mg/kg	1	NONE	50	-	16	-	35
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	50	48	16	29	35
Copper (aqua regia extractable)	mg/kg	1	MCERTS	410	100	66	170	100
Lead (aqua regia extractable)	mg/kg	1	MCERTS	530	75	140	1100	420
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3	< 0.3	1.7	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	4.5	1.7	1.2	5.5	1.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	41	60	13	65	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	47	23	23	58	42
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	580	280	260	680	370



4041



Environmental Science

Analytical Report Number: 25-041716

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number				639235	639236	639237	639238	639239
Sample Reference				STP02	STP04	STP06	STP07	STP08
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)				0.05-0.50	0.20-0.60	0.05-0.20	0.25-0.60	0.05-0.40
Date Sampled				04/08/2025	04/08/2025	04/08/2025	04/08/2025	04/08/2025
Time Taken				1200	1230	1300	1330	1330
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	0.031	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	1.2	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	10	< 2.0	2.3	3
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	130	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	24	220	29	31	23
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	24	360	29	33	26

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	1.5	< 1.0	< 1.0	1.3	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	4	< 2.0	< 2.0	5.1	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	12	50	< 10	52	41
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	34	88	39	120	110
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	51	140	39	170	150

TPH Total >EC5 - EC35 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	75	500	68	210	180
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VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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

Analytical Report Number: 25-041716

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number	639240				639241	639242	639243	639244
Sample Reference	STP09				STP10	STP12	STP15	STP20
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)	0.30-0.60				0.05-0.25	0.15-0.60	0.05-0.15	0.05-0.60
Date Sampled	04/08/2025				04/08/2025	04/08/2025	05/08/2025	05/08/2025
Time Taken	1400				1400	1430	1000	1230
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Stone Content	%	0.1	NONE	19.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	12	45	21	11
Total mass of sample received	kg	0.1	NONE	1.1	1.2	1.1	1.2	1.3

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MUA	MUA	MUA	MUA	MUA
Analysis completed	N/A	N/A	N/A	11/08/2025	11/08/2025	13/08/2025	11/08/2025	11/08/2025
Actinolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	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	-	-	Detected	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	Not-detected	-	-

Asbestos Quantification (SemiQ -0.1%)	%	0.1	ISO 17025	-	-	1.36	-	-
Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	Loose Fibrous Debris	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8	8.9	10.9	7.9	8
Total Cyanide	mg/kg	1	MCERTS	1.5	1.1	< 1.0	< 1.0	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	1000	1200	20000	1400	1000
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	40	270	1100	52	20
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0201	0.136	0.541	0.0262	0.00973
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	20.1	136	541	26.2	9.73
Elemental Sulphur	mg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	17	7
Organic Matter (automated)	%	0.1	MCERTS	4.7	5.2	4.2	9.8	4.6
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.7	3	2.4	5.7	2.7

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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4041



Environmental Science

Analytical Report Number: 25-041716

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number				639240	639241	639242	639243	639244
Sample Reference				STP09	STP10	STP12	STP15	STP20
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)				0.30-0.60	0.05-0.25	0.15-0.60	0.05-0.15	0.05-0.60
Date Sampled				04/08/2025	04/08/2025	04/08/2025	05/08/2025	05/08/2025
Time Taken				1400	1400	1430	1000	1230
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.55	0.6	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.74	0.85	0.09	0.11	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.63	7.7	0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.79	7.9	0.06	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	11	84	1.2	0.5	0.37
Anthracene	mg/kg	0.05	MCERTS	3.6	27	0.35	0.14	0.1
Fluoranthene	mg/kg	0.05	MCERTS	28	140	3.5	1.6	0.93
Pyrene	mg/kg	0.05	MCERTS	25	120	3.2	1.5	0.86
Benzo(a)anthracene	mg/kg	0.05	MCERTS	15	58	1.8	1	0.51
Chrysene	mg/kg	0.05	MCERTS	15	58	2	1.3	0.67
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	21	59	2.4	2	0.74
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	7.4	30	1	0.81	0.28
Benzo(a)pyrene	mg/kg	0.05	MCERTS	19	61	2.2	1.8	0.59
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	9	24	0.99	0.9	0.28
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.6	4	0.25	0.22	0.07
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	9.8	26	1	1	0.32

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	167	703	20	12.9	5.72
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	180	7.2	5.7	16	3.8
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	21	29	71	24
Barium (aqua regia extractable)	mg/kg	1	MCERTS	720	180	160	830	120
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.1	1.3	1.4	6.4	1.8
Boron (water soluble)	mg/kg	0.2	MCERTS	1	1.2	3.9	2.3	1.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1	0.3	< 0.2	1.7	0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	2.1	U/S ^{u/s g}	< 1.8
Chromium (VI) by IC	mg/kg	1.8	NONE	-	-	-	< 1.80	-
Chromium (III) by IC	mg/kg	1	NONE	-	-	-	34	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	34	21	49	34	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	170	50	110	150	190
Lead (aqua regia extractable)	mg/kg	1	MCERTS	420	120	110	640	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.8	1.6	2.8	8.2	1.2
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	16	39	81	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.5	1.3	2.2	1.5
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	31	29	38	71	38
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	270	200	250	440	160



4041



Environmental Science

Analytical Report Number: 25-041716

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number	639240	639241	639242	639243	639244
Sample Reference	STP09	STP10	STP12	STP15	STP20
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)	0.30-0.60	0.05-0.25	0.15-0.60	0.05-0.15	0.05-0.60
Date Sampled	04/08/2025	04/08/2025	04/08/2025	05/08/2025	05/08/2025
Time Taken	1400	1400	1430	1000	1230
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	4.1	7.6	< 2.0	2.3	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	11	17	8.9	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	64	51	30	15	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	79	75	39	18	< 10

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	1.4	2.1	2.1	< 1.0	1.6
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	6.5	56	6.2	3.1	3.6
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	71	480	16	10	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	210	670	62	36	< 10
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	290	1200	85	50	< 10

TPH Total >EC5 - EC35 _{EH_CU+HS_1D_TOTAL}	mg/kg	10	NONE	370	1300	120	67	< 10
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VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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



Analytical Report Number: 25-041716
Project / Site name: Chalford Vale Recreation Ground
Your Order No: S3565

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-PL 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 of this method is around 0.1 %

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
639235	STP02	0.05-0.50	131	Loose Fibres	Chrysotile	< 0.10	< 0.10	11/08/2025	MUA
639236	STP04	0.20-0.60	131	Loose Fibrous Debris, Sheeting/Board Debris	Chrysotile	2.29	2.29	13/08/2025	MUA
639242	STP12	0.15-0.60	167	Loose Fibrous Debris	Amosite & Chrysotile & Crocidolite	1.36	1.36	13/08/2025	MUA

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



4041



Environmental Science

Analytical Report Number : 25-041716**Project / Site name: Chalford Vale Recreation Ground**

* 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 *
639235	STP02	None Supplied	0.05-0.50	Brown loam and sand with gravel and vegetation
639236	STP04	None Supplied	0.20-0.60	Light brown sand with gravel and stones
639237	STP06	None Supplied	0.05-0.20	Brown loam and clay with gravel and vegetation
639238	STP07	None Supplied	0.25-0.60	Brown loam and clay with gravel and vegetation
639239	STP08	None Supplied	0.05-0.40	Brown loam and clay with stones and vegetation
639240	STP09	None Supplied	0.30-0.60	Brown loam and sand with gravel and stones
639241	STP10	None Supplied	0.05-0.25	Brown clay and loam with gravel
639242	STP12	None Supplied	0.15-0.60	Brown clay and sand with gravel
639243	STP15	None Supplied	0.05-0.15	Brown loam and sand with gravel and vegetation
639244	STP20	None Supplied	0.05-0.60	Brown loam and sand with gravel and vegetation

Analytical Report Number : 25-041716

Project / Site name: Chalford Vale Recreation Ground

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
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
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
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
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Total sulphate (as SO ₄ 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
Cr(VI) in soils 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
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
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	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



4041



Environmental Science

Analytical Report Number : 25-041716

Project / Site name: Chalford Vale Recreation Ground

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
Free cyanide in soil	Determination of free 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
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
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
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
Soil Descriptions	Textural classification	In-house method	L019B	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 300C.

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.