

Report on a
**PHASE 2 GEO-ENVIRONMENTAL
GROUND INVESTIGATION**

Ref: 26/41658 | Date: April 2026



For the site at:

43 Belmont Avenue

London

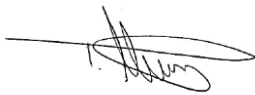
N17 6AX

Prepared for:

Paul Simon Homes

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EXECUTIVE SUMMARY

Site Location	43 Belmont Avenue, London N17 6AX
Proposed Development	At the time of reporting (April 2026), the proposed works include the redevelopment of the site to provide 5 apartments consisting of three one-bedroom flats and two, two-bedroom flats with cycle and bin storage and associated landscaped areas.
Current and Historical Setting	The site comprises of two shipping containers, a large scaffolding frame, a dilapidated single-storey WC, together with a large shed building and a partially demolished storage building. From historical map evidence, it would appear that the site comprised of undeveloped land prior 1863, with the surrounding areas to the site being predominantly undeveloped land in all directions, with slight residential use south-west of the site. Between 1913-1914, a large structure west of the site with an additional two structures, one small structure adjacent and one large structure immediately bounded south of the site were constructed in 1935. In 1991, an additional structure was immediately bounded south of the site, until all three structures were demolished and no longer visible on the historic maps currently. A Railway Line and Electrical Sub-stations were evident within 250m of the site.
Environmental Setting	The site is underlain by deposits of London Clay Formation at depth. A surface cover of Made Ground up to 0.94m thick has previously been identified. The Bedrock geology underlying the site has been classified as a non-aquifer.

ENVIRONMENTAL INVESTIGATION

Contamination	For a residential end use (without home grown produce) the assessment of the results of the chemical analysis indicated that Beryllium, Lead and various PAHs exceeded the assessment criteria. However, the proposed development includes 100% hard cover across the site. There is a medium risk to end-users of the site from Beryllium, Lead and PAHs on-site. Remediation should be undertaken on-site to mitigate these risks. There is a medium risk to groundworkers from Beryllium, Lead and PAHs on-site. Normal PPE and following health and safety regulations would mitigate this risk. Avoiding dust generation by damping down exposed soils in dry weather is recommended. There is a risk to sensitive plants from Copper and Zinc identified on-site. No current growing medium exists on-site and topsoil will therefore be required.
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1.0 INTRODUCTION

1.1 Outline and Limitations of Report

At the request of Paul Simon Homes, a ground investigation was carried out in connection with a proposed development at the above site.

The information was required in order to assess whether any remediation was required for the protection of the end-user from the presence of potential contamination within the soils encountered.

The recommendations and comments given in this report are based on the ground conditions encountered in the exploratory holes made during the investigation and the results of the tests made in the field and the laboratory. It must be noted that there may be special conditions prevailing at the site remote from the exploratory hole locations which have not been disclosed by the investigation and which have not been taken into account in the report. No liability can be accepted for any such conditions.

The site works were performed in accordance with the methods given in BS 5930+A2:2010 and BS EN ISO 22476-2&3:2005. The work was carried out in accordance with the methodologies detailed in Stage 1 of the LCRM (Land Contamination: Risk Management) 2023.

1.2 Report Objectives

This report comprises a supplementary Phase 2 - Intrusive Investigation Report to provide additional chemical analysis to assess potential contamination within the soils encountered and assess potential risks to the end-user of the site from the presence of such contamination.

Planning permission granted by councils for development of Brownfield land often have conditions attached which require the following site investigation to be undertaken and submitted to the local authority for approval:

1. Phase 1 - Preliminary Risk Assessment
2. Phase 2 - Intrusive Investigation
3. Phase 3 - Remediation Strategy
4. Phase 4 - Validation Report

A Phase 1 - Preliminary Risk Assessment has previously been undertaken at the site by Site Analytical Services Limited, Ref: 24/38289, dated April 2024.

A Report on a Geotechnical Ground Investigation has also been undertaken by Site Analytical Services Limited, Ref 24/38289-1, dated June 2024.

1.3 Report Limitations

This report is prepared for Paul Simon Homes (herein called the 'Client'), for purposes agreed and in accordance with the terms and conditions set out in the Agreement between Site Analytical Services Limited and the client.

This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of future changes in the condition of the site.

The comments given in this report, and the opinions expressed herein, are based upon the readily available information collated for the report and an assessment based upon the current UK guidance, primarily the LCRM (Land Contamination: Risk Management) 2023.

This report has been prepared for the sole use of the Client for the purposes described and no extended duty of care to any third party is implied or offered. Third parties using any information contained within this report do so at their own risk.

The revised conceptual model is based on the information available at the time of conducting this assessment and is an interpretative assessment of the conditions at the site. It should be noted that the redevelopment and/or further investigation of the site may reveal additional information and therefore alter the conceptual model and the conclusion of this report.

2.0 SITE DETAILS

National Grid Reference: TQ 321896

2.1 Site Location

The site is located to the rear of 43 Belmont Avenue at the junction of two terraces set at angles to each other on Belmont Avenue, at approximate postcode N17 6AX. The terraced properties consist of two-storey Victorian houses.

The site is located in an area of predominantly residential use, with Turnpike Underground Train Station located approximately 555m to the east of the site.

The site is an irregular shape and covers an approximate area of 0.04 Hectares with the general area being under the authority of the London Borough of Haringey.

The National Grid Reference is: TQ 345 964.

A location map is presented below in Figure 1:



Figure 1 - Site Location Map

2.2 Published Geology

The 1:50000 Geological Survey of Great Britain (England and Wales) covering the area indicates the site to be underlain by deposits of London Clay Formation. A surface cover of Made Ground is known to be present.

2.3 Previous Investigations

A Phase 1 - Preliminary Risk Assessment has previously been undertaken at the site by Site Analytical Services Limited, Ref: 24/38289, dated April 2024.

A Report on a Geotechnical Ground Investigation has also been undertaken by Site Analytical Services Limited, Ref 24/38289-1, dated June 2024. In this investigation the borehole and trial pits revealed ground conditions that were generally consistent with the geological records and known history of the area and comprised Made Ground up to 0.94m in thickness resting on the London Clay Formation at depth.

Groundwater was encountered at a depth of 1.07m below ground level in Borehole 1 after a period of approximately four weeks. However, given the presence of a non-aquifer below the site it is likely that the groundwater recorded within these soils relates to perched water within the Made Ground and is recharged via intermittent seepages from surface water associated with weather conditions rather than any large scale subterranean groundwater flow.

2.4 Proposed Development

At the time of reporting (April 2026), it is proposed to provide 5 apartments consisting of three one-bedroom flats and two, two-bedroom flats with cycle and bin storage and associated landscaped areas. A planning application has been submitted to the London Borough of Haringey, application number HGY/2023/0926.

3.0 SCOPE OF WORK

3.1 Site Works

The exploratory investigation included for an inspection of the site and near surface soils in order to: -

- Determine the presence, extent and significance of potential contaminants in the sub-surface strata associated with current and former activities at the site.
- Assess the significance of potential impacts on sensitive receptors at or adjacent to the site.
- Assess the potential environmental liabilities and consequences associated with the site.
- Identify requirements for further works, including the design of any additional investigative/monitoring works and remedial measures if deemed necessary.

The proposed scope of works was agreed by the client prior to the commencement of the investigations. To achieve this, the following works were undertaken: -

- The excavation by hand of six trial pits to 1.00m maximum depth, to obtain samples for laboratory testing (Trial Pits A to F inclusive).
- Sampling and in-situ testing as appropriate to the ground conditions encountered in the trial pits.
- Laboratory testing to determine the chemical properties of the soils encountered in the exploratory holes.
- A study into the possibility of the presence of toxic substances in the soil, together with limited comment on any remediation required.

Due to the presence of the London Clay Formation and also no significant thickness of Made Ground was identified in the geotechnical investigation, it was determined that no ground gas monitoring was necessary.

3.2 Ground Conditions

The locations of the exploratory holes are shown on the site investigation plan, Figure 2.

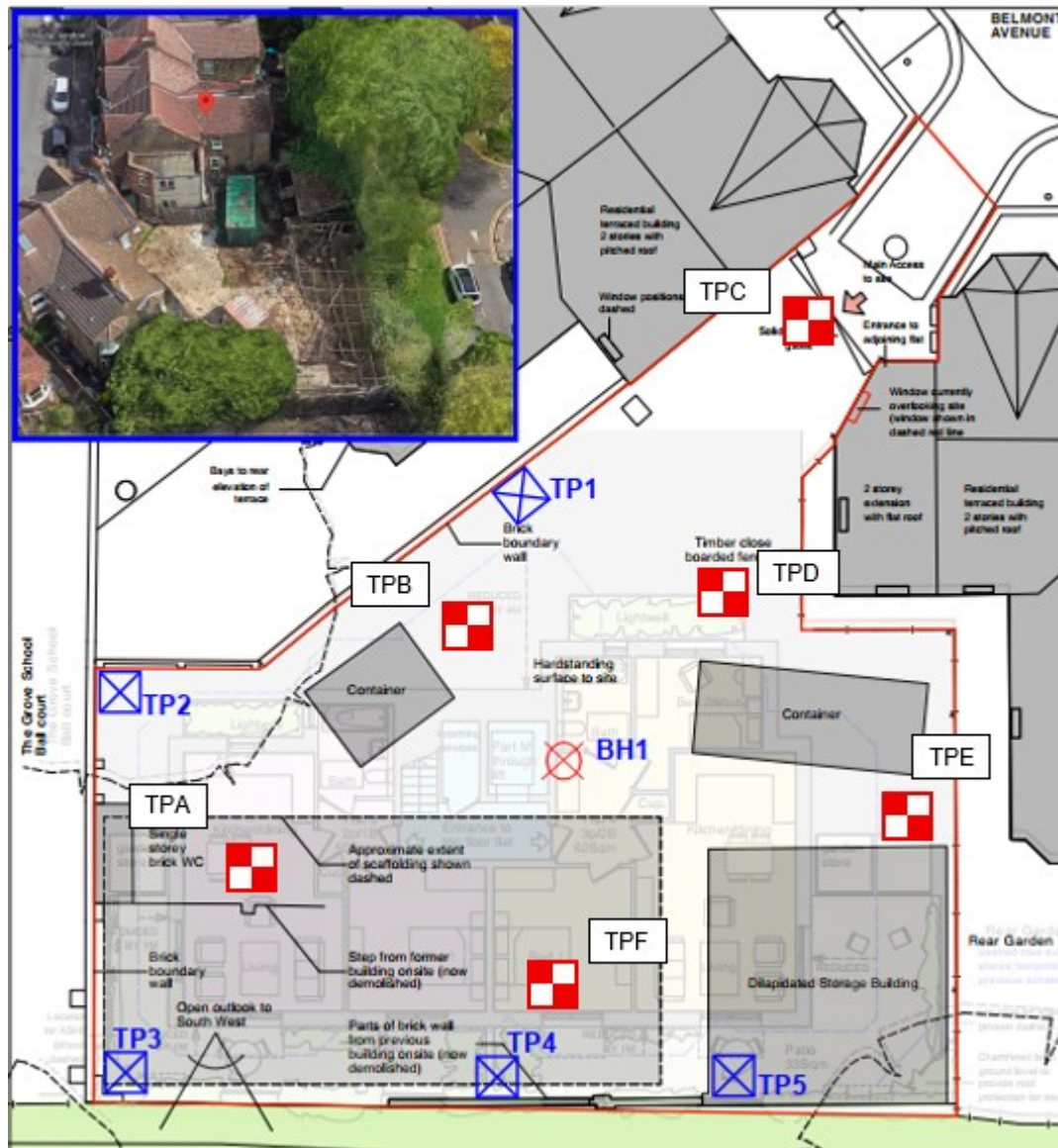


Figure 2: Site Investigation Plan

The trial pits revealed ground conditions that were generally consistent with the geological records and known history of the area and comprised Made Ground up to 0.65m in thickness underlain by the London Clay Formation at depth.

These ground conditions are summarised in the following table. For detailed information on the ground conditions encountered reference should be made to the exploratory hole records presented in Appendix A.

Strata	Depth to top of strata (mbgl)	Depth to base of strata (mbgl)	Description
Made Ground	0.00	0.40 to 0.65	Concrete over silty sandy clay containing brick and concrete fragments
London Clay Formation	0.40 to 0.65	1.00 (max depth investigated)	Orange-brown with grey veining silty, occasionally sandy, CLAY

Summary of Ground Conditions in Exploratory Holes

3.3 Groundwater

Groundwater was not encountered in any of the trial pits and the material remained essentially dry throughout.

It must be noted that the speed of excavation is such that there may well be insufficient time for further light seepages of groundwater to enter the trial pits and hence be detected, particularly within more cohesive soils.

Isolated pockets of groundwater may also be present perched within any less permeable material found at shallower depth on other parts of the site especially within any Made Ground.

It should be noted that the comments on groundwater conditions are based on observations made at the time of the investigation (March 2026) and that changes in the groundwater level could occur due to seasonal effects and also changes in drainage conditions.

4.0 CONTAMINATION TESTING

4.1 Intended Future Uses of the Site

At the time of reporting (April 2026), proposed works include the redevelopment of the site to provide 5 apartments consisting of three one-bedroom flats and two, two-bedroom flats, with cycle and bin storage and associated landscaped areas.

For the purposes of the assessment within this section of the report the site has been considered as 'Residential without home grown produce' due to the development having small courtyard private gardens.

4.2 Preliminary Site Conceptual Model

In accordance with current UK guidance on contaminated land risk assessment (CLR7, Land Contamination Risk Management framework and BS10175), the following Conceptual Site Model has been generated to summarise the primary sources, receptors and migration and exposure pathways present on the site and to aid in the decision-making process.

For an environmental risk to exist there has to be a source of contamination, receptor or receptors at risk from the contamination and one or more pathway which links the two. Such contaminant – pathway – receptor relationships are termed pollutant linkages.

The subject site has been assessed within the source – pathway – receptor methodology as described above in the framework of a conceptual site model. A conceptual site model can be defined as a testable representation of environmental processes on a site and its vicinity. Its purpose is to identify potential contaminants, pathways and receptors with a view to, initially identifying potential and eventually, quantifying significant pollutant linkages. It should highlight any limitation and uncertainties present in the risk assessment and be able to communicate the results of the risk assessment to all stakeholders.

A Phase 1 Desk Study has been undertaken at the site by Site Analytical Services Limited and the site conceptual model from that report is presented below.

Feature/Source	Pathway	Receptor	Hazard (Potential Consequence)	Likelihood of Contaminant Linkage	Risk Assessment	Justification /Further Action
On-Site: Made Ground	Direct soil and dust ingestion Dermal contact Inhalation of dust, vapours, and ground gases	Construction workers	Medium Acute and chronic toxicity, carcinogenic impact Fire and explosion	<i>Likely</i>	<i>Moderate Risk</i>	Significant redevelopment is planned. As such, groundwork would be involved in the construction process. Considering the site history and the unknown usage of the past structures on-site, it is likely that significant contamination will be present. A good standard of site health and safety will be required during construction should be sufficient to protect workers. Further investigation is required.
	Dermal contact Inhalation of dust, vapours, and ground gases	Future users – open landscaped areas & gardens.	Medium Acute and chronic toxicity, carcinogenic impact	<i>Likely</i>	<i>Moderate Risk</i>	The proposed development will include the redevelopment of site to provide 5 apartments consisting of three one-bedroom flats and two, two-bedroom flats, with cycle and bin storage and associated landscaped areas. Considering the site history and the unknown usage of the past structures on-site, it is likely that significant contamination will be present. Further investigation is required.
	Inhalation of vapours Inhalation of ground gases	Future residential users – within the building footprint	Medium Acute and chronic toxicity, carcinogenic impact Fire and explosion	<i>Likely</i>	<i>Moderate Risk</i>	Historically the site has comprised undeveloped land, then storage on-site. Due to the unknown use of the storage, it is likely that significant contamination will be present. Further investigation is required.
	Inhalation of dust, vapours	Off-site receptors / neighbouring residents and property	Mild Acute and chronic toxicity, carcinogenic impact	<i>Likely</i>	<i>Moderate/ Low Risk</i>	The site is set in an area of residential use. Due to the site history, there are significant risks considered present. Further investigation is required.
	Surface water run-off	Surface water	Mild Water pollution	<i>Low Likelihood</i>	<i>Low Risk</i>	The site and the immediate area are residential use. Due to the surface flood map, there is no risk across the site and low risk in close proximity, therefore surface run off would not be expected. No additional consideration is needed.
	Direct Contact	Built materials and services	Medium Degradation	<i>Likely</i>	<i>Moderate Risk</i>	Due to the history of the site significant contamination on-site site is expected. Further investigation is required.



Feature/Source	Pathway	Receptor	Hazard (Potential Consequence)	Likelihood of Contaminant Linkage	Risk Assessment	Justification /Further Action
	Migration through Groundwater	Unproductive Aquifer	Medium	Likely	Moderate Risk	The site is situated in an area of a Unproductive Aquifer. Due to the history of the site, contamination through groundwater flows is expected. Further investigation is required.

Off Site:

No significant off – site sources that may pose a potential risk to the site have been identified.

Phase 1 Conceptual Site Model

4.3 Made Ground Encountered

The investigation revealed the presence of Made Ground across the site to depths of up to 0.90m bgl.

The Made Ground typically consisted of concrete over silty sandy clay / sandy silt with brick and concrete fragments.

Trial Hole	Depth	Depth(s) of Sample for Contamination Analysis
BH1	0.90m	-
TPA	0.60m	0.25m
TPB	0.40m	0.25m
TPC	0.45m	0.50m
TPD	0.65m	0.50m
TPE	0.65m	0.25m
TPF	0.60m	0.50m

Depth of Made Ground and Samples Tested

4.4 Determination of Contaminants of Concern

The samples were submitted for a broad screen of total potential contaminants, including those potential contaminants of concern on-site and included pH, Sulphate, Sulphide, Cyanide, Phenols, Metals & Semi-Metals: Cd, Cr, Pb, Hg, Ni, Se, Cu, Zn, B, As, Asbestos Screening and Quantification, Organics: USEPA 16 speciated Polycyclic Aromatic Hydrocarbons, Aromatic/Aliphatic Carbon Banded Petroleum Hydrocarbons, BTEX and MTBE Compounds and Soil Organic Matter (SOM).

The samples selected for contamination assessment were sub-contracted to Normec i2 Analytical Limited (a UKAS and MCERTS accredited laboratory) and their report is contained in Appendix B.

The exploratory holes were excavated at the locations indicated on the site investigation plan below, (Figure 2).

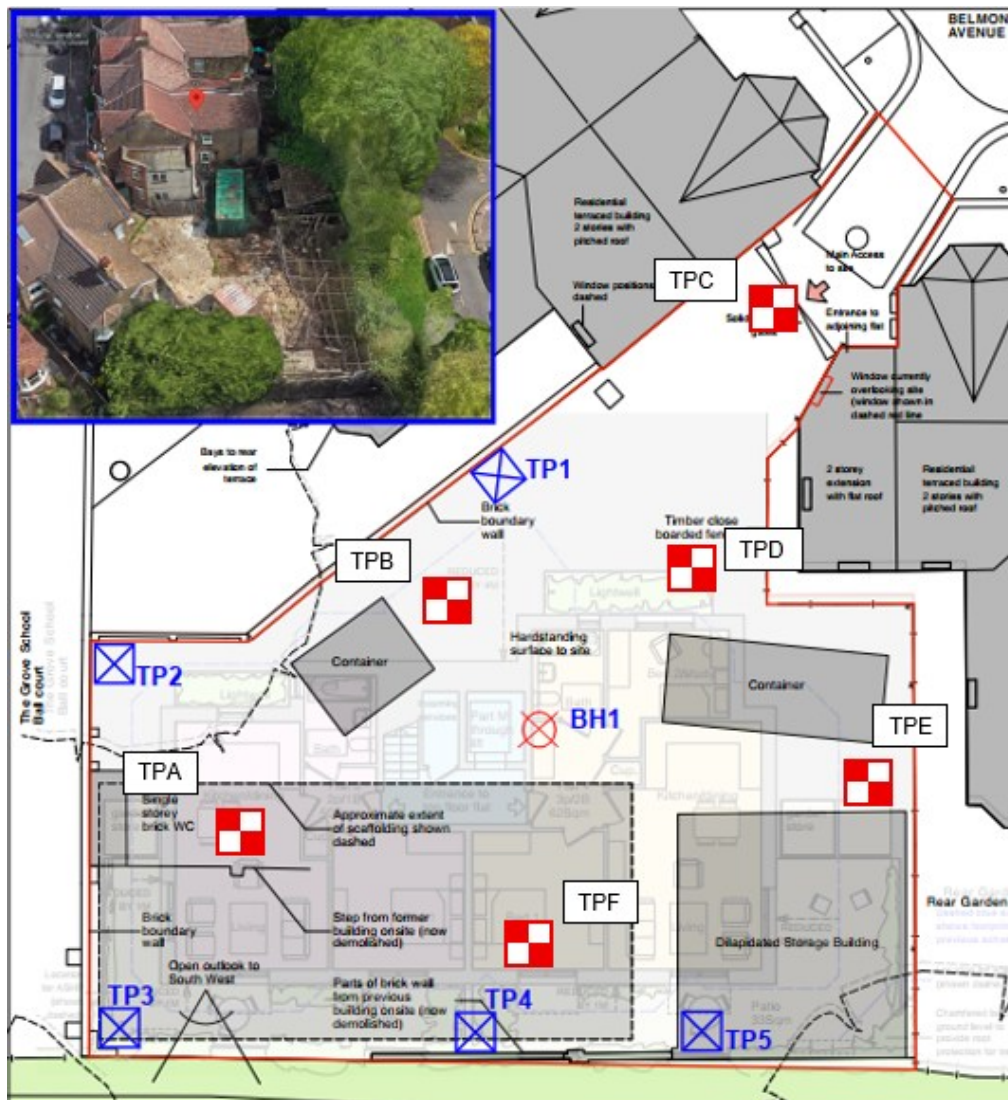


Figure 2: Site Investigation Plan

4.5 Discussion

4.5.1 Human Health Risk Assessment (On-Site Users, Workforce and Neighbouring Residents)

Comparison of the measured concentrations of the contaminants of concern to their respective screening values indicated that none of the measured parameters exceeded the screening values, except for the following:

- Beryllium – 3No. of 6No. samples tested
- Lead – 4No. of 6No. samples tested
- Naphthalene – 1No. of 6No. samples tested
- Benzo(a)anthracene – 2No. of 6No. samples tested
- Benzo(b)fluoranthene – 4No. of 6No. samples tested
- Benzo(a)pyrene – 4No. of 6No. samples tested
- Dibenz(a,h)anthracene 5No. of 6No. samples tested.

Further analysis of the soil sample results was conducted, and the summary of the statistical test is presented in the table below.

Statistical Comparison Test

Contaminant	Outliers	UCL ₉₅ (mg/kg)	Critical Concentration (Cc)	Result	Evidence Level (Against a null hypothesis)	Reject Null Hypothesis
Beryllium	YES	3.01	1.7	$\mu \geq Cc$	30%	NO
Lead	NO	914.38	310	$\mu \geq Cc$	3%	NO
Naphthalene	YES	6.01	5.6	NE	94%	NO
Benzo(a)anthracene	NO	15.09	11	NE	73%	NO
Benzo(b)fluoranthene	NO	17.87	4	$\mu \geq Cc$	5%	NO
Benzo(a)pyrene	NO	16.88	3.2	$\mu \geq Cc$	4%	NO
DiBenz(a,h)anthracene	NO	2.63	0.32	$\mu \geq Cc$	2%	NO

Notes: -

Ne – Not enough Evidence

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq Cc$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < Cc$

For Beryllium and Naphthalene, the maximum concentrations of 4.4mg/kg and 6.6mg/kg were likely to be outliers within the area. Further analysis without the outlier showed that for Naphthalene the true mean concentration was likely to be less than the relevant critical concentration.

Contaminant	Sample Results	Guideline Value	Evaluation
Beryllium	0.94 – 4.4mg/kg	1.7mg/kg	Further consideration required
Lead	250 - 1000mg/kg	310mg/kg	Further consideration required
Naphthalene	0.27 – 6.6mg/kg	5.6mg/kg	Further consideration required
Benzo(a)anthracene	1.4 – 21mg/kg	11mg/kg	Further consideration required

Contaminant	Sample Results	Guideline Value	Evaluation
<i>Benzo(b)fluoranthene</i>	1.8 – 23mg/kg	4mg/kg	Further consideration required
<i>Benzo(a)pyrene</i>	1.5 – 22mg/kg	3.2mg/kg	Further consideration required
<i>Dibenz(a,h)anthracene</i>	0.23 – 2.8mg/kg	0.32mg/kg	Further consideration required

Table Summary of Elevated Contaminants

4.5.2 Asbestos Containing Materials

The Made Ground at each exploratory location was screened for the presence of asbestos containing material. Asbestos containing material was not observed during the investigation or identified during the laboratory analysis.

4.5.3 Assessment of Gas Hazard

Due to less than 1m of Made Ground being present across the site and with the natural geology comprising of the London Clay Formation it was considered that no significant risk existed from ground gases at the site.

4.5.4 Landscape Planting/Ecological Features

The proposed site plan indicates limited areas of soft landscaping around the site. Elevated concentrations of Zinc and Copper in some areas may prove detrimental to some sensitive plants.

4.5.5 Buildings and Construction Materials

Concrete Cast In-Situ

The concentration of Total Sulphate encountered within the Made Ground exceeded the BRE guidance level of 2400mg/kg in some samples. From the water-soluble sulphate concentrations BRE Special Digest 1: 2005, Tables C1 and C2 would classify the samples analysed as up to Class DS-3. This should be taken into account should any concrete structures be installed within the soils represented by these samples.

Potable Water Supply Pipes

If at any point in the future, it be intended to install new water supply pipes within the Made Ground then consideration to the pipe materials used and/or the trench construction in accordance with UKWIR (2010) and the WATER UK HBF guide. Based upon the concentrations of TPH returned by the samples of Made Ground and the analysis undertaken, the use of standard PE pipe materials at the site may be suitable.

4.6 Revised Conceptual Site Model and Conclusions

The findings of the Phase 2 site investigation have demonstrated that in the context of a proposed residential use with private gardens, see Figure 3 below, the contaminants of concern with respect to end-user protection were 'hot-spots' of Beryllium, Lead and individual species of PAHs. Copper and Zinc concentrations may be detrimental to sensitive plants.

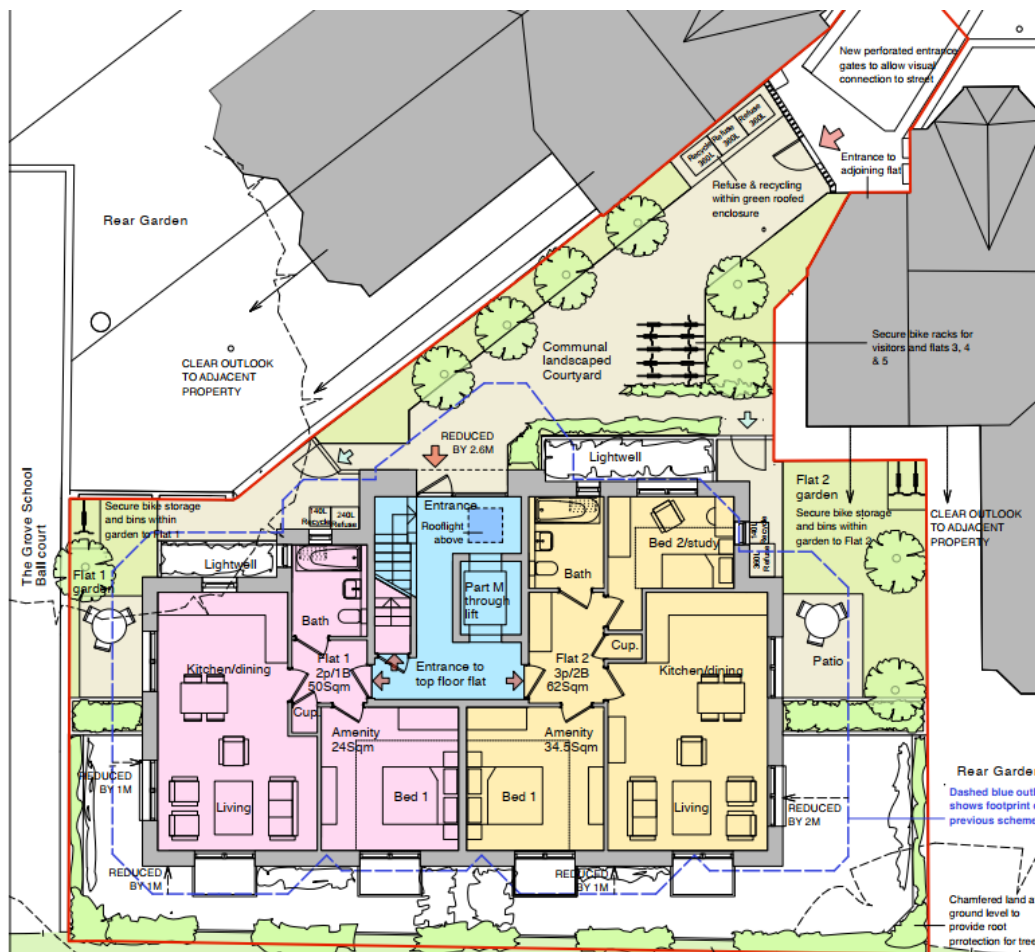


Figure 3 – Proposed Development Plan (Ground floor)

A Phase 2 Site Investigation has identified the following Source/Pathway/Receptor linkages present on-site or potentially present.

Potential Contaminants / Source	Pathway	Receptor	Site specific settings	Risk Classification: (Phase 2)	Action Required
BERYLLIUM, LEAD, PAHs	Inhalation, ingestion and dermal contact.	Human Health Residents	Residential without home grown produce	Medium	Remedial action required
BERYLLIUM, LEAD, PAHs	Inhalation, ingestion and dermal contact	Human Health Workers	Construction workers should follow regulation on health and safety during development (HSE, 1991).	Medium	Remedial action required
BERYLLIUM, LEAD, PAHs	Negligible groundwater flow	Deep groundwater	Limited Made Ground, impermeable natural ground	Low	No specific remedial action required
ZINC, COPPER	Uptake (root and stomata), ingestion, inhalation and dermal absorption by animal)	Proposed planting	Planting in soft landscaping	Low	No specific remedial action required, topsoil will need to be imported for areas of soft landscaping.

4.7 Viable Risks Requiring Action

There is a medium risk to end-users of the site from Beryllium, Lead and PAHs on-site. Remediation should be undertaken on-site to mitigate these risks.

There is a medium risk to groundworkers from Beryllium, Lead and PAHs on-site. Normal PPE and following health and safety regulations would mitigate this risk. Avoiding dust generation by damping down exposed soils in dry weather is recommended.

There is a risk to sensitive plants from Copper and Zinc identified on-site. No current growing medium exists on-site and topsoil will therefore be required.

4.8 Discovery Strategy

The discovery strategy sets out the actions that must be taken if contamination is encountered during the course of a development that was unexpected.

The contractor should develop their discovery strategy as part of the construction management plan.

5.0 LIST OF APPENDICES

Appendix A – Trial Pit Logs

Appendix B – Laboratory Test Data

Appendix C – Statistical Analysis

Appendix D – Generic Values used in the Risk Assessment

6.0 REFERENCES

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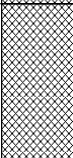
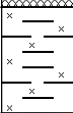
APPENDIX A

Trial Pit Logs

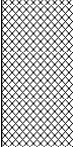
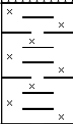
Site Analytical Services Ltd.						Site 43 BELMONT AVENUE, LONDON, N17 6AX		Trial Pit Number TPA		
Excavation Method HAND EXCAVATION		Dimensions		Ground Level (mOD)		Client PAUL SIMON HOMES		Job Number 2641658		
		Location TQ321896		Dates 16/03/2026		Engineer		Sheet 1/1		
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water	
0.25	D1				0.10	MADE GROUND: Concrete				
					0.10	MADE GROUND: Dark brown silty fine to coarse grained sand containing brick and other man made fragments				
					0.20					
					0.30					
0.50	D2				0.30	MADE GROUND: Medium brown orange silty sandy clay containing occasional brick fragments				
					0.40					
0.75	D3				0.60	Medium brown orange silty sandy CLAY				
					0.80					
1.00	D4				1.00	Complete at 1.00m				
Plan					Remarks					
.					D= Disturbed Sample					
.					Groundwater was not encountered during boring/excavation					
.										
.										
.										
.										
.										
					Scale (approx)		Logged By		Figure No.	
					1:25		SB		2641658.TPA	

Site Analytical Services Ltd.						Site 43 BELMONT AVENUE, LONDON, N17 6AX		Trial Pit Number TPB	
Excavation Method HAND EXCAVATION		Dimensions		Ground Level (mOD)		Client PAUL SIMON HOMES		Job Number 2641658	
		Location TQ321896		Dates 16/03/2026		Engineer		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
0.25 0.50 0.75 1.00	D1				(0.12) 0.12	MADE GROUND: Concrete			
	(0.28) 0.40				MADE GROUND: Dark brown silty fine to coarse grained sand containing brick and concrete fragments				
	D2				(0.40) 0.80	MADE GROUND: Dark brown greyish silty sandy CLAY			
	D3				(0.20) 1.00	Medium brown orange silty sandy CLAY			
D4					Complete at 1.00m				
Plan					Remarks				
.					D= Disturbed Sample				
.					Groundwater was not encountered during boring/excavation				
.									
.									
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.									
Scale (approx)			Logged By		Figure No.				
1:25			SB		2641658.TPB				

Site Analytical Services Ltd.						Site 43 BELMONT AVENUE, LONDON, N17 6AX		Trial Pit Number TPC	
Excavation Method HAND EXCAVATION		Dimensions		Ground Level (mOD)		Client PAUL SIMON HOMES		Job Number 2641658	
		Location TQ321896		Dates 16/03/2026		Engineer		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
0.25	D1				(0.10) 0.10	MADE GROUND: Concrete			
					(0.35)	MADE GROUND: Medium to dark brown silty fine to coarse grained sand containing brick fragments			
0.50	D2				0.45 (0.25)	MADE GROUND: Medium brown greyish silty clay			
0.75	D3				0.70	Medium brown grey silty CLAY			
1.00	D4				(0.50)				
					1.20	Complete at 1.20m			
Plan						Remarks			
.						D= Disturbed Sample			
.						Groundwater was not encountered during boring/excavation			
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.									
						Scale (approx)		Logged By	
						1:25		SB	
								Figure No.	
								2641658.TPC	

Site Analytical Services Ltd.						Site 43 BELMONT AVENUE, LONDON, N17 6AX		Trial Pit Number TPD		
Excavation Method HAND EXCAVATION		Dimensions		Ground Level (mOD)		Client PAUL SIMON HOMES		Job Number 2641658		
		Location TQ321896		Dates 16/03/2026		Engineer		Sheet 1/1		
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water	
0.25 0.50 0.75 1.00	D1				(0.12) 0.12	MADE GROUND: Concrete				
					MADE GROUND: Medium to dark brown silty fine to coarse grained sand containing brick and concrete fragments					
	D2				(0.53)					
	D3				0.65	Medium brown orange silty CLAY				
	D4	(0.35)								
					1.00	Complete at 1.00m				
Plan					Remarks					
.					Groundwater was not encountered during boring/excavation					
.					D= Disturbed Sample					
.										
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.										
					Scale (approx)		Logged By		Figure No.	
					1:25		SB		2641658.TPD	

Site Analytical Services Ltd.						Site 43 BELMONT AVENUE, LONDON, N17 6AX		Trial Pit Number TPE		
Excavation Method HAND EXCAVATION		Dimensions		Ground Level (mOD)		Client PAUL SIMON HOMES		Job Number 2641658		
		Location TQ321896		Dates 16/03/2026		Engineer		Sheet 1/1		
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water	
0.25 0.50 0.75 1.00	D1				(0.12) 0.12	MADE GROUND: Concrete				
	D2				(0.28) 0.40	MADE GROUND: Medium to dark brown silty fine to coarse grained sand containing brick and concrete fragments				
					(0.25) 0.65	MADE GROUND: Medium brown silty sandy clay containing occasional brick and concrete fragments				
	D3				(0.35) 1.00	Medium brown orange grey veined silty CLAY				
D4						Complete at 1.00m				
Plan					Remarks					
.					D= Disturbed Sample					
.					Groundwater was not encountered during boring/excavation					
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.										
.										
.										
					Scale (approx)		Logged By		Figure No.	
					1:25		SB		2641658.TPE	

Site Analytical Services Ltd.						Site 43 BELMONT AVENUE, LONDON, N17 6AX		Trial Pit Number TPF	
Excavation Method HAND EXCAVATION		Dimensions		Ground Level (mOD)		Client PAUL SIMON HOMES		Job Number 2641658	
		Location TQ321896		Dates 16/03/2026		Engineer		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
0.25 0.50 0.75 1.00	D1				0.10 0.10	MADE GROUND: Concrete			
					MADE GROUND: Medium to dark brown silty fine to coarse grained sand containing brick and concrete fragments				
	D2				(0.50)				
	D3				0.60	Medium brown orange silty CLAY			
	D4				(0.40)				
					1.00	Complete at 1.00m			
Plan					Remarks				
.					D= Disturbed Sample				
.					Groundwater was not encountered during boring/excavation				
.									
.									
.									
.									
.									
Scale (approx)			Logged By		Figure No.				
1:25			SB		2641658.TPF				



APPENDIX B

Laboratory Test Data

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Analytical Report Number : 26-014033

Project / Site name:	43 Belmont Avenue, London N17 6AX	Samples received on:	18/03/2026
Your job number:	26 41658	Samples instructed on/ Analysis started on:	18/03/2026
Your order number:	17751	Analysis completed by:	26/03/2026
Report Issue Number:	1	Report issued on:	26/03/2026
Samples Analysed:	6 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: 26-014033

Project / Site name: 43 Belmont Avenue, London N17 6AX

Your Order No: 17751

Lab Sample Number	863233				863234	863235	863236	863237
Sample Reference	TPA				TPB	TPC	TPD	TPE
Sample Number	D1				D1	D2	D2	D1
Water Matrix	N/A				N/A	N/A	N/A	N/A
Depth (m)	0.25				0.25	0.50	0.50	0.25
Date Sampled	16/03/2026				16/03/2026	16/03/2026	16/03/2026	16/03/2026
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	0.6	2.7	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	21	23	22	17
Total mass of sample received	kg	0.1	NONE	0.8	0.8	0.9	0.9	0.7
Whole Sample Crushed	N/A	N/A	NONE	Crushed	Crushed	Crushed	Crushed	Crushed

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-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	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	9.4	7.9	7.7	8.1	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Complex Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 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 SO4	mg/kg	50	MCERTS	3500	1500	1300	1400	4900
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	810	330	1200	1600	3400
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.406	0.166	0.609	0.79	1.72
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	406	166	609	790	1720
Sulphide	mg/kg	1	MCERTS	11	19	38	57	24
Organic Matter (automated)	%	0.1	MCERTS	2.9	6.9	6.4	5.5	5.6

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	6.6	1.2	0.27	0.59	0.51
Acenaphthylene	mg/kg	0.05	MCERTS	0.54	0.16	0.06	0.54	0.08
Acenaphthene	mg/kg	0.05	MCERTS	5.5	1.8	0.25	0.74	1
Fluorene	mg/kg	0.05	MCERTS	5.4	1.3	0.29	1.2	0.56
Phenanthrene	mg/kg	0.05	MCERTS	47	17	2.7	11	7.8
Anthracene	mg/kg	0.05	MCERTS	11	3.8	0.56	2.4	2
Fluoranthene	mg/kg	0.05	MCERTS	57	30	3.5	14	13
Pyrene	mg/kg	0.05	MCERTS	45	27	3	13	12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	21	14	1.4	7	8
Chrysene	mg/kg	0.05	MCERTS	21	15	1.5	6.9	7.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	23	17	1.8	6.7	14
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	10	7.7	0.69	3.3	5.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	22	15	1.5	6.4	14
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	10	9.3	0.87	3.4	11
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.8	2.5	0.23	1.1	2.8
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	11	10	0.87	3.9	12

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	300	174	19.4	82.6	112
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Analytical Report Number: 26-014033
Project / Site name: 43 Belmont Avenue, London N17 6AX
Your Order No: 17751

Lab Sample Number	863233	863234	863235	863236	863237
Sample Reference	TPA	TPB	TPC	TPD	TPE
Sample Number	D1	D1	D2	D2	D1
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.25	0.25	0.50	0.50	0.25
Date Sampled	16/03/2026	16/03/2026	16/03/2026	16/03/2026	16/03/2026
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	24	31	14	18	18
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2	4.4	0.94	1.2	1.8
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.2	4.3	3.7	2.8
Boron (total)	mg/kg	1	MCERTS	16	32	10	14	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	0.3	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	U/S ^{*U/S g}	U/S ^{*U/S g}	U/S ^{*U/S g}
Chromium (hexavalent) by IC	mg/kg	1.8	NONE	-	-	< 1.80	< 1.80	< 1.80
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	40	34	32	39	38
Copper (aqua regia extractable)	mg/kg	1	MCERTS	97	230	73	75	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	1000	1000	250	270	670
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	1.7	1.3	0.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	35	55	20	26	34
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.5	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	59	84	41	51	52
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	530	430	110	130	260

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	0.015	0.019	0.02	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	0.014	< 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	2.7	< 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	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	30	19	< 8.0	< 8.0	11
TPHCWG - Aliphatic >EC35 - EC40 _{EH_CU_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC40 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	33	19	< 10	< 10	11

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	0.19	0.061	0.048	0.11	0.027
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	0.48	0.11	0.21	0.34	0.05
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	2.5	< 1.0	< 1.0	1.2	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	15	3.5	4.4	4.8	2.1
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	92	42	11	33	19
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	130	91	16	60	58
TPHCWG - Aromatic >EC35 - EC40 _{EH_CU_1D_AR}	mg/kg	10	NONE	22	< 10	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC40 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	260	140	31	100	80

TPH Total >EC5 - EC40 _{EH_CU+HS_1D_TOTAL}	mg/kg	10	NONE	290	160	31	100	91
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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	180	55	44	100	26
Ethylbenzene	µg/kg	5	MCERTS	53	11	17	31	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	280	40	110	200	23
o-Xylene	µg/kg	5	MCERTS	120	47	77	87	12

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

Analytical Report Number: 26-014033

Project / Site name: 43 Belmont Avenue, London N17 6AX

Your Order No: 17751

Lab Sample Number	863238			
Sample Reference	TPF			
Sample Number	D2			
Water Matrix	N/A			
Depth (m)	0.50			
Date Sampled	16/03/2026			
Time Taken	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	19
Total mass of sample received	kg	0.1	NONE	0.9
Whole Sample Crushed	N/A	N/A	NONE	Crushed

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MUA
Analysis completed	N/A	N/A	N/A	25/03/2026

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Complex Cyanide	mg/kg	1	MCERTS	< 1.0
Free Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	2300
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	1500
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.773
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	773
Sulphide	mg/kg	1	MCERTS	3.8
Organic Matter (automated)	%	0.1	MCERTS	3.4

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	0.89
Acenaphthylene	mg/kg	0.05	MCERTS	0.09
Acenaphthene	mg/kg	0.05	MCERTS	0.81
Fluorene	mg/kg	0.05	MCERTS	0.82
Phenanthrene	mg/kg	0.05	MCERTS	7.9
Anthracene	mg/kg	0.05	MCERTS	2
Fluoranthene	mg/kg	0.05	MCERTS	8.1
Pyrene	mg/kg	0.05	MCERTS	6.8
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.1
Chrysene	mg/kg	0.05	MCERTS	3.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.43
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.9

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	45.5
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Analytical Report Number: 26-014033

Project / Site name: 43 Belmont Avenue, London N17 6AX

Your Order No: 17751

Lab Sample Number	863238			
Sample Reference	TPF			
Sample Number	D2			
Water Matrix	N/A			
Depth (m)	0.50			
Date Sampled	16/03/2026			
Time Taken	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.6
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5
Boron (total)	mg/kg	1	MCERTS	17
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (hexavalent) by IC	mg/kg	1.8	NONE	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	39
Copper (aqua regia extractable)	mg/kg	1	MCERTS	62
Lead (aqua regia extractable)	mg/kg	1	MCERTS	660
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	57
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC35 - EC40 _{EH_CU_1D_AL}	mg/kg	10	NONE	< 10
TPHCWG - Aliphatic >EC5 - EC40 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	0.11
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	0.26
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	1.4
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	4.5
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	15
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	17
TPHCWG - Aromatic >EC35 - EC40 _{EH_CU_1D_AR}	mg/kg	10	NONE	< 10
TPHCWG - Aromatic >EC5 - EC40 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	38

TPH Total >EC5 - EC40 _{EH_CU+HS_1D_TOTAL}	mg/kg	10	NONE	38
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VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	100
Ethylbenzene	µg/kg	5	MCERTS	30
p & m-Xylene	µg/kg	8	MCERTS	100
o-Xylene	µg/kg	5	MCERTS	110

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

Analytical Report Number : 26-014033

Project / Site name: 43 Belmont Avenue, London N17 6AX

* 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 *
863233	TPA	D1	0.25	Brown loam and sand with gravel and stones
863234	TPB	D1	0.25	Brown loam and sand with vegetation and stones
863235	TPC	D2	0.5	Brown loam and clay with gravel
863236	TPD	D2	0.5	Brown loam and clay with gravel
863237	TPE	D1	0.25	Brown loam and clay with gravel and vegetation
863238	TPF	D2	0.5	Brown loam and clay with gravel and vegetation

Analytical Report Number : 26-014033

Project / Site name: 43 Belmont Avenue, London N17 6AX

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
Whole Sample Crushed	Either: Client specific preparation instructions - sample(s) crushed whole prior to analysis OR Sample unsuitable for standard preparation and therefore crushed whole prior to analysis	In house method, applicable to dry samples only	L019B	D	NONE
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
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010-PL	D	MCERTS
Moisture Content (Wet Weight)	Moisture content (% wet weight), determined gravimetrically (up to 30°C)	In-house-procedure based on BS EN 12880:2000	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
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
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
Complex Cyanide in soil	Determination of complex cyanide by calculation	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
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
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

Analytical Report Number : 26-014033

Project / Site name: 43 Belmont Avenue, London N17 6AX

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
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
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
Soil Descriptions	Textural classification	In-house method	L019B	W	NONE
Hexavalent chromium in soil 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

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



Analytical Report Number : 26-014033
Project / Site name: 43 Belmont Avenue, London N17 6AX

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
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*U/S g- Unsuitable for analysis due to high colour intensity.

APPENDIX C

Statistical Analysis

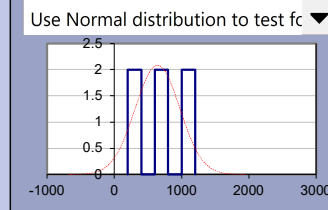
Test Results

Client/client ref: Paul Simon Hor Site ref: 43 Belmont Avenue, London N17 6AX
Project ref: 26/41658 Data description:

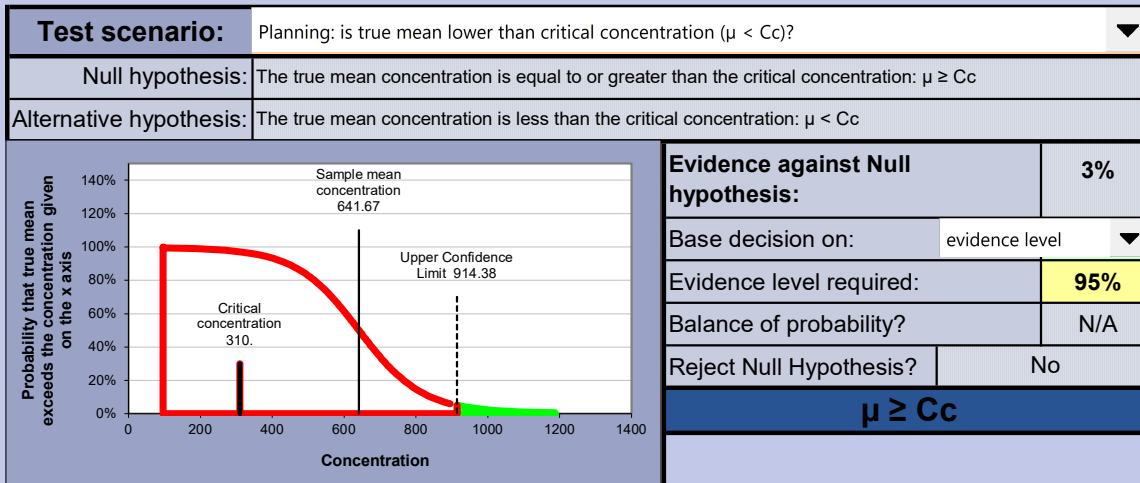
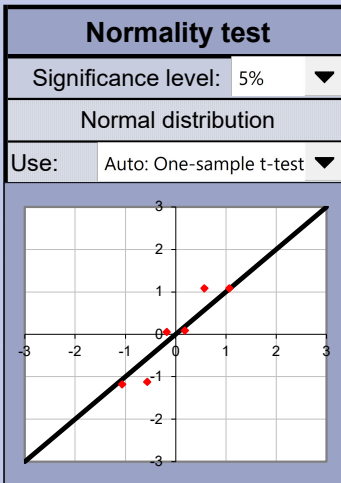
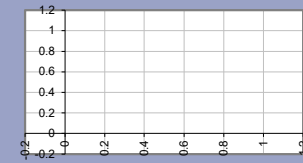
Date: 08-Apr-2026

User details: A Garnham

Dataset:	Lead ▼
Sample mean, $\bar{x}$	641.67
Sample standard deviation, s	331.51
Sample size, n	6
Critical concentration, Cc	310



Outliers & non-detects	
Outliers present?	NO
Significance level	5% ▼
Outliers removed?	0
Non-detects	0



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[Go to outlier test](#)

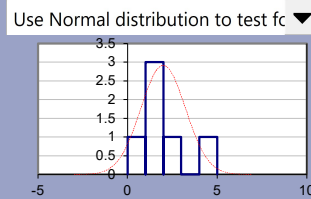
[Go to normality test](#)

Test Results

Client/client ref: Paul Simon Hor Site ref: 43 Belmont Avenue, London N17 6AX
Project ref: 26/41658 Data description:

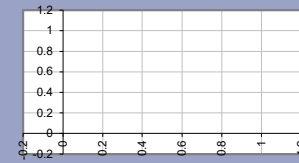
Date: 08-Apr-2026
User details: A Garnham

Dataset:	Beryllium ▼
Sample mean, $\bar{x}$	1.99
Sample standard deviation, s	1.2428
Sample size, n	6
Critical concentration, Cc	1.7



Outliers & non-detects

Outliers present?	YES
Significance level	5% ▼
Outliers removed?	0
Non-detects	0

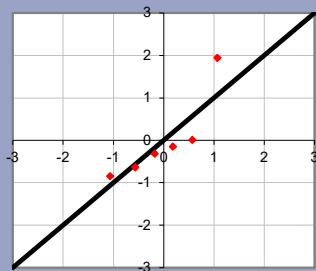


Normality test

Significance level: 5% ▼

Normal distribution

Use: Auto: One-sample t-test ▼

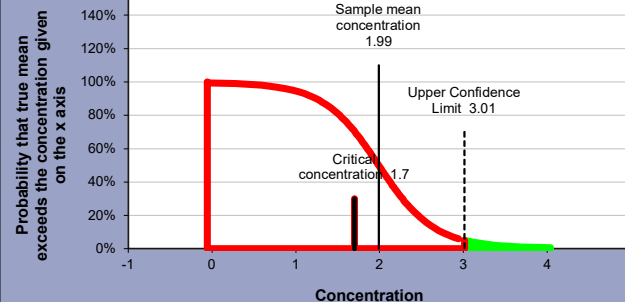


Test scenario:

Planning: is true mean lower than critical concentration ($\mu < C_c$)? ▼

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

30%

Base decision on: evidence level ▼

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? No

$\mu \geq C_c$

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Go to outlier test

Go to normality test

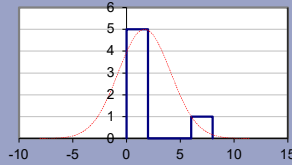
Test Results

Client/client ref: Paul Simon Hor Site ref: 43 Belmont Avenue, London N17 6AX
Project ref: 26/41658 Data description:

Date: 08-Apr-2026
User details: A Garnham

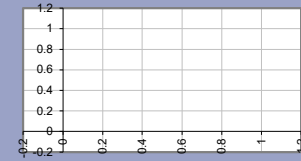
Dataset:	Naphthalene
Sample mean, $\bar{x}$	1.6767
Sample standard deviation, s	2.4333
Sample size, n	6
Critical concentration, Cc	5.6

Use Normal distribution to test for



Outliers & non-detects

Outliers present?	YES
Significance level	5%
Outliers removed?	0
Non-detects	0

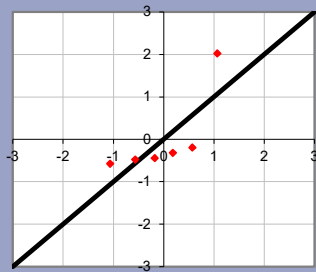


Normality test

Significance level: 5%

Non-normal distribution

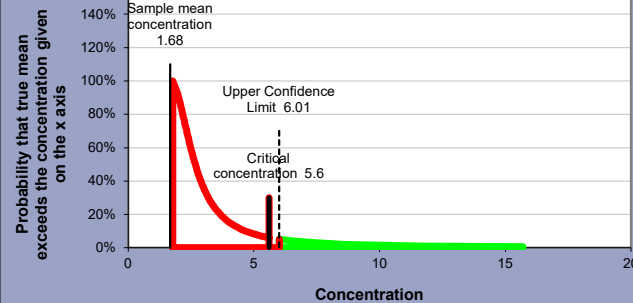
Use: Auto: Chebychev



Test scenario: Planning: is true mean lower than critical concentration ($\mu < C_c$)?

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

94%

Base decision on: evidence level

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? No

Not enough evidence

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Go to outlier test

Go to normality test

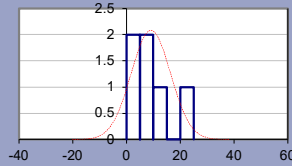
Test Results

Client/client ref: Paul Simon Hor Site ref: 43 Belmont Avenue, London N17 6AX
Project ref: 26/41658 Data description:

Date: 08-Apr-2026
User details: A Garnham

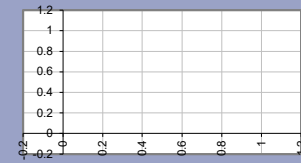
Dataset:	Benzo(a)anthracene ▼
Sample mean, $\bar{x}$	9.0833
Sample standard deviation, s	7.3011
Sample size, n	6
Critical concentration, Cc	11

Use Normal distribution to test for



Outliers & non-detects

Outliers present?	NO
Significance level	5% ▼
Outliers removed?	0
Non-detects	0

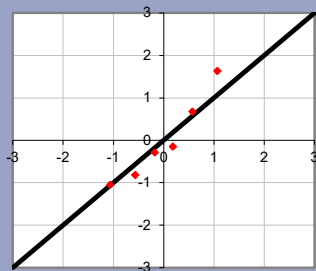


Normality test

Significance level: 5% ▼

Normal distribution

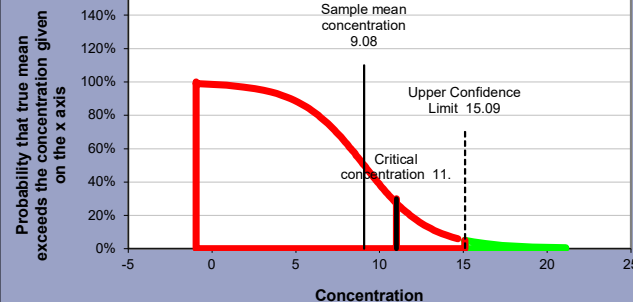
Use: Auto: One-sample t-test ▼



Test scenario: Planning: is true mean lower than critical concentration ($\mu < C_c$) ▼

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

73%

Base decision on: evidence level ▼

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? No

Not enough evidence

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Go to outlier test

Go to normality test

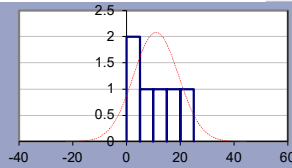
Test Results

Client/client ref: Paul Simon Hor Site ref: 43 Belmont Avenue, London N17 6AX
Project ref: 26/41658 Data description:

Date: 08-Apr-2026
User details: A Garnham

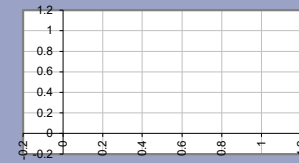
Dataset:	Benzo(b)fluoranthene ▼
Sample mean, $\bar{x}$	11
Sample standard deviation, s	8.3472
Sample size, n	6
Critical concentration, Cc	4

Use Normal distribution to test for ▼



Outliers & non-detects

Outliers present?	NO
Significance level	5% ▼
Outliers removed?	0
Non-detects	0

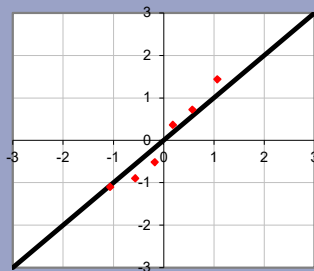


Normality test

Significance level: 5% ▼

Normal distribution

Use: Auto: One-sample t-test ▼

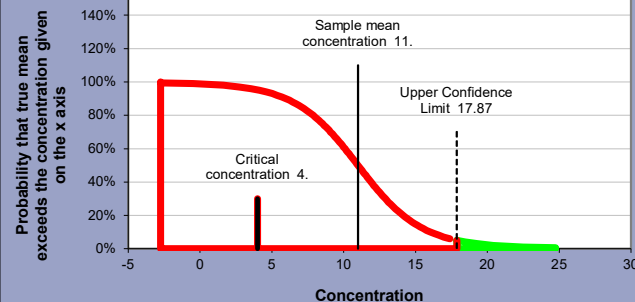


Test scenario:

Planning: is true mean lower than critical concentration ($\mu < C_c$)? ▼

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

5%

Base decision on: evidence level ▼

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? No

$\mu \geq C_c$

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Go to outlier test

Go to normality test

Test Results

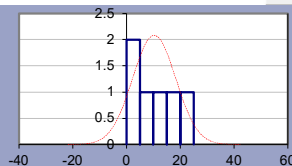
Client/client ref: Paul Simon Hor Site ref: 43 Belmont Avenue, London N17 6AX
Project ref: 26/41658 Data description:

Date: 08-Apr-2026

User details: A Garnham

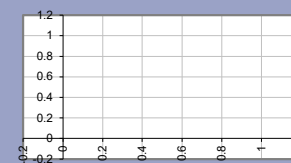
Dataset:	Benzo(a)pyrene ▼
Sample mean, $\bar{x}$	10.3
Sample standard deviation, s	8.001
Sample size, n	6
Critical concentration, Cc	3.2

Use Normal distribution to test for



Outliers & non-detects

Outliers present?	NO
Significance level	5% ▼
Outliers removed?	0
Non-detects	0

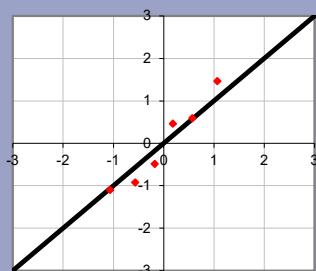


Normality test

Significance level: 5% ▼

Normal distribution

Use: Auto: One-sample t-test ▼

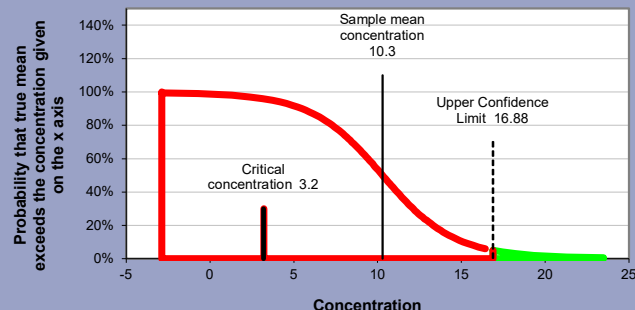


Test scenario:

Planning: is true mean lower than critical concentration ($\mu < C_c$)? ▼

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

4%

Base decision on: evidence level ▼

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? No

$\mu \geq C_c$

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Go to outlier test

Go to normality test

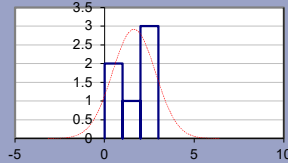
Test Results

Client/client ref: Paul Simon Hor Site ref: 43 Belmont Avenue, London N17 6AX
Project ref: 26/41658 Data description:

Date: 08-Apr-2026
User details: A Garnham

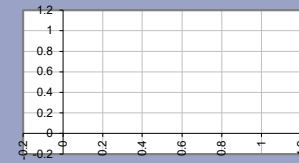
Dataset:	Dibenz(a,h)anthracene ▼
Sample mean, $\bar{x}$	1.6433
Sample standard deviation, s	1.1979
Sample size, n	6
Critical concentration, Cc	0.32

Use Normal distribution to test for



Outliers & non-detects

Outliers present?	NO
Significance level	5% ▼
Outliers removed?	0
Non-detects	0

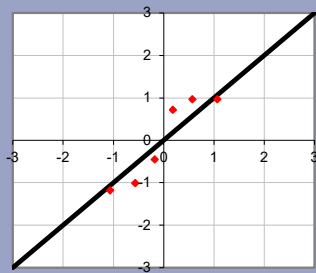


Normality test

Significance level: 5% ▼

Normal distribution

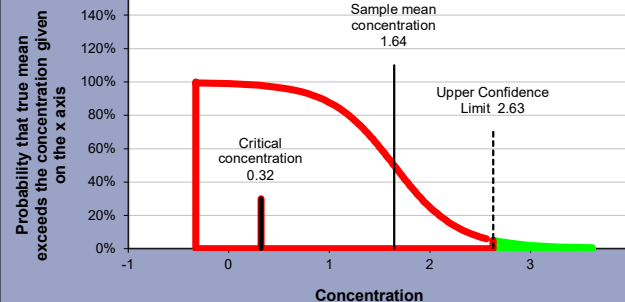
Use: Auto: One-sample t-test ▼



Test scenario: Planning: is true mean lower than critical concentration ($\mu < C_c$)? ▼

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

2%

Base decision on: evidence level ▼

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? No

$\mu \geq C_c$

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Go to outlier test

Go to normality test

APPENDIX D

Generic Values used in the Risk Assessment

Qualitative Risk Assessment - Soils

The hazard caused by the presence of a substance or element is not absolute but depends on the proposed end use of the site.

It is understood that the site is to be developed for commercial use. As such the S4UL screening levels for Residential without Home Grown Produce and Category 4 Screening Level for Residential use have been used in the following soil assessment.

Site data has been assessed against current generic assessment criteria (GAC) / guideline values in accordance with current industry practice and statutory guidance; chemical toxicology (TOX), Soil Guideline Value (SGV) reports developed using the new Contaminated Land Exposure Assessment (CLEAv1.06) framework, CLR 11 (Environment Agency, 2009) and SP1010: Development of Category 4 screening levels for assessment of land affected by contamination (DEFRA, 2014).

However, it must be remembered that GAC are not binding standards but can be useful in forming judgements regarding the level of risk i.e. unacceptable or acceptable. Exceedance of GAC does not automatically result in the requirement for remedial / risk management work but would warrant further assessment.

Suitable 4 Use Levels, Category 4 Screening Levels, Soil Guideline Values, CLR Documents & Chartered Institute of Environmental Health Values

Under Part 2A of the Environmental Protection Act 1990, land is determined as contaminated if it is deemed to be causing significant harm, or where there is a Significant Possibility of Significant Harm to human health.

From January 2009 revised Soil Guidance Values for certain contaminants were issued in the Contaminated Land Reports (CLR) by the Environment Agency in conjunction with Department of the Environment, Food, Agriculture and Rural Affairs. These values and the CLEA methodology used to derive them have superseded CLEA and TOX reports for soil contaminants.

The CLR Documents are a series of contaminated land guidance documents developed by various past and present government agencies involved with protection of the environment.

These documents aim to provide a set of generic Soil Guideline Values and a site specific modelling programme based upon tolerable predicted uptakes from experimental data for a variety of common industrial toxic contaminants. In instances of carcinogenic and mutagenic substances the guideline values are set on the basis of "As Low As Reasonably Practicable" (ALARP), as theoretically mutation can occur on exposure to a single particle of the contaminant.

Revised Statutory Guidance to support Part 2A of the Environmental Protection Act 1990 was published in April 2012, which introduced a new four-category system for classifying land under Part 2A for cases of a Significant Possibility of Significant Harm to human health, where Category 1 includes land where the level of risk is clearly unacceptable and Category 4 includes land where the level of risk posed is acceptably low.

'Category 4 Screening Levels' (C4SLs) have been introduced in March 2014 to provide a simple test for deciding when land is suitable for use and definitely not contaminated land. The Category 4 Screening Levels consist of estimates of contaminant concentrations in soil that are considered to present an 'acceptable' level of risk, within the context of Part 2A.

In response, in November 2014, The Chartered Institute of Environmental Health Generic Assessment Criteria for Human Health Risk Assessment adopt the Environment Agency's CLEA UK (Beta) Model and Category 4 Screening Levels and as such have derived guideline values that are compatible with current English legislation, policy and technical guidance in the form of LQM/CIEH S4ULS's (Suitable 4 Use Levels).

The methodology for deriving both the previous Soil Guideline Values and the new Suitable 4 Use Levels is based on the Environment Agency's Contaminated Land Exposure Assessment (CLEA) methodology.

At the time of writing this report Suitable 4 Use Levels are in place for some heavy metals, BTEX Substances, Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons as well as a number of selected organic compounds.

Generic Assessment Criteria for Human Health Risk Assessment (S4UL's) have been produced by LQM / Chartered Institute of Environmental Health for the 'residential with home grown produce'. The table below summarized the relevant screening values for the contaminants of concern.

Residential without Home Grown Produce

		POS Res 1% SOM	POS Res 2.5% SOM	POS Res 6% SOM
Metals				
<i>Arsenic</i>	mg/kg	40	40	40
<i>Beryllium</i>	mg/kg	1.7	1.7	1.7
<i>Boron</i>	mg/kg	11000	11000	11000
<i>Cadmium</i>	mg/kg	85	85	85
<i>Chromium III</i>	mg/kg	910	910	910
<i>Chromium VI</i>	mg/kg	6	6	6
<i>Copper</i>	mg/kg	7100	7100	7100
<i>Lead*</i>	mg/kg	310	310	310
<i>Mercury</i>	mg/kg	1.2-56	1.2-56	1.2-56
<i>Nickel</i>	mg/kg	180	180	180
<i>Selenium</i>	mg/kg	430	430	430
<i>Vanadium</i>	mg/kg	1200	1200	1200
<i>Zinc</i>	mg/kg	40000	40000	40000
Total Phenols				
<i>Total Phenols (monohydric)</i>	mg/kg	440	690	1200
Speciated PAHs				
<i>Naphthalene</i>	mg/kg	2.3	5.6	13
<i>Acenaphthylene</i>	mg/kg	2900	4600	6000

Residential without Home Grown Produce

		POS Res 1% SOM	POS Res 2.5% SOM	POS Res 6% SOM
<i>Acenaphthene</i>	mg/kg	3000	4700	6000
<i>Fluorene</i>	mg/kg	2800	3800	4500
<i>Phenanthrene</i>	mg/kg	1300	1500	1500
<i>Anthracene</i>	mg/kg	31000	35000	37000
<i>Fluoranthene</i>	mg/kg	1500	1600	1600
<i>Pyrene</i>	mg/kg	3700	3800	3800
<i>Benzo(a)anthracene</i>	mg/kg	11	14	15
<i>Chrysene</i>	mg/kg	30	31	32
<i>Benzo(b)fluoranthene</i>	mg/kg	3.9	4.0	4.0
<i>Benzo(k)fluoranthene</i>	mg/kg	110	110	110
<i>Benzo(a)pyrene</i>	mg/kg	3.2	3.2	3.2
<i>Indeno(1,2,3cd)pyrene</i>	mg/kg	45	46	46
<i>Dibenz(a,h)anthracene</i>	mg/kg	0.31	0.32	0.32
<i>Benzo(ghi)perylene</i>	mg/kg	360	360	360
<i>Aliphatic hydrocarbons</i>				
<i>EC5 – C6</i>	mg/kg	42	78	160
<i>EC6 - C8</i>	mg/kg	100	230	530
<i>EC8 – C10</i>	mg/kg	27	65	150
<i>EC10 – C12</i>	mg/kg	130	330	770
<i>EC12 – C16</i>	mg/kg	1100	2400	4400
<i>EC16-C35</i>	mg/kg	65000	92000	110000
<i>EC35-44</i>	mg/kg	65000	92000	110000
<i>Aromatic hydrocarbons</i>				
<i>EC5 – C7</i>	mg/kg	370	690	1400
<i>EC7 – C8</i>	mg/kg	860	1800	3900
<i>EC8 – C10</i>	mg/kg	47	110	270
<i>EC10 – C12</i>	mg/kg	250	590	1200
<i>EC12 – C16</i>	mg/kg	1800	2300	2500
<i>EC16 – C21</i>	mg/kg	1900	1900	1900
<i>EC21 – C35</i>	mg/kg	1900	1900	1900

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Residential without Home Grown Produce

		POS Res 1% SOM	POS Res 2.5% SOM	POS Res 6% SOM
EC35 – C44	mg/kg	1900	1900	1900
Benzene	mg/kg	0.38	0.70	1.4
Toluene	mg/kg	880	1900	3900
Ethylbenzene	mg/kg	83	190	440
Xylenes O	mg/kg	88	210	480
Xylenes M	mg/kg	82	190	450
Xylenes P	mg/kg	79	180	430

Note:

* Based on C4SL values