



4041



Sample Deviation Report



Environmental Science

Analytical Report Number : 25-041716

Project / Site name: Chalford Vale Recreation Ground

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

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

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
STP02	N/A	S	639235	b	Asbestos Quantification - Gravimetric	A006B	b
STP02	N/A	S	639235	b	Asbestos identification in Soil	A001B	b
STP04	N/A	S	639236	b	Asbestos Quantification - Gravimetric	A006B	b
STP04	N/A	S	639236	b	Asbestos identification in Soil	A001B	b
STP06	N/A	S	639237	b	Asbestos identification in Soil	A001B	b
STP07	N/A	S	639238	b	Asbestos identification in Soil	A001B	b
STP08	N/A	S	639239	b	Asbestos identification in Soil	A001B	b
STP08	N/A	S	639239	b	BTEX and/or Volatile organic compounds in soil	L073B	b
STP09	N/A	S	639240	b	Asbestos identification in Soil	A001B	b
STP10	N/A	S	639241	b	Asbestos identification in Soil	A001B	b
STP12	N/A	S	639242	b	Asbestos Quantification - Gravimetric	A006B	b
STP12	N/A	S	639242	b	Asbestos identification in Soil	A001B	b
STP15	N/A	S	639243	b	Asbestos identification in Soil	A001B	b
STP20	N/A	S	639244	b	Asbestos identification in Soil	A001B	b



4041



Environmental Science

Sanctus Ltd
Sanctus House
1 Olympus Park Business Centre
Quedgeley
Gloucester
Gloucestershire
GL2 4DH

t: 01453 828222

e: labs@sanctusltd.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 25-041718

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:	1	Report issued on:	13/08/2025
Samples Analysed:	5 leachate samples		

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.



4041



Environmental Science

Analytical Report Number: 25-041718

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number				639249	639250	639251	639252	639253
Sample Reference				STP01	STP05	STP11	STP14	STP19
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)				0.05-0.20	0.30-0.60	0.20-0.60	0.05-0.40	0.05-0.60
Date Sampled				04/08/2025	04/08/2025	04/08/2025	04/08/2025	04/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Moisture of sample	%	N/A	NONE	31	42	18	25	17
--------------------	---	-----	------	----	----	----	----	----

General Inorganics

Total Cyanide	µg/l	10	ISO 17025	< 10	19	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Thiocyanate as SCN	µg/l	200	ISO 17025	< 200	< 200	< 200	< 200	< 200
Sulphate as SO ₄	mg/l	0.045	ISO 17025	8.79	13.4	18.3	3.63	4.34
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
----------------------------	------	----	-----------	------	------	------	------	------

Speciated PAHs

Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	0.08	0.09	0.04	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	0.03	0.03	0.04	< 0.01
Phenanthrene	µg/l	0.01	NONE	0.05	0.13	0.15	0.07	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	0.04	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	0.02	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	0.24	0.34	< 0.16	< 0.16
-------------------	------	------	------	--------	------	------	--------	--------

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1	ISO 17025	1.5	< 1.0	4.4	< 1.0	6.1
Boron (dissolved)	µg/l	10	ISO 17025	110	150	29	24	32
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	250	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.5	240	2.3	< 0.4	0.8
Copper (dissolved)	µg/l	0.7	ISO 17025	50	17	74	16	19
Lead (dissolved)	µg/l	1	ISO 17025	< 1.0	< 1.0	3.5	< 1.0	3.6
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	2.5	0.8	0.9	0.5	1.1
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	21	19	25	9.9	15



4041



Environmental Science

Analytical Report Number: 25-041718

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number	639249	639250	639251	639252	639253
Sample Reference	STP01	STP05	STP11	STP14	STP19
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)	0.05-0.20	0.30-0.60	0.20-0.60	0.05-0.40	0.05-0.60
Date Sampled	04/08/2025	04/08/2025	04/08/2025	04/08/2025	04/08/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_ID_AL}	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >EC6 - EC8 _{HS_ID_AL}	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >EC8 - EC10 _{HS_ID_AL}	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >EC10 - EC12 _{EH_ID_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aliphatic >EC12 - EC16 _{EH_ID_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aliphatic >EC16 - EC21 _{EH_ID_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aliphatic >EC21 - EC35 _{EH_ID_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aliphatic >EC5 - EC35 _{HS+EH_ID_AL_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH - Aromatic >EC5 - EC7 _{HS_ID_AR}	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 _{HS_ID_AR}	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 _{EH_ID_AR_MS}	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 _{EH_ID_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aromatic >EC12 - EC16 _{EH_ID_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aromatic >EC16 - EC21 _{EH_ID_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aromatic >EC21 - EC35 _{EH_ID_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH - Aromatic >EC6 - EC35 _{HS+EH_ID_AR_MS}	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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



4041



Environmental Science

Analytical Report Number : 25-041718

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
Sulphide in leachate	Determination of sulphide in leachate by ion selective electrode	In-house method	L029-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total petroleum hydrocarbons with carbon banding by GC-MS in leachate	Determination of total petroleum hydrocarbons in leachate by GC-MS with carbon banding aliphatic and aromatic	In-house method	L070B	W	NONE
Total petroleum hydrocarbons with carbon banding by GC-MS/GC-MS HS in leachate (Summed Bands)	Determination of total petroleum hydrocarbons in leachate by GC-MS/GC-MS HS with carbon banding aliphatic and aromatic (Summed Bands).	Calculation	L070B/L088-PL	W	NONE
BTEX and/or Volatile organic compounds in leachate	Determination of volatile organic compounds in leachate by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	NONE
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry	In-house method	L080-PL	W	ISO 17025
Free cyanide in leachate	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	ISO 17025
Monohydric phenols in leachate	Determination of phenols in leachate by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Total cyanide in leachate	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	ISO 17025
Total petroleum hydrocarbons with carbon banding by HS-GC/MS in leachate	Determination of total petroleum hydrocarbons in leachate by HS-GC/MS with carbon banding aliphatic and aromatic	In-house method	L088-PL	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in leachate	SVOCs and PAHs in leachate	In-house method	L102B		NONE
Thiocyanate in leachate	Determination of thiocyanate in water by discrete analyser (colorimetry)	In-house method based on SMWW 4500-CN-M	L082B	W	ISO 17025



4041



Analytical Report Number : 25-041718

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
One stage WAC 2:1 leachate preparation	One stage batch test at a liquid to solid ratio of 2 L/kg	BS EN 12457-1-2002	L043B	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 30°C.

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.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_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

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution



4041



Environmental Science

Sanctus Ltd
Sanctus House
1 Olympus Park Business Centre
Quedgeley
Gloucester
Gloucestershire
GL2 4DH

t: 01453 828222

e: labs@sanctusltd.co.uk
labs@sanctusltd.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 25-041719

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:	20 soil 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



Environmental Science

Analytical Report Number: 25-041719

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number	639254	639255	639256	639257	639258
Sample Reference	STP01	STP02	STP03	STP04	STP05
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)	0.20-0.60	0.50-0.60	0.05-0.60	0.05-0.20	0.30-0.60
Date Sampled	04/08/2025	04/08/2025	04/08/2025	04/08/2025	04/08/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO	PDO
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	-
Amosite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	Detected	Detected	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	-
Tremolite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	0.26	9.801	-
-------------------------------------	---	-------	-----------	---	---	------	-------	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	Loose Fibrous Debris, Asbestos Cement	Sheeting/Board Debris, Asbestos Cement	-
---	------	-----	-----------	---	---	---	--	---

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



4041



Environmental Science

Analytical Report Number: 25-041719

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number	639259	639260	639261	639262	639263
Sample Reference	STP06	STP07	STP08	STP09	STP10
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)	0.20-0.60	0.05-0.25	0.40-0.60	0.05-0.30	0.25-0.60
Date Sampled	04/08/2025	04/08/2025	04/08/2025	04/08/2025	04/08/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	MBI	MBI	MBI
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
Amosite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	Not-detected
Anthophyllite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	-	-	Detected	Detected	Detected
Crocidolite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	Not-detected
Tremolite detected	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	Not-detected

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	< 0.001	< 0.001	< 0.001
-------------------------------------	---	-------	-----------	---	---	---------	---------	---------

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	Loose Fibres	Loose Fibres	Loose Fibres
---	------	-----	-----------	---	---	--------------	--------------	--------------

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



4041



Environmental Science

Analytical Report Number: 25-041719

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number	639264	639265	639266	639267	639268
Sample Reference	STP11	STP12	STP13	STP14	STP15
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)	0.05-0.20	0.05-0.15	0.05-0.20	0.40-0.60	0.15-0.60
Date Sampled	04/08/2025	04/08/2025	05/08/2025	05/08/2025	05/08/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Detected	Detected	Not-detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	PKU	PKU	PKU	PKU	PKU
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
Amosite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	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	Not-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 % by hand picking/weighing	%	0.001	ISO 17025	0.78	0.002	< 0.001	-	0.102
-------------------------------------	---	-------	-----------	------	-------	---------	---	-------

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Asbestos Cement, Loose Fibrous Debris	Loose Fibrous Debris	Loose Fibres	-	Loose Fibrous Debris
---	------	-----	-----------	---	-------------------------	--------------	---	-------------------------

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



4041



Environmental Science

Analytical Report Number: 25-041719

Project / Site name: Chalford Vale Recreation Ground

Your Order No: S3565

Lab Sample Number				639269	639270	639271	639272	639273
Sample Reference				STP16	STP17	STP18	STP19	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)				0.05-0.20	0.40-0.60	0.05-0.30	0.05-0.60	0.05-0.60
Date Sampled				05/08/2025	05/08/2025	05/08/2025	05/08/2025	05/08/2025
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Detected	Not-detected	Detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MBI	MBI	MBI	MBI	MBI
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	-
Amosite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	-
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	-
Chrysotile detected	Type	N/A	ISO 17025	Detected	Detected	-	Detected	-
Crocidolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	-
Tremolite detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	< 0.001	< 0.001	-	< 0.001	-
-------------------------------------	---	-------	-----------	---------	---------	---	---------	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	Loose Fibres	-	Loose Fibres	-
---	------	-----	-----------	--------------	--------------	---	--------------	---

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



Analytical Report Number: 25-041719
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 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

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

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

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample	Analysis completed	Analyst ID
639256	STP03	0.05-0.60	198	Loose Fibrous Debris, Asbestos Cement	Chrysotile	0.26	0.26	11/08/2025	PDO
639257	STP04	0.05-0.20	124	Sheeting/Board Debris, Asbestos Cement	Chrysotile	9.801	9.801	11/08/2025	PDO
639261	STP08	0.40-0.60	192	Loose Fibres	Chrysotile	< 0.001	< 0.001	11/08/2025	MBI
639262	STP09	0.05-0.30	150	Loose Fibres	Chrysotile	< 0.001	< 0.001	11/08/2025	MBI
639263	STP10	0.25-0.60	210	Loose Fibres	Chrysotile	< 0.001	< 0.001	11/08/2025	MBI
639264	STP11	0.05-0.20	178	Asbestos Cement, Loose Fibrous Debris	Chrysotile	0.78	0.78	11/08/2025	PKU
639265	STP12	0.05-0.15	186	Loose Fibrous Debris	Chrysotile	0.002	0.002	11/08/2025	PKU
639266	STP13	0.05-0.20	153	Loose Fibres	Amosite	< 0.001	< 0.001	11/08/2025	PKU
639268	STP15	0.15-0.60	126	Loose Fibrous Debris	Chrysotile	0.102	0.102	11/08/2025	PKU
639269	STP16	0.05-0.20	187	Loose Fibres	Chrysotile	< 0.001	< 0.001	11/08/2025	MBI
639270	STP17	0.40-0.60	245	Loose Fibres	Chrysotile	< 0.001	< 0.001	11/08/2025	MBI
639272	STP19	0.05-0.60	179	Loose Fibres	Chrysotile	< 0.001	< 0.001	11/08/2025	MBI

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



4041



Environmental Science

Analytical Report Number : 25-041719

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
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

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



4041



Environmental Science

Sanctus Ltd
Sanctus House
1 Olympus Park Business Centre
Quedgeley
Gloucester
Gloucestershire
GL2 4DH

t: 01453 828222

e: labs@sanctusltd.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 25-041721

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:	20/08/2025
Report Issue Number:	1	Report issued on:	20/08/2025
Samples Analysed:	2 soil samples		


Signed:

Joanna Wawrzeczko
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

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

i2 Analytical Ltd.
7 Woodshots Meadow
Croxley Green Business Park
Watford
WD18 8YS



Environmental Science

Client: SANCTUS

Site: Chalford Vale Recreation Ground

Sample date: 06/08/2025

Sample instructed: 07/08/2025

Sample received: 07/08/2025

Analysis Completed: 20/08/2025

Certificate of Analysis - Asbestos Dustiness

Analytical Report no. 25-041721, Sample Number 639280

The analysis was carried out in accordance to in house method A007- PL, using rotating dustiness drum adapted BS EN 15051-2:2013 + A1:2016 (Workplace exposure - Measurement of the dustiness of bulk material) for asbestos contaminated soils and phase-contrast microscopy (PCM).

Analytical Results:

The same sample was examined 3 times and dust was collected on the 3 separate filters.

Asbestos Analyst ID: DBU

Results tabulated below:

Sample ID		STP11			General Sample Description			N/A		
Other ID		DRIED								
Depth		0.2			Moisture content of 'As received' sample			N/A		
Run no.	Volume (L)	Respirable fibres counted	Graticules counted	LOQ Fibre concentration in drum (f/ml)	Fibre concentration in drum (f/ml)	LOQ Dust in drum (mg/m³)	Dust in drum (mg/m³)	Respirable dustiness mass fraction (mg/kg)	Mean of Respirable dustiness mass fraction (mg/kg)	RSD of Respirable dustiness mass fraction (%)
1	4.0	3.0	200	9.00	<9.00	20	2747	68.0	60.0	30.0
2	4.0	4.0	200	9.00	<9.00	20	3270	40.0		
3	4.0	2.5	200	9.00	<9.00	20	3053	73.0		

Comments

-

Table 1. Classification scheme for rotating drum method (in accordance with BS EN 15051-2:2013 + A1:2016)

Category of dustiness	Respirable dustiness mass fraction (mg/kg)
Very low	< 10
Low	10 to 60
Moderate	> 60 to 210
High	> 210

Client: SANCTUS

Site: Chalford Vale Recreation Ground

Sample date: 06/08/2025
Sample received: 07/08/2025

Sample instructed: 07/08/2025
Analysis Completed: 20/08/2025

Certificate of Analysis - Asbestos Dustiness

Analytical Report no. 25-041721, Sample Number 639281

The analysis was carried out in accordance to in house method A007- PL, using rotating dustiness drum adapted BS EN 15051-2:2013 + A1:2016 (Workplace exposure - Measurement of the dustiness of bulk material) for asbestos contaminated soils and phase-contrast microscopy (PCM).

Analytical Results:

The same sample was examined 3 times and dust was collected on the 3 separate filters.

Asbestos Analyst ID: DBU

Results tabulated below:

Sample ID		STP17		General Sample Description				N/A		
Other ID		DRIED								
Depth		0.1		Moisture content of 'As received' sample				N/A		
Run no.	Volume (L)	Respirable fibres counted	Graticules counted	LOQ Fibre concentration in drum (f/ml)	Fibre concentration in drum (f/ml)	LOQ Dust in drum (mg/m ³)	Dust in drum (mg/m ³)	Respirable dustiness mass fraction (mg/kg)	Mean of Respirable dustiness mass fraction (mg/kg)	RSD of Respirable dustiness mass fraction (%)
1	4.0	0.0	200	9.00	<9.00	20	872	31.0	49.0	38.0
2	4.0	1.0	200	9.00	<9.00	20	1335	48.0		
3	4.0	2.0	200	9.00	<9.00	20	2317	69.0		

Comments

-

Table 1. Classification scheme for rotating drum method (in accordance with BS EN 15051-2:2013 + A1:2016)

Category of dustiness	Respirable dustiness mass fraction (mg/kg)
Very low	< 10
Low	10 to 60
Moderate	> 60 to 210
High	> 210



Supplementary Information – Asbestos Dustiness

Method:

The analysis was carried out in accordance to in house method A007- PL, using rotating dustiness drum adapted BS EN 15051-2:2013 + A1:2016 (Workplace exposure - Measurement of the dustiness of bulk material) for asbestos contaminated soils and phase-contrast microscopy (PCM).

Approximately 50 g of each sample was loaded into the rotating drum and three subsequent dust samples were obtained. Dust was extracted from the sample in accordance with the membrane filter method (adapted from BS EN 15051-2:2013 + A1:2016 ISBN: 1 920763 81 3).

Fibre measurement and counting was carried out in accordance with HSG248

This method is accredited to ISO 17025.

This method was carried out by i2 Analytical Ltd at ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Quality Control:

Each sample is preceded by a blank sample.

Method References:

1. BS EN 15051-2:2013 + A1:2016 Workplace exposure - Measurement of the dustiness of bulk material
2. EH40/2005 – Workplace exposure limits in UK
3. Development and validation of an analytical method to determine the amount of asbestos in soils and loose aggregates; Addison et al.; HSE Contract Research Report No. 83/1996;
4. Asbestos: The Analysts' Guide; HSG248, HSE; 2021



4041



Environmental Science

Analytical Report Number : 25-041721

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 Dustiness in Soil	See Attached Dustiness Report	Asbestos Dustiness Testing - In-house Method A007	A007B	D	ISO 17025
Sample available for Asbestos Dustiness analysis		In-house method	A007B	D	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

Sanctus Ltd
Sanctus House
1 Olympus Park Business Centre
Quedgeley
Gloucester
Gloucestershire
GL2 4DH

t: 01453 828222

e: labs@sanctusltd.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: info-i2analytical@normecgroup.com

Analytical Report Number : 25-053728

Project / Site name:	Chalford Vale Recreational Park	Samples received on:	03/10/2025
Your job number:	S3565	Samples instructed on/ Analysis started on:	03/10/2025
Your order number:	S3459	Analysis completed by:	15/10/2025
Report Issue Number:	1	Report issued on:	15/10/2025
Samples Analysed:	10 soil samples		



Signed:

Adam Fenwick
Customer Relationship Manager
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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

Analytical Report Number: 25-053728

Project / Site name: Chalford Vale Recreational Park

Your Order No: S3459

Lab Sample Number	705386	705387	705388	705389	705390
Sample Reference	STP201	STP202	STP203	STP204	STP205
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)	0.05-0.15	0.05-0.15	0.05-0.15	0.05-0.15	0.05-0.15
Date Sampled	03/10/2025	03/10/2025	03/10/2025	03/10/2025	03/10/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	48.7	49.9	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	26	18	12	34	19
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.5	0.5	0.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.21	0.26	0.06	0.37	0.17
Acenaphthylene	mg/kg	0.05	MCERTS	0.17	< 0.05	0.07	0.15	0.17
Acenaphthene	mg/kg	0.05	MCERTS	0.37	0.11	0.08	0.17	0.11
Fluorene	mg/kg	0.05	MCERTS	0.24	0.11	0.05	0.14	0.1
Phenanthrene	mg/kg	0.05	MCERTS	5.2	1	0.89	3	2.4
Anthracene	mg/kg	0.05	MCERTS	1	0.27	0.27	0.7	0.57
Fluoranthene	mg/kg	0.05	MCERTS	17	2	3.3	9.3	9.2
Pyrene	mg/kg	0.05	MCERTS	16	1.8	3	8.5	8.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.9	1.2	1.8	4.4	5.2
Chrysene	mg/kg	0.05	MCERTS	9.1	1.2	2	5.1	5.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	12	1.6	2.1	6.4	7.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.5	0.69	1.3	2.6	2.8
Benzo(a)pyrene	mg/kg	0.05	MCERTS	9.6	1.2	2	5.3	6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	5.3	0.61	1.1	3	3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.3	0.17	0.26	0.71	0.77
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	5.9	0.79	1.3	3.4	3.7

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	95.6	13.1	19.6	53.3	55.2
-----------------------------	-------	-----	-----------	------	------	------	------	------

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

Analytical Report Number: 25-053728

Project / Site name: Chalford Vale Recreational Park

Your Order No: S3459

Lab Sample Number	705391	705392	705393	705394	705395
Sample Reference	STP206	STP207	STP208	STP209	STP210
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)	0.05-0.15	0.05-0.15	0.05-0.15	0.05-0.15	0.05-0.15
Date Sampled	03/10/2025	03/10/2025	03/10/2025	03/10/2025	03/10/2025
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	39.6	14.8	15.8	14.2	31.1
Moisture Content	%	0.01	NONE	26	24	17	27	17
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.6	0.6	0.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.2	0.05	0.23	0.32	0.28
Acenaphthylene	mg/kg	0.05	MCERTS	0.06	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	0.06	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.16	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	3.3	0.44	0.35	0.26	0.28
Anthracene	mg/kg	0.05	MCERTS	0.63	0.11	0.08	0.07	0.08
Fluoranthene	mg/kg	0.05	MCERTS	6.8	1.1	0.7	0.7	0.9
Pyrene	mg/kg	0.05	MCERTS	5.6	0.94	0.63	0.7	0.9
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.7	0.62	0.36	0.41	0.51
Chrysene	mg/kg	0.05	MCERTS	3.9	0.58	0.45	0.53	0.59
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	4.4	0.87	0.55	0.77	0.78
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.7	0.3	0.22	0.27	0.29
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.3	0.63	0.39	0.59	0.61
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.7	0.37	0.22	0.37	0.37
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.53	0.12	< 0.05	0.07	0.11
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.9	0.41	0.27	0.46	0.45

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	38	6.54	4.45	5.6	6.14
-----------------------------	-------	-----	-----------	----	------	------	-----	------

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



4041



Normec
i2 Analytical

Analytical Report Number : 25-053728

Project / Site name: Chalford Vale Recreational Park

* 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 *
705386	STP201	None Supplied	0.05-0.15	Brown loam and sand with gravel and vegetation
705387	STP202	None Supplied	0.05-0.15	Brown loam and sand with vegetation and stones
705388	STP203	None Supplied	0.05-0.15	Brown loam and sand with vegetation and stones
705389	STP204	None Supplied	0.05-0.15	Brown loam and sand with gravel and vegetation
705390	STP205	None Supplied	0.05-0.15	Brown loam and sand with gravel and vegetation
705391	STP206	None Supplied	0.05-0.15	Brown loam and sand with gravel and vegetation
705392	STP207	None Supplied	0.05-0.15	Brown loam and sand with vegetation and stones
705393	STP208	None Supplied	0.05-0.15	Brown loam and clay with vegetation and stones
705394	STP209	None Supplied	0.05-0.15	Brown loam and clay with vegetation and stones
705395	STP210	None Supplied	0.05-0.15	Brown loam and clay with vegetation and stones

Analytical Report Number : 25-053728

Project / Site name: Chalford Vale Recreational Park

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
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
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
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 30°C.

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

Appendix E Environmental Laboratory Water Analysis