

Our Ref: JAC/PS/KJ/J14451

29th March 2021

Hill Partnership Ltd
Westfield House
Bonnetts Lane
Crawley
RH11 0NY

For the attention of Trevor Parslow

Dear Sirs,

**Re: Additional Contamination Testing at: Hermitage Lane, London NW2
National Grid Reference: TQ 2510 8637
Geology: London Clay**

1 Authority

Our authority for carrying out this work is contained in an email from Trevor Parslow on the 8th February 2021.

2 Background and Objectives

The site was subject to a site investigation carried out by Southern Testing in May 2020. Reference to the report (Ref J14451 Hermitage Lane 2020) should be made. The investigation was carried out pre-demolition and therefore it was recommended that additional investigation take place following removal of buildings to confirm the ground conditions under the building footprint.

The object of the investigation was to carry out additional contamination testing to confirm the ground conditions, check for the presence of asbestos fibres within the soil and assess the concentrations of potential contamination within the soil below the previous buildings.

3 Scope

This letter report presents our test results and our interpretation of these data. As with any site there may be differences in soil conditions between exploratory hole positions and hitherto undiscovered contaminated soil may be present.

This report is not an engineering design and the figures and calculations contained in the report should be used by the Engineer, taking note that variations will apply, according to variations in design loading, in techniques used, and in site conditions. Our figures therefore should not supersede the Engineer's design.

Any contamination screening values used are valid at the time of writing but may be subject to change and any such changes will have implications for the assessments based upon them. (Their validity should be confirmed at the time of site development.)



ISO 9001
Quality
ISO 14001
Environmental
OHSAS 18001
Health & Safety

The findings and opinions conveyed via this Site Investigation Report are based on information obtained from a variety of sources as detailed within this report, and which Southern Testing Laboratories Limited believes are reliable. Nevertheless, Southern Testing Laboratories Limited cannot and does not guarantee the authenticity or reliability of the information it has obtained from others.

The site investigation was conducted and this report has been prepared for the sole internal use and reliance of Hill Partnership Ltd and their appointed Engineers. This report shall not be relied upon or transferred to any other parties without the express written authorization of Southern Testing Laboratories Limited. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

Recommendations contained in this report may not be appropriate to alternative development schemes.

4 Site Investigation – Soils

4.1 Sampling Regime

The number of sample locations was limited but was intended to provide coverage of the areas previously inaccessible during the initial investigation.

4.2 Testing

The following tests were selected as a general screen for potential contamination.

Test Suite	Number of Samples	Soil Tested
STL Key Contamination Suite	5	Made Ground and Natural
Asbestos Screen	5	Made Ground and Natural

The test results are presented in full in the Appendix B. A summary and discussion of the significance of the results and identified contamination sources is given below.

5 Test Results and Identified Contamination Sources

5.1 General Contaminants

The results of the key contaminant tests have been analysed in accordance with the CLEA methodology. The samples have been grouped into two populations comprising Made Ground and natural soil. For each parameter in each population the sample mean is calculated and compared to a Tier 1 screening value. If the sample mean exceeds the screening value, the soil may be regarded as contaminated and further assessment may be required. If neither the sample mean nor any single value exceeds the screening value, the soil may be regarded as not contaminated, though further confirmatory assessment may be required. Where any single parameter value exceeds the screening value but the sample mean does not, further statistical analysis may be applied to that parameter if the available data is suitable. Such analysis would include an assessment of the Normality of the distribution of the data, consideration of the presence of outliers, and the calculation of a UCL estimate of the mean.

Summary data is presented in the tables below and the laboratory analysis is included in the Appendix B. The screening values and source notes are presented in Table 1 "Tier 1 Screening Values" at the front of Appendix B.

Soil Type: MADE GROUND

Samples: S4, S5 @ 0.30m and S6 @ 0.60m.

Contaminants	Units	S4	S5 @ 0.30m	S6 @ 0.60m	Public Open Space (Residential) Tier 1 Screening Values
Arsenic (As)	Mg/kg	12	17	17	79
Cadmium (Cd)	Mg/kg	<0.2	<0.20	<0.20	120
Trivalent Chromium (CrIII)*	Mg/kg	45	20	35	1,500
Hexavalent Chromium (CrVI)	Mg/kg	<4.0	<4.0	<4.0	7.7
Lead (Pb)	Mg/kg	56	210	230	630
Mercury (Hg)	Mg/kg	<0.30	0.8	0.90	40
Selenium (Se)	Mg/kg	<1.0	<1.0	<1.0	1,100
Nickel (Ni)	Mg/kg	33	20	22	230
Copper (Cu)	Mg/kg	33	52	150	12,000
Zinc (Zn)	Mg/kg	74	150	110	81,000
Phenol	Mg/kg	<1.0	<1.0	<1.0	440-1300
Benzo(a)pyrene (BaP)	Mg/kg	<0.05	0.59	0.90	4.9
Naphthalene	Mg/kg	<0.05	<0.05	<0.05	77-430
Total Cyanide (CN)	Mg/kg	<1.0	<1.0	<1.0	/
Acidity (pH values)	pH units	7.5	11.4	7.9	/
Soil Organic Matter	%	0.5	0.6	1.1	/

* Assumed as Total Cr minus CrVI

The samples S4, S5 and S6 were taken following demolition of the buildings once the site had been cleared. Due to the ongoing groundwork and placement of a pile mat, the levels on site had changed significantly since the original investigation and it was not possible to determine exact depths below the previous ground level that samples were taken from so the depths given are approximate. Sample S4 was taken from a stockpile of recently stripped soil to reduce the levels in the north eastern corner of the site.

Samples S5 and S6 were taken from a trial pit excavated in the north western corner of the site under the footprint of the previous building. See figure 1 for the location of the samples.

Based on the results in the table above the Made Ground soils tested can be considered uncontaminated when compared to the tier 1 screening values for a public open space (residential) land use.

Soil Type: Natural Ground*Samples: S2 @ 1.50m (approximate depth)*

Contaminants	Units	S2 @ 1.50m	Public Open Space (Residential) Tier 1 Screening Values
Arsenic (As)	Mg/kg	14	79
Cadmium (Cd)	Mg/kg	<0.2	120
Trivalent Chromium (CrIII)*	Mg/kg	65	1,500
Hexavalent Chromium (CrVI)	Mg/kg	<4	7.7
Lead (Pb)	Mg/kg	41	630
Mercury (Hg)	Mg/kg	<0.3	40
Selenium (Se)	Mg/kg	<1.0	1,100
Nickel (Ni)	Mg/kg	38	230
Copper (Cu)	Mg/kg	33	12,000
Zinc (Zn)	Mg/kg	75	81,000
Phenol	Mg/kg	<1.0	440-1300
Benzo(a)pyrene (BaP)	Mg/kg	<0.05	4.9
Naphthalene	Mg/kg	<0.005	77-430
Total Cyanide (CN)	Mg/kg	<1	/
Acidity (pH values)	pH units	7.6	/
Soil Organic Matter	%	0.2	/

* Assumed as Total Cr minus CrVI

The one sample tested from the natural soil on site can be considered uncontaminated when compared to the tier 1 screening values for a public open space (residential) land use.

5.2 Petroleum Hydrocarbons

No visual evidence of potential petroleum hydrocarbon contamination (malodorous and/or stained soil) was identified during the additional sampling works.

5.3 Asbestos Containing Materials

No suspected asbestos containing materials (ACM's) were visually identified during the additional sampling visits post demolition.

Four samples (3 no. of Made ground and 1 no. of Natural soils) were subject to laboratory analysis for the presence of asbestos.

No asbestos containing materials were detected in any of the samples analysed.

6 Discussion and Conclusions

The results from the first phase of the investigation (REF J14451 July 2020) showed evidence of soil contamination in the form of PAH's and Asbestos. Further contamination testing was completed once demolition of the previous buildings was complete. This additional testing report did not identify any additional evidence of contamination. The vast majority of the Made Ground has now been removed from site and therefore, based on the contamination test results in of the original report and this addendum letter report, the site can be considered to be fit for purpose when compared to the Tier 1 screening values for Public Open Space (Residential). It should be noted that the presence of contamination may affect the classification of waste soils, or the potential for their re-use.

If you have any queries or we can be of further assistance, please do not hesitate to contact us

Yours faithfully



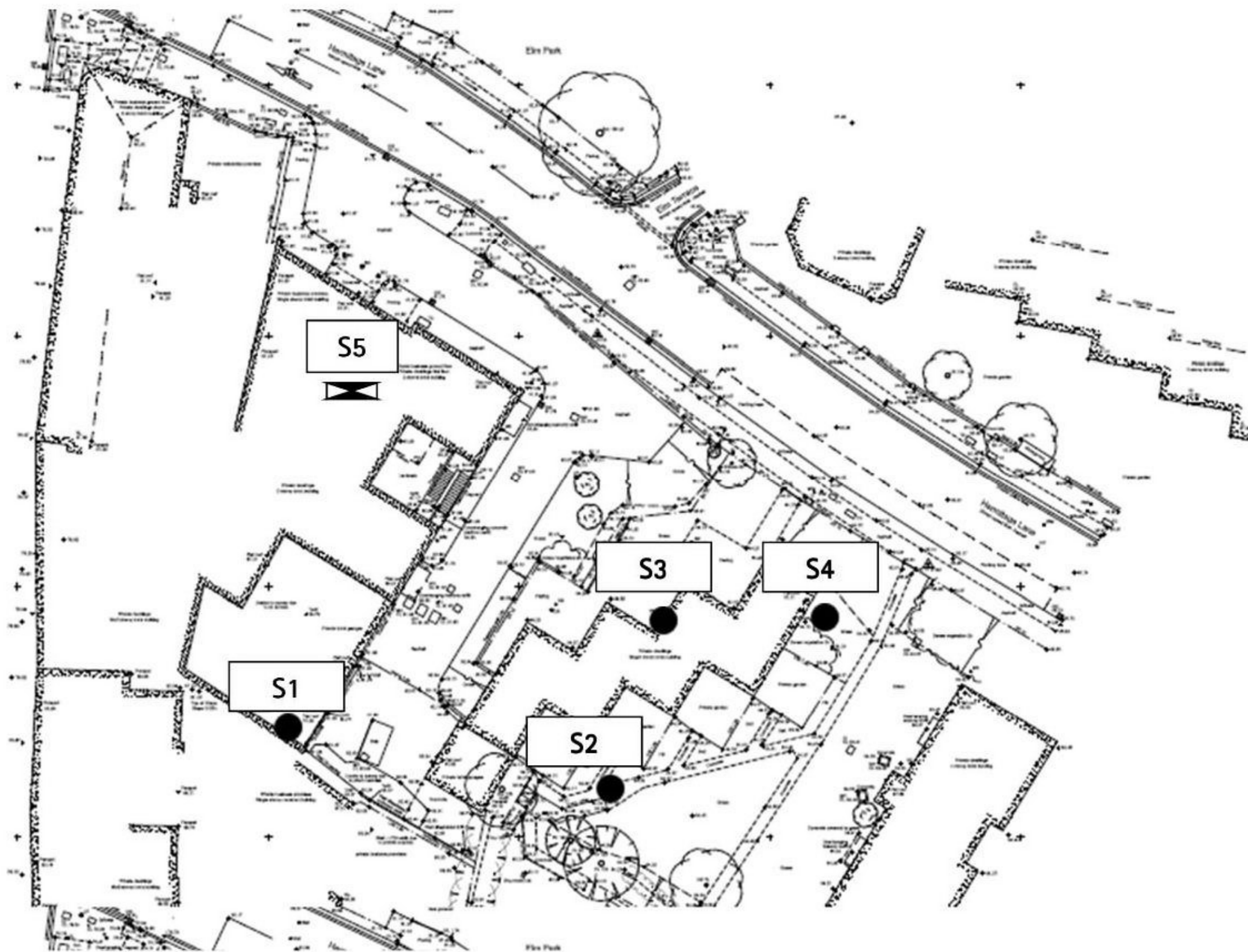
James Clifford
For and on behalf of
Southern Testing Laboratories Limited



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APPENDIX A

Site Plan



NB: Positions of sampling locations are only indicative unless dimensioned

Site: Hermitage Lane, London NW2

Date: 29 March 2021

STL: J14451

Fig No: 1

 Southern Testing

Southern Testing: Keeble House, Stuart Way, East Grinstead, West Sussex RH19 4QA
ST Consult: Twigden Barns, Brixworth Road, Creton, Northampton NN6 8NN

 ST Consult

Proposed Trial Pits – Post Demolition

APPENDIX B

Contamination Laboratory Test Results

Table 1 - Tier 1 Screening Values

Contaminant	Units	Proposed Land Use					
		Residential with home-grown produce consumption	Residential without home-grown produce consumption	Open Space* (Residential)	Open Space* (Park)	Allotments	Commercial / Industrial
Arsenic (As) [2]	mg/kg	37	40	79	170	43	640
Cadmium (Cd) [2]	mg/kg	11	85	120	555	1.9	190
Trivalent Chromium (CrIII) [2]	mg/kg	910	910	1,500	33,000	18,000	8600
Hexavalent Chromium (CrVI) [2]	mg/kg	6	6	7.7	220	1.8	33
Lead (Pb) [3]	mg/kg	200	310	630	1300	80	2330
Mercury (Hg) [1,2,7]	mg/kg	7.6-11	9.2-15	40	68-71	6.0	29-320
Selenium (Se) [2]	mg/kg	250	430	1,100	1,800	88	12,000
Nickel (Ni) [2,4]	mg/kg	130	180	230	800	53	980
Copper (Cu) [2,4]	mg/kg	2,400	7,100	12,000	44,000	520	68,000
Zinc (Zn) [2,4]	mg/kg	3,700	40,000	81,000	170,000	620	730,000
Phenol [1,2]	mg/kg	120-380	440-1200	440-1300	440-1300	23-83	440-1300
Benzo[a]pyrene [1,5]	mg/kg	1.7-2.4	2.6	4.9	10	0.67-2.7	36
Naphthalene [1,2]	mg/kg	2.3-13	2.3-13	77-430*	77-430*	4.1-24	77-430*
Total Cyanide (CN) [6]	mg/kg	/	/	/	/	/	/
Free Cyanide [6]	mg/kg	/	/	/	/	/	/
Complex Cyanides [6]	mg/kg	/	/	/	/	/	/
Thiocyanate [6]	mg/kg	/	/	/	/	/	/

Notes:

* Open Space levels calculated on the basis of the exposure modelling developed in the C4SL research.

+ Screening values constrained to saturation limit. Higher values may be acceptable on a site specific basis.

[1] Where ranges of values are given for organic contaminants the screening value is dependent on the Soil *Organic Matter.

[2] LQM/CIEH S4UL (2014). Copyright Land Quality Management Ltd reproduced with permission; Publication Number S4UL 3116. All rights reserved.

[3] C4SL (DEFRA 2014).

[4] Copper, Zinc and Nickel may have phototoxic effects at the given concentrations. Alternative criteria should be adopted for importation of Topsoil or other soils for cultivation. BS3882:2015 and BS8601:2013 suggest values of 200 to 300mg/kg for Zn, 100 to 200mg/kg for Cu, and 60 to 110mg/kg for Ni, for topsoil and subsoil, depending on pH.

[5] Based on the Surrogate Marker approach and modelled using the modified exposure parameters of C4SL but retaining 'minimal risk' HCV.

[6] Screening criteria derived on a site specific basis if test results indicate.

[7] S4UL for Methyl Mercury, higher concentrations may be tolerable if inorganic mercury is the only species present. Lower concentrations apply for elemental Mercury.

These screening values are valid at the time of writing but may be subject to change and any such changes will have implications for the assessments based on them. Their validity should be confirmed at the time of site development.




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Analytical Report Number : 21-57826

Project / Site name:	Hermitage Lane, London NW2	Samples received on:	19/02/2021
Your job number:	J14451	Samples instructed on/ Analysis started on:	19/02/2021
Your order number:	J14451_4	Analysis completed by:	02/03/2021
Report Issue Number:	1	Report issued on:	02/03/2021
Samples Analysed:	2 soil samples		


Agnieszka Czerwińska
Technical Reviewer (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

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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: 21-57826
 Project / Site name: Hermitage Lane, London NW2
 Your Order No: J14451_4

Lab Sample Number	1776074	1776075			
Sample Reference	S2	S4			
Sample Number	None Supplied	None Supplied			
Depth (m)	1.50	1.00			
Date Sampled	16/02/2021	16/02/2021			
Time Taken	1200	1200			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	16
Total mass of sample received	kg	0.001	NONE	1.2	1.1

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.5
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.41	0.24
Sulphide	mg/kg	1	MCERTS	53	3.5
Organic Matter	%	0.1	MCERTS	0.2	0.5

Total Phenols

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

Speciated PAHs

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

Total PAH

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

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	65	45
Copper (aqua regia extractable)	mg/kg	1	MCERTS	33	33
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	56
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	38	33
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	75	74

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number : 21-57826

Project / Site name: Hermitage Lane, London NW2

* 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 *
1776074	S2	None Supplied	1.5	Brown clay with gravel.
1776075	S4	None Supplied	1	Brown clay with gravel.

Analytical Report Number : 21-57826

Project / Site name: Hermitage Lane, London NW2

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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 (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	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
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
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.	L019-UK/PL	D	NONE
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 (Skalar)	L080-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.




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Analytical Report Number : 21-62264

Project / Site name:	Hermitage Lane, London NW2	Samples received on:	12/03/2021
Your job number:	J14451	Samples instructed on/ Analysis started on:	12/03/2021
Your order number:	J14451_5	Analysis completed by:	23/03/2021
Report Issue Number:	1	Report issued on:	23/03/2021
Samples Analysed:	2 soil samples		


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Technical Reviewer (Reporting Team)
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soils - 4 weeks from reporting
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asbestos - 6 months from reporting

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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: 21-62264
 Project / Site name: Hermitage Lane, London NW2
 Your Order No: J14451_5

Lab Sample Number	1801116	1801117			
Sample Reference	S5	S5			
Sample Number	None Supplied	None Supplied			
Depth (m)	0.30	0.60			
Date Sampled	11/03/2021	11/03/2021			
Time Taken	None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.9	17
Total mass of sample received	kg	0.001	NONE	1.0	1.0

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.4	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.5	0.27
Sulphide	mg/kg	1	MCERTS	1.9	< 1.0
Organic Matter	%	0.1	MCERTS	0.6	1.1

Total Phenols

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

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.55	0.89
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.0	1.6
Pyrene	mg/kg	0.05	MCERTS	0.91	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.67	1.0
Chrysene	mg/kg	0.05	MCERTS	0.49	0.73
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.61	0.95
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.32	0.45
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.59	0.90
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.42	0.56
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.47	0.60

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	6.04	9.10

Analytical Report Number: 21-62264
 Project / Site name: Hermitage Lane, London NW2
 Your Order No: J14451_5

Lab Sample Number	1801116	1801117	
Sample Reference	S5	S5	
Sample Number	None Supplied	None Supplied	
Depth (m)	0.30	0.60	
Date Sampled	11/03/2021	11/03/2021	
Time Taken	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	17
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	35
Copper (aqua regia extractable)	mg/kg	1	MCERTS	150	52
Lead (aqua regia extractable)	mg/kg	1	MCERTS	210	230
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	0.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150	110

Petroleum Hydrocarbons

TPH C10 - C40	mg/kg	10	MCERTS	< 10	12
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U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-62264

Project / Site name: Hermitage Lane, London NW2

* 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 *
1801116	S5	None Supplied	0.3	Brown sandy gravel.**
1801117	S5	None Supplied	0.6	Brown clay and loam with gravel.

** Non MCERTS Matrix

Analytical Report Number : 21-62264

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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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 (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	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
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
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.	L019-UK/PL	D	NONE
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 (Skalar)	L080-PL	W	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.