

ENVIRONMENTAL REPORT

Site Address:	The Generator House, Hexton Manor, Hexton, Herts SG5 3JH
Report Date:	May 2025
Project No.:	18674
Prepared for:	Architech Ltd
Planning Application	North Herts Council



SECTION 1 **INTRODUCTION**

- 1.1 In accordance with your instructions, we visited the above site during May 2025.
- 1.2 The purpose of our visit was to carry out an investigation into the subsoil conditions in order to assess the suitability of the site for a development of residential units and associated landscaping. The purpose of this assessment was to recover and test a number of samples to determine the level and extent of contamination resulting from historical land uses, albeit no historical searches have been completed.
- 1.3 The comments and opinions expressed are based purely on the conditions encountered and the subsequent chemical testing. The location of the excavations was designed to take into account the subsoil conditions relevant to the proposed development and assess subsoil conditions.
- 1.4 Some special conditions may be present on site that, to date, have not been encountered within the scope of the site investigation works and therefore will not have been taken into account within this report.
- 1.5 All ground water recordings or their absence relate to short term observations and do not allow for fluctuations due to seasonal or other effects.

SECTION 2 **DESCRIPTION OF SITE**

- 2.1 The site is located on the edges of the Hexton Manor estate, off of Mill Lane. The site forms a vacant former generator room surrounded by grassland.
- 2.2 Surrounding the site, my Hexton Manor to the north and east and residential land to the west and south.

SECTION 3 **FIELDWORK**

- 3.1 ***Initial Investigation***
- 1 No Competitor Rig Windowless Sampler borehole sunk to a maximum depth of between 3.00 meters - Date of Works – March 2025.
 - 4 No hand augered boreholes sunk to a maximum depth of between 0.60 meters - Date of Works – May 2025.
 - Chemical Sampling and Testing recovered from samples and sent to analytical chemist, (report date 20/5/25).
- 3.2 The location of these works is indicated on the site plan-forming appendix one.
- 3.3 The various strata encountered were noted and are recorded on the borehole logs forming appendix two.
- 3.4 Full ranges of samples were recovered as noted and retained for subsequent laboratory testing.

Table 1 **Geological Profile**

Location	Made ground	Depth (m bgl)	Natural ground	Depth (m bgl)
WS1	Moderately compact brown/ grey/ yellow re-worked silty clay FILL with brick gravel and chalk fragments	0.60	Stiff turning very stiff light grey slightly silty Chalk Marl	3.00+
BH1	Moderately compact brown/ grey/ yellow re-worked silty sandy clay with occasional to much brick flint gravel and chalk fragments	0.40	Stiff light grey slightly silty Chalk Marl	1.00+
BH2	Moderately compact brown/ grey/ yellow re-worked silty sandy clay with occasional to much brick flint gravel and chalk fragments	0.50	Stiff light grey slightly silty Chalk Marl	1.00+
BH3	Moderately compact brown/ grey/ yellow re-worked silty clay with brick gravel and chalk fragments	0.60	Stiff light grey slightly silty Chalk Marl	1.00+
BH4	Moderately compact brown/ grey/ yellow re-worked silty clay with brick gravel and chalk fragments	0.40	Stiff light grey slightly silty Chalk Marl	1.00+

SECTION 4 **CHEMICAL TESTING**

- 4.1 The selected samples chosen for contamination testing were tested for a range of determinants based on the existing use of the site and a standard environmental suite, although have additionally incorporated the assessment of fuels within the site based on the former uses of the building.
- 4.2 As part of a generic assessment of the subsoil conditions, a comparison has initially been made using Generic Quantitative Assessment Criteria, (GQRA), values for contaminants derived the Environment Agency in Soil Guideline Values released in LCRM, (Land Contamination Risk Management), for Human Health Risk Assessment. For the proposed land use of this site, we can confirm that Generic Quantitative Assessment Criteria have been identified for the site. This is the order in which the Health Criteria Values will be used.
- 4.3 We are aware that the CIEH have published a 'Position Statement' which confirms that they do not wish to be associated with Category 4 screening values under the planning regime and as such would revert back to their own values, although, we are also aware that Local Authorities recommend the use of these value, although this is dependent upon the council EHO. As detailed above, the order of progression will be EA - SGV's, LQM / CIEH Data and then C4SL data.
- 4.4 It is possible that where exceedance of these values are recorded, a more Detailed, Qualitative Risk Assessment, (DQRA), could be completed using site specific scenarios and toxicological properties of the

subsoil and site conditions to derive Site Specific Assessment Criteria, (SSAC), for the site. The assessment of testing has been completed as follows and reports the initial risks considered in place compared to GQRA

4.5 The results of this testing are enclosed and form appendix three.

SECTION 5 FINDINGS

- 5.1 Based on the information gained from the site investigation works, it is recorded that the subsoil conditions are variable and include nominal depths of made ground to between 0.40 – 0.60 meters where a marl is recorded.
- 5.2 In order to assess the subsoil conditions, sampling was completed across the site area.
- 5.3 No obvious fuel odours were noted within the excavation or samples recovered from the excavations
- 5.4 Primarily, we have assessed the conditions of the subsoil with human health risk to humans within a residential land use scenario.

Table 1 Test Suites

<i>Land Use</i>	<i>Pollutant</i>
<i>Soil, Groundwater & Vapour Risk</i>	
<i>Generator room</i>	Moisture Content, pH, Electrical Conductivity, Cyanide, (Free), Cyanide, (Total), Organic Matter, Boron, Sulfate, (2:1 water soluble), Chromium, (Hexavalent), Sulfate, (Total), Arsenic, Cadmium, Chromium, Copper, Mercury, Nickel, Lead, Zinc, Speciated PAH's, (EPA Priority 16), Phenols, Asbestos, Total Petroleum Hydrocarbons (aliphatic/ aromatic 8-Band).
<i>Soil Sampling Groundwater & Vapour Assessment</i>	
<i>Spatial Sampling, (General Assessment)</i>	Moisture Content, pH, Electrical Conductivity, Cyanide, (Free), Cyanide, (Total), Organic Matter, Boron, Sulfate, (2:1 water soluble), Chromium, (Hexavalent), Sulfate, (Total), Arsenic, Cadmium, Chromium, Copper, Mercury, Nickel, Lead, Zinc, Speciated PAH's, (EPA Priority 16), Phenols.
	25-meter Centres In accordance with BS10175: 2011+A2:2017.
	5-10-meter Centres In accordance with BS10175: 2011+A2:2017.
	Asbestos

Human Health Risk

5.5 As part of a generic assessment of the subsoil conditions, a comparison has initially been made using Generic Quantitative Assessment Criteria, (GQRA), values for contaminants derived by LQM / CIEH, (2nd Edition), and Atkins 'AtRiskSoils' to evaluate whether the levels of contamination measured at the site exceed the human health risk levels which have been derived for the site. For the proposed land use of this site, we can confirm that Generic Quantitative Assessment Criteria have been identified for the site as follows :-

- **GQRA Levels : Residential Land Use Standard with Home Grown Produce**

5.6 The definition of the site which includes residential land use has been carefully selected based on the guidance and information provided by the client.

5.7 We are aware that the proposed land use of residential land can be classed as a sensitive land use and as such, this has been chosen.

5.8 It is possible that where exceedance of these values are recorded, a more Detailed, Qualitative Risk Assessment, (DQRA), could be completed using site specific scenarios and toxicological properties of the subsoil and site conditions to derive Site Specific Assessment Criteria, (SSAC), for the site. The assessment of testing has been completed as follows and reports the initial risks considered in place compared to GQRA.

5.9 The testing completed and the levels of contamination risk has been shown in Table 2 when compared to Residential Land Use Standards with home ground produce.

Table 2 Sampling and Testing Schedule

Site Details			Sample ID				Testing Suite							
Existing Site Use	Proposed Site Use	Chemical Testing Date	stratum sampled	Depth Of Stratum (m b.g.l)	Sample Location	Sample Depth (m)		Justification	HESI Suite 1	PAH' s, (Speciated)	TPH' S, (TPHCWG)	Asbestos	Type Of Asbestos Identified	Elevated levels of contamination
Vacant building	Residential dwelling	20/5/25	FILL	0.40	BH1	0.20	- 0.25	Spatial coverage	✓	✓	✓	✓	NONE	No elevated levels of risk
			FILL	0.50	BH2	0.40	- 0.45	Spatial coverage	✓	✓	✓	✓	NONE	
			FILL	0.60	BH3	0.35	- 0.40	Spatial coverage	✓	✓	✓	✓	NONE	
			FILL	0.40	BH4	0.45	- 0.50	Spatial coverage	✓	✓	✓	✓	NONE	

* Indicates the value which forms the lowest trigger level.

Where PAH's are additionally tested within the VOC List. the highest values have been taken.

For the purposes of assessment where not stated otherwise Soil Organic Matter values of 2.5% has been used.

All measurements are given in mg/kg

- Sample not tested for the contaminant

**EXPOSURE
LEVELS**

Absent/
Presents

5.10 Based on the information gained, we can confirm that no elevated levels of contamination are recorded within the site area.

SECTION 6 **CONCLUSIONS**

HUMAN HEALTH RISK

No elevated levels of contamination are recorded within the site area.

WORKFORCE

The lack of human health risk is in place within the site area, will promote a low risk to any workforce within the areas. Appropriate PPE / RPE should be worn.

GROUNDWATER RISKS

No sources of risk are recorded in place within the site area - risks to groundwater is not in place.

VAPOUR RISKS

Chemical testing of the soils show that no risks are in place. Vapour risk is not in place.

GAS RISKS

No sources of land gases are in place.

CONSTRUCTION MATERIALS

Construction materials have been considered and no risk has been identified directly to any water main pipework developed at the site.

- Water main pipework can be laid in a conventional pipework system.
- Any water main pipework should be laid in clean corridors in order to prevent future risk to workforce used in the maintenance and repair of any water main system.

FURTHER WORKS

Submit reports to Local Authority and Environment Agency for review and confirm the risks identified in this report along with the further works proposed are suitable and acceptable.

Maintain a watching brief as follows:-

It should be noted that this investigation is undertaken in order to identify the extent of contamination as a result of historic and ongoing use. Should any areas of the site be encountered within the development that appear potentially contaminated through visual or olfactory assessment outside that discussed within this report, consultation with ourselves should be undertaken in order to identify the risk associated with the material.

The Generator House, Hexton Manor, Hexton, Herts SG5 3JH

Location Plan

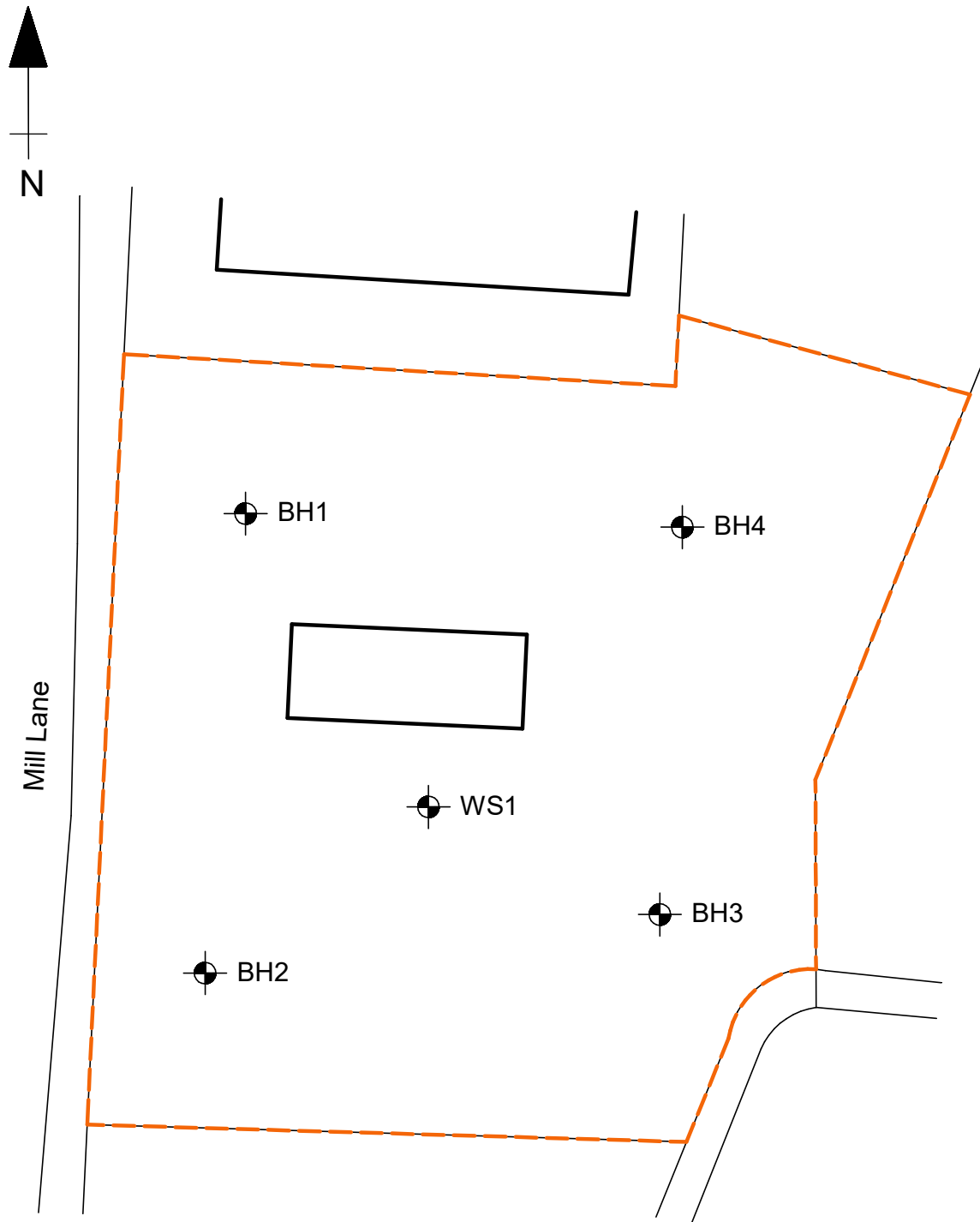


The Site



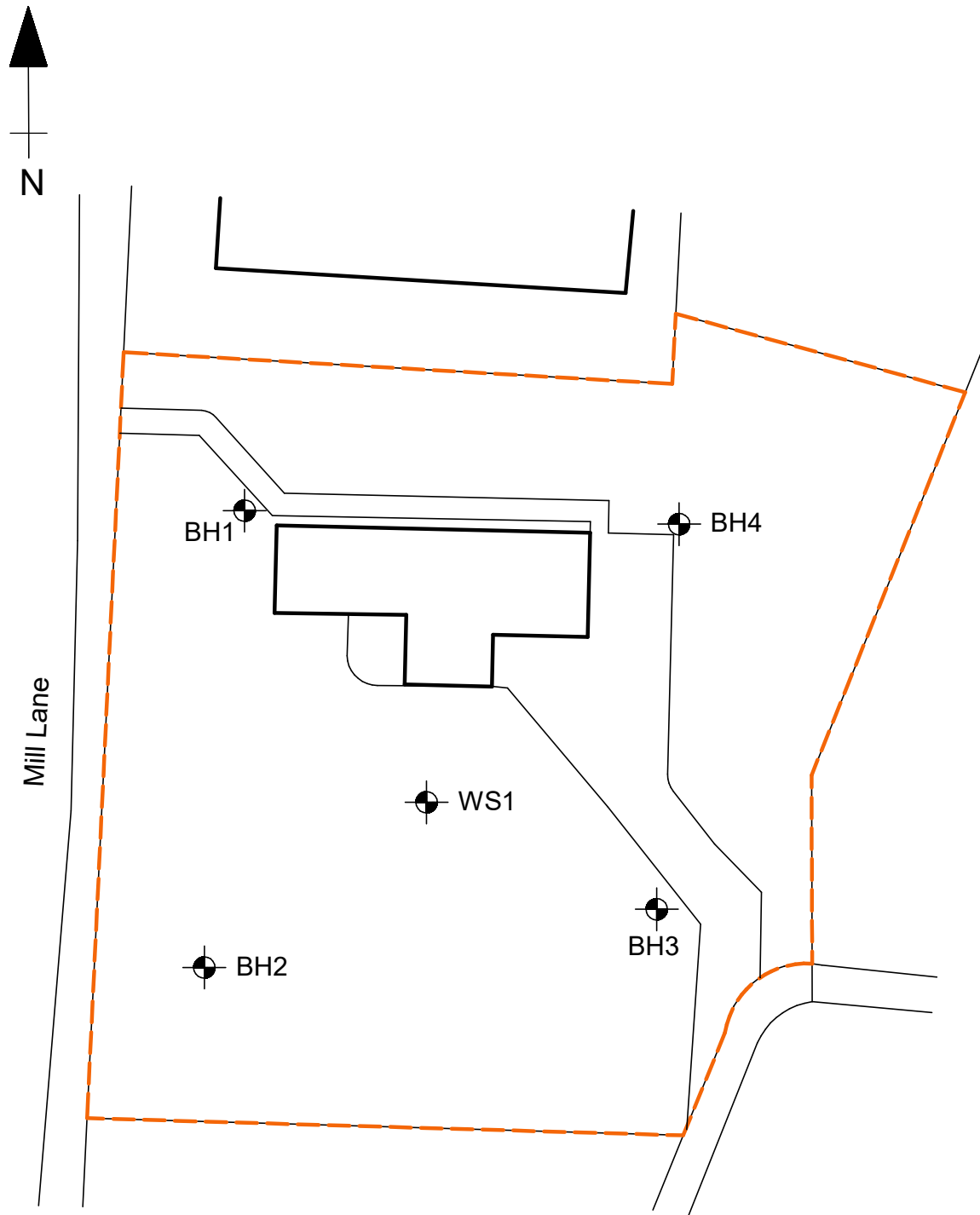
The Generator House, Hexton Manor, Hexton, Herts SG5 3JH

Existing Site Plan



The Generator House, Hexton Manor, Hexton, Herts SG5 3JH

Proposed Site Plan



The Generator, Hexton Manor, Herts SG5 3JH

Window Sampler One

Description Of Stratum	Legend	Depth	Thickness (m)	Water Level	Samples			S.P.T N-Value or Vane Strength	VOC's (ppm)	Installations	Casing Depth, (m)
					No	Type	Depth (m)				
Moderatly compact brown/grey/yellow re-worked silty clay FILL with brick gravel and chalk fragments			1.20	DRY	1	U	G.L. - 1.00				
		1.40									
Stiff turning very stiff light grey chalk marl					2	U	1.00 - 2.00	N=12			
			2.40		3	U	2.00 - 3.00	N=36			
		4.00					3.00	N=23			
Borehole Closed at 3.00m Roots to 1.00 meters.											

Remarks

Scale 1 : 25

 Key : U - Undisturbed Sample
 (100mm diameter)

 B - Bulk Sample
 - Water Struck

 D - Disturbed Sample
 - Water Standing

 W - Water Sample
 T - Chemical Tub

 N - SPT N-Value
 V - Vane Test, (kN.m²)

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Analytical Report Number : 25-023668

Project / Site name:	The Generator Hexton Manor, Hexton, Herts SG5 3JH	Samples received on:	08/05/2025
Your job number:	18674	Samples instructed on/ Analysis started on:	08/05/2025
Your order number:	18674	Analysis completed by:	19/05/2025
Report Issue Number:	1	Report issued on:	20/05/2025
Samples Analysed:	4 soil samples		



Signed:

Anna Goc
PL Head of Reporting Team
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: 25-023668

Project / Site name: The Generator Hexton Manor, Hexton, Herts SG5 3JH

Your Order No: 18674

Lab Sample Number				539653	539654	539655	539656
Sample Reference				BH1	BH2	BH3	BH4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A
Depth (m)				0.2	0.4	0.35	0.45
Date Sampled				06/05/2025	06/05/2025	06/05/2025	06/05/2025
Time Taken				930	930	930	930
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	15	16	18
Total mass of sample received	kg	0.1	NONE	1.4	1.4	1.4	1.4

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO	PDO	PDO	PDO
Analysis completed	N/A	N/A	N/A	15/05/2025	15/05/2025	15/05/2025	15/05/2025

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.9	7.8	7.8	8
Organic Matter (automated)	%	0.1	MCERTS	4.5	4	5.6	2.7

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.35	0.62	0.64	0.44
Anthracene	mg/kg	0.05	MCERTS	0.08	0.17	0.14	0.1
Fluoranthene	mg/kg	0.05	MCERTS	1	1.6	1.7	0.86
Pyrene	mg/kg	0.05	MCERTS	0.85	1.4	1.6	0.76
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.49	0.74	0.95	0.4
Chrysene	mg/kg	0.05	MCERTS	0.56	0.89	0.85	0.37
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.66	1.1	1.2	0.41
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.29	0.39	0.62	0.27
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.56	0.93	1.1	0.44
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.27	0.47	0.51	0.21
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.07	0.11	0.12	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.28	0.48	0.6	0.22

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	5.47	8.89	9.96	4.48
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Your Order No: 18674

Lab Sample Number	539653	539654	539655	539656
Sample Reference	BH1	BH2	BH3	BH4
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A
Depth (m)	0.2	0.4	0.35	0.45
Date Sampled	06/05/2025	06/05/2025	06/05/2025	06/05/2025
Time Taken	930	930	930	930
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	20	24	7.9
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.44	0.54	0.65	0.47
Boron (total)	mg/kg	1	MCERTS	13	13	16	13
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	0.6	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	13	15	20	11
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	16	20	11
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	24	32	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	82	130	140	37
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	20	20	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.1	1.3	1.3	1.1
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	25	31	26	16
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	97	140	100	51

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 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
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 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
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	12	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	12	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 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
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	3	2.1	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	10	10	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	14	19	22	< 10
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	14	33	35	< 10

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 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 *
539653	BH1	None Supplied	0.2	Brown loam with gravel
539654	BH2	None Supplied	0.4	Brown loam with gravel
539655	BH3	None Supplied	0.35	Brown loam with gravel
539656	BH4	None Supplied	0.45	Brown loam with gravel

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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
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/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	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
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
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

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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
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