



Geotechnical and Geo-environmental Consultants

Brown 2 Green Associates Ltd
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Station Road, Wendens Ambo
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CB11 4LB
Tel: 01799 542473
Email: info@brown2green.co.uk
Web: www.brown2green.co.uk

Our Ref: 2293/Rpt 3v1
Your Ref:

16th September 2022

Michael James
Tally Homes Ltd

Dear Michael

Re: 102 Northumberland Park, Tottenham, London

Find attached the results of the verification completed at the above site.

Yours sincerely
For and on behalf of Brown 2 Green Associates Ltd

A handwritten signature in blue ink, appearing to read 'P. Miles'.

Philip Miles
Director

GARDEN VERIFICATION REPORT

SITE: 102 NORTHUMBERLAND PARK, TOTTENHAM, LONDON

1.0 Introduction

This report presents the results of verification completed on the above site. The objective of the verification is to confirm that remediation has been completed in accordance with the specification detailed in the Remediation Method Statement presented in the following document:

- Remediation Method Statement: 102 Northumberland Park, London, N17 OTS; Ref: 2293/Rpt 2 V1; dated June 2019; prepared by Brown 2 Green Associates Ltd.

2.0 Remediation

The remediation consisted of the excavation of contaminated soil to a specified depth and backfilling of the resulting excavation with clean suitable top and sub-soil. Within areas of private gardens and soft landscaping the excavation was taken to a depth of 600mm below finished garden level to allow the placement of a 600mm thick barrier of clean suitable top and sub soil.

Following the placement of the sub soil, verification was undertaken. The results of samples obtained on 16th June 2022 indicates that the sub soil that had been placed the garden area of Plot 1A and Plot 2 was chemical unsuitable as the concentrations of individual polycyclic aromatic hydrocarbons and lead were at levels that exceed the verification criteria. These areas were subsequently re-excavated and the soil was replaced.

3.0 Verification

The first verification visit to assess the sub-soil was completed on 16th June 2022. The second verification visit was completed on 31 August 2022. During the second visit, verification of the top soil and the replacement of soil was also undertaken.

During the verification visit hand dug trial pits were excavated to the base of the placed top and sub-soil. The locations of the trial pits are presented in Figure 1.

As required by the Remediation Method Statement soil samples were obtained and submitted to a UKAS accredited laboratory for chemical analysis. Samples were analysed in accordance with the chemical suite detailed in the Remediation Method Statement. Samples of the top and sub soil were analysed for metals, speciated polycyclic aromatic hydrocarbons, total petroleum hydrocarbons and asbestos. The sample of top soil obtained from Plot 1 consisted of a highly organic pseudo-fibrous peat. This sample was analysed for speciated Total Petroleum Hydrocarbon, to reduce the potential for interference of the result by the presence of organic acids that are likely to be present within peaty material.

4.0 Results

Depth of Excavation

The following ground conditions were encountered during the verification visit completed on 16th June 2022:

Plot 1

Depth Range (m bgl)	Description
0.0 – 0.6	Sub-soil – brown slightly gravelly, slightly sandy silty clay. Gravel of fine to medium, angular to subround chert.

Plot 1A

Depth Range (m bgl)	Description
0.0 – 0.6	Sub-soil – brown slightly gravelly, slightly sandy silty clay. Gravel of fine to medium, angular to subround chert.

Plot 2

Depth Range (m bgl)	Description
0.0 – 0.60	Dark brown, slightly gravelly sandy clay with occasional brick fragments and charcoal.

Plot 7

Depth Range (m bgl)	Description
0.0 – 0.60	Sub-soil – brown slightly gravelly, slightly sandy silty clay. Gravel of fine to medium, angular to subround chert.

Plot 8

Depth Range (m bgl)	Description
0.0 – 0.60	Sub-soil – brown slightly gravelly, slightly sandy silty clay. Gravel of fine to medium, angular to subround chert.

Communal Area

Depth Range (m bgl)	Description
0.0 – 0.60	Sub soil – dark brown gravelly sand with occasional brick fragments. Gravel of fine to medium subround to subangular chert.

The following ground conditions were encountered during the verification visit completed on 31st August 2022:

Plot 1

Depth Range (m bgl)	Description
0.0 – 0.6	Top-soil – dark brown pseudo-fibrous peat.

Plot 1A

Depth Range (m bgl)	Description
0.0 – 0.6	Top-soil – Brown, slightly gravelly silty fine to medium sand. Gravel of fine to medium angular to round flint and quartz.

Plot 2

Depth Range (m bgl)	Description
0.0 – 0.2	Top-soil – Brown, slightly gravelly silty fine to medium sand. Gravel of fine to medium angular to round flint and quartz.
0.2 – 0.6	Sub-soil – Greyish brown, slightly gravelly, slightly sandy silty clay with are wood fragments and gravel of fine to medium chert/flint.

Plot 7

Depth Range (m bgl)	Description
0.0 – 0.25	Top-soil – Brown, slightly gravelly silty fine to medium sand. Gravel of fine to medium angular to round flint and quartz.

Plot 8

Depth Range (m bgl)	Description
0.0 – 0.6	Top-soil – Brown, slightly gravelly silty fine to medium sand. Gravel of fine to medium angular to round flint and quartz.

Communal area

Depth Range (m bgl)	Description
0.0 – 0.6	Top-soil – Brown, slightly gravelly silty fine to medium sand. Gravel of fine to medium angular to round flint and quartz.

Chemical Analysis

Samples of the top soil and sub-soil used to backfill the excavation were submitted for analysis. The laboratory reports are attached.

Within the sub soil samples obtained on 16th June 2022, concentrations of determinants were all less than the verification criteria in Plots 1, 7, 8 and the communal area. In the samples obtained from Plots 1A and 2, concentrations of individual PAHs (benzo[b]fluoranthene, benzo[a]pyrene and dibenz(a,h)anthracene) exceed the verification criteria. Further remediation resulted in the removal of this soil.

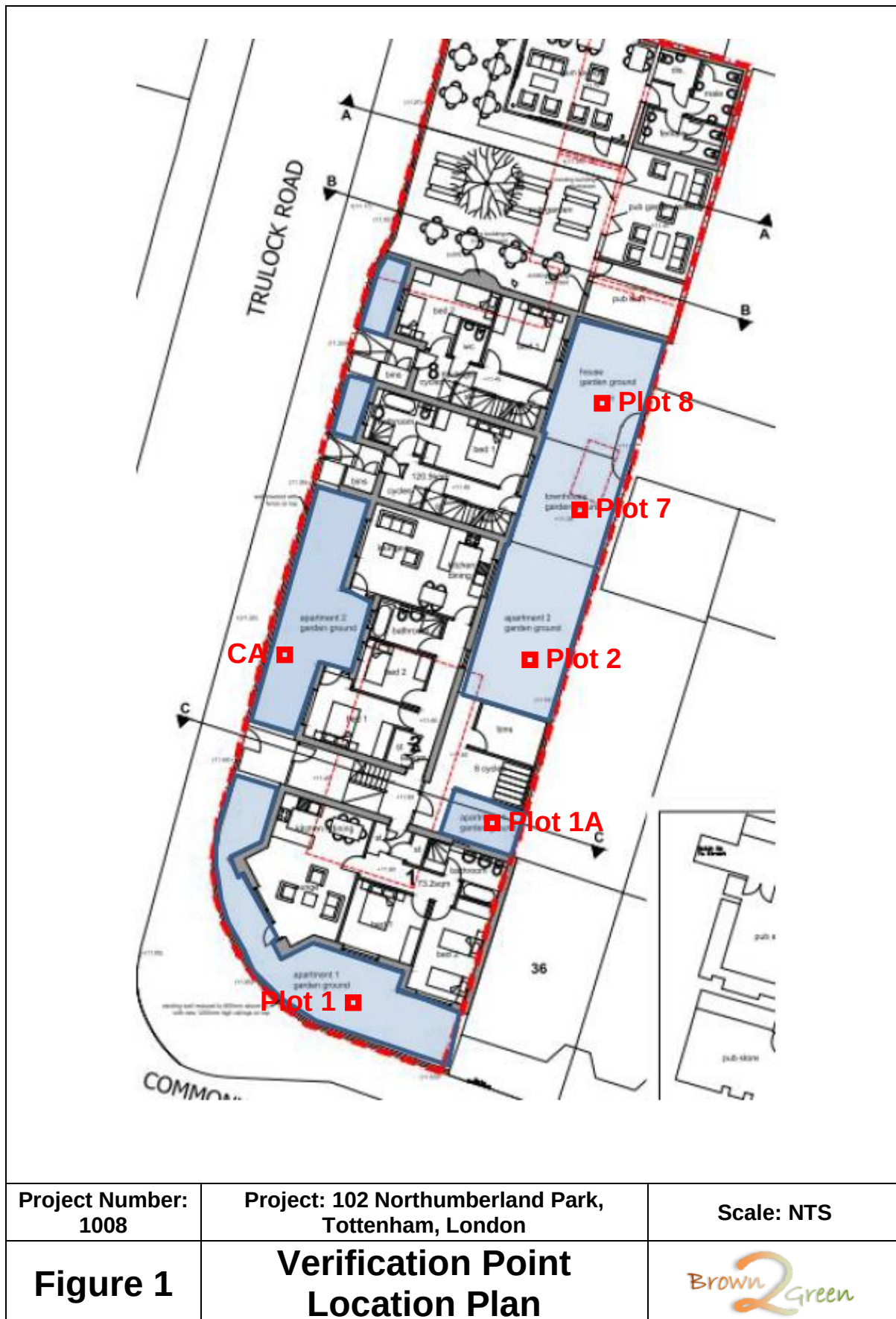
The results of the top soil sample obtained on 30th August 2022 confirmed that in Plots 1A, 2, 7, 8 and the communal areas the concentrations were less than the verification criteria. In the sample obtained from Plot 1, TPH concentrations were greater than the verification criteria. In this sample the organic matter content was 84%. No visual or olfactory evidence of hydrocarbons was noted. To determine if the concentrations pose an unacceptable level of risk, the results have been compared with the Generic Assessment Criteria (GAC) detailed in Nathanail, C. P., McCaffrey, C., Gillett, A. G., Ogden, R. C. and Nathanail, J. F. 2015: The LQM/CIEH S4ULs for Human Health Risk Assessment. Land Quality Press, Nottingham. As all concentrations are less than the GAC, it is considered that the TPH concentrations will not pose an unacceptable level of risk to human health and the soil is suitable for use.

5.0 Conclusions

From the results the verification confirms that:

- A suitable depth of excavation and thickness of replacement soil is present.
- The chemical quality of the soil used to backfill the excavated area is suitable for use.

- The remediation undertaken as broken all the identified exposure pathways and contamination will not pose an unacceptable level of risk to human health and environmental receptors.



16th June 2022



General view



Plot 1



Plot 2



Plot 7

31st August 2022



Plot 1



Plot A1



Plot 7



Plot 8



Final Report

Report No.: 22-22534-1
Initial Date of Issue: 22-Jun-2022
Client Brown 2 Green Associates
Client Address: Suite 1, Wenden Court
Station Road
Wendens Ambo
Nr. Saffron Walden
Essex
CB11 4LB
Contact(s): Philip Miles
Radu Mihai Ilie
Project 2293 102 Northumberland Park,
Tottenham

Quotation No.:	Date Received:	17-Jun-2022
Order No.:	Date Instructed:	17-Jun-2022
No. of Samples:		6
Turnaround (Wkdays):	Results Due:	23-Jun-2022
Date Approved:		22-Jun-2022

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:					22-22534	22-22534	22-22534	22-22534	22-22534	22-22534
Quotation No.:	Chemtest Sample ID.:					1449990	1449991	1449992	1449993	1449994	1449995
	Client Sample ID.:					SS	SS	SS	SS	SS	SS
	Sample Location:					Plot 1	Plot 1A	Plot 2	Plot 7	Plot 8	Plot CA
	Sample Type:					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Date Sampled:					16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
	Asbestos Lab:					COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
ACM Type	U	2192		N/A	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	11	13	14	17	17	11	
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Sand	
pH	M	2010		4.0	8.0	8.0	8.3	8.1	8.2	8.3	
Arsenic	M	2455	mg/kg	0.5	7.0	14	13	4.8	4.9	6.9	
Cadmium	M	2455	mg/kg	0.10	< 0.10	0.53	0.70	< 0.10	< 0.10	0.44	
Chromium	M	2455	mg/kg	0.5	18	20	17	8.1	8.4	8.6	
Copper	M	2455	mg/kg	0.50	12	74	43	13	13	25	
Mercury	M	2455	mg/kg	0.05	0.07	0.60	0.37	0.18	0.13	0.24	
Nickel	M	2455	mg/kg	0.50	11	15	12	5.4	5.6	7.3	
Lead	M	2455	mg/kg	0.50	28	270	320	52	70	130	
Selenium	M	2455	mg/kg	0.25	< 0.25	0.61	0.41	< 0.25	< 0.25	< 0.25	
Vanadium	U	2455	mg/kg	0.5	24	29	23	13	13	14	
Zinc	M	2455	mg/kg	0.50	32	210	130	30	31	97	
Organic Matter	M	2625	%	0.40	1.2	7.2	8.5	1.6	2.2	2.6	
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C12-C16	N	2670	mg/kg	1.0	< 1.0	4.7	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C16-C21	N	2670	mg/kg	1.0	< 1.0	21	11	< 1.0	< 1.0	13	
TPH >C21-C35	N	2670	mg/kg	1.0	< 1.0	58	15	< 1.0	< 1.0	27	
Total TPH >C5-C35	N	2670	mg/kg	10	< 10	84	26	< 10	< 10	40	
Naphthalene	M	2800	mg/kg	0.10	< 0.10	1.8	0.28	< 0.10	< 0.10	< 0.10	
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	0.42	0.17	< 0.10	< 0.10	< 0.10	
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	2.1	0.13	< 0.10	< 0.10	< 0.10	
Fluorene	M	2800	mg/kg	0.10	< 0.10	2.5	0.21	< 0.10	< 0.10	< 0.10	
Phenanthrene	M	2800	mg/kg	0.10	< 0.10	9.6	2.2	< 0.10	< 0.10	1.5	
Anthracene	M	2800	mg/kg	0.10	< 0.10	3.4	0.47	< 0.10	< 0.10	0.32	
Fluoranthene	M	2800	mg/kg	0.10	< 0.10	18	4.7	0.53	0.40	3.3	
Pyrene	M	2800	mg/kg	0.10	< 0.10	16	3.9	0.52	0.41	2.7	
Benzo[a]anthracene	M	2800	mg/kg	0.10	< 0.10	6.9	2.1	< 0.10	< 0.10	1.4	
Chrysene	M	2800	mg/kg	0.10	< 0.10	5.4	1.7	< 0.10	< 0.10	1.3	
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	< 0.10	8.9	2.8	< 0.10	< 0.10	2.1	

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:					22-22534	22-22534	22-22534	22-22534	22-22534	22-22534
Quotation No.:	Chemtest Sample ID.:					1449990	1449991	1449992	1449993	1449994	1449995
	Client Sample ID.:					SS	SS	SS	SS	SS	SS
	Sample Location:					Plot 1	Plot 1A	Plot 2	Plot 7	Plot 8	Plot CA
	Sample Type:					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Date Sampled:					16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022	16-Jun-2022
	Asbestos Lab:					COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD							
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10	3.3	1.0	< 0.10	< 0.10	0.78	
Benzo[a]pyrene	M	2800	mg/kg	0.10	< 0.10	6.9	2.2	< 0.10	< 0.10	1.7	
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	< 0.10	4.5	1.6	< 0.10	< 0.10	1.2	
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	0.88	0.36	< 0.10	< 0.10	0.25	
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10	4.0	1.5	< 0.10	< 0.10	1.1	
Total Of 16 PAH's	N	2800	mg/kg	2.0	< 2.0	95	25	< 2.0	< 2.0	18	

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com



Amended Report

Report No.:	22-33488-2		
Initial Date of Issue:	07-Sep-2022	Date of Re-Issue:	15-Sep-2022
Client	Brown 2 Green Associates		
Client Address:	Suite 1, Wenden Court Station Road Wendens Ambo Nr. Saffron Walden Essex CB11 4LB		
Contact(s):	Philip Miles Radu Mihai Ilie		
Project	2293 102 Northumberland Park, Tottenham		
Quotation No.:		Date Received:	02-Sep-2022
Order No.:		Date Instructed:	02-Sep-2022
No. of Samples:	1		
Turnaround (Wkdays):	9	Results Due:	14-Sep-2022
Date Approved:	15-Sep-2022		
Approved By:			
Details:	Stuart Henderson, Technical Manager		

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33488		
Quotation No.:	Chemtest Sample ID.:		1498785		
	Client Sample ID.:		TS		
	Sample Location:		Plot 1		
	Sample Type:		SOIL		
	Top Depth (m):		0.3		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	74
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Roots
Soil Texture	N	2040		N/A	Loam
pH	M	2010		4.0	6.8
Arsenic	M	2455	mg/kg	0.5	0.7
Cadmium	M	2455	mg/kg	0.10	< 0.10
Chromium	M	2455	mg/kg	0.5	4.0
Copper	M	2455	mg/kg	0.50	5.1
Mercury	M	2455	mg/kg	0.05	< 0.05
Nickel	M	2455	mg/kg	0.50	< 0.50
Lead	M	2455	mg/kg	0.50	5.2
Selenium	M	2455	mg/kg	0.25	< 0.25
Vanadium	U	2455	mg/kg	0.5	0.6
Zinc	M	2455	mg/kg	0.50	7.5
Organic Matter	M	2625	%	0.40	84
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	880
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	880
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	1600
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	1600
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	2500

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33488		
Quotation No.:	Chemtest Sample ID.:		1498785		
	Client Sample ID.:		TS		
	Sample Location:		Plot 1		
	Sample Type:		SOIL		
	Top Depth (m):		0.3		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Naphthalene	M	2800	mg/kg	0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	< 0.10
Anthracene	M	2800	mg/kg	0.10	< 0.10
Fluoranthene	M	2800	mg/kg	0.10	0.17
Pyrene	M	2800	mg/kg	0.10	0.12
Benzo[a]anthracene	M	2800	mg/kg	0.10	< 0.10
Chrysene	M	2800	mg/kg	0.10	< 0.10
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	< 0.10
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10
Benzo[a]pyrene	M	2800	mg/kg	0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10
Total Of 16 PAH's	N	2800	mg/kg	2.0	< 2.0

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS

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None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

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Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com



Final Report

Report No.: 22-33493-1

Initial Date of Issue: 08-Sep-2022

Client Brown 2 Green Associates

Client Address: Suite 1, Wenden Court
Station Road
Wendens Ambo
Nr. Saffron Walden
Essex
CB11 4LB

Contact(s): Philip Miles
Radu Mihai Ilie

Project 2293 102 Northumberland Park,
Tottenham

Quotation No.: **Date Received:** 02-Sep-2022

Order No.: **Date Instructed:** 02-Sep-2022

No. of Samples: 1

Turnaround (Wkdays): 5 **Results Due:** 08-Sep-2022

Date Approved: 08-Sep-2022

Approved By:

Details: Stuart Henderson, Technical Manager

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33493		
Quotation No.:	Chemtest Sample ID.:		1498807		
	Client Sample ID.:		TS		
	Sample Location:		Plot 1A		
	Sample Type:		SOIL		
	Top Depth (m):		0.0		
	Bottom Depth (m):		0.6		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		NEW-ASB		
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	8.3
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones
Soil Texture	N	2040		N/A	Loam
pH	M	2010		4.0	7.3
Arsenic	M	2455	mg/kg	0.5	5.6
Cadmium	M	2455	mg/kg	0.10	0.12
Chromium	M	2455	mg/kg	0.5	13
Copper	M	2455	mg/kg	0.50	16
Mercury	M	2455	mg/kg	0.05	0.08
Nickel	M	2455	mg/kg	0.50	11
Lead	M	2455	mg/kg	0.50	56
Selenium	M	2455	mg/kg	0.25	0.29
Vanadium	U	2455	mg/kg	0.5	19
Zinc	M	2455	mg/kg	0.50	63
Organic Matter	M	2625	%	0.40	2.5
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	4.5
TPH >C16-C21	N	2670	mg/kg	1.0	14
TPH >C21-C35	N	2670	mg/kg	1.0	65
Total TPH >C5-C35	N	2670	mg/kg	10	83
Naphthalene	M	2800	mg/kg	0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	1.3
Anthracene	M	2800	mg/kg	0.10	0.47
Fluoranthene	M	2800	mg/kg	0.10	3.5
Pyrene	M	2800	mg/kg	0.10	3.1
Benzo[a]anthracene	M	2800	mg/kg	0.10	1.8

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.: 22-33493				
Quotation No.:	Chemtest Sample ID.: 1498807				
	Client Sample ID.: TS				
	Sample Location: Plot 1A				
	Sample Type: SOIL				
	Top Depth (m): 0.0				
	Bottom Depth (m): 0.6				
	Date Sampled: 31-Aug-2022				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
Chrysene	M	2800	mg/kg	0.10	1.8
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	2.5
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	0.88
Benzo[a]pyrene	M	2800	mg/kg	0.10	2.2
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	1.5
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.27
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	1.3
Total Of 16 PAH's	N	2800	mg/kg	2.0	21

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS

Report Information

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U	UKAS accredited
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I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

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customerservices@chemtest.com



Final Report

Report No.:	22-33497-1		
Initial Date of Issue:	07-Sep-2022		
Client	Brown 2 Green Associates		
Client Address:	Suite 1, Wenden Court Station Road Wendens Ambo Nr. Saffron Walden Essex CB11 4LB		
Contact(s):	Philip Miles Radu Mihai Ilie		
Project	2293 102 Northumberland Park, Tottenham		
Quotation No.:		Date Received:	02-Sep-2022
Order No.:		Date Instructed:	02-Sep-2022
No. of Samples:	2		
Turnaround (Wkdays):	5	Results Due:	08-Sep-2022
Date Approved:	07-Sep-2022		
Approved By:			
Details:	Stuart Henderson, Technical Manager		

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:				22-33497	22-33497
Quotation No.:	Chemtest Sample ID.:				1498817	1498818
	Client Sample ID.:				TS	SS
	Sample Location:				Plot 2	Plot 2
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.0	0.2
	Bottom Depth (m):				0.2	0.6
	Date Sampled:				31-Aug-2022	31-Aug-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
ACM Type	U	2192		N/A	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	6.2	15
Soil Colour	N	2040		N/A	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones
Soil Texture	N	2040		N/A	Loam	Clay
pH	M	2010		4.0	8.2	8.0
Arsenic	M	2455	mg/kg	0.5	5.4	7.1
Cadmium	M	2455	mg/kg	0.10	0.15	0.33
Chromium	M	2455	mg/kg	0.5	13	11
Copper	M	2455	mg/kg	0.50	19	25
Mercury	M	2455	mg/kg	0.05	0.07	0.28
Nickel	M	2455	mg/kg	0.50	9.8	14
Lead	M	2455	mg/kg	0.50	56	100
Selenium	M	2455	mg/kg	0.25	< 0.25	0.32
Vanadium	U	2455	mg/kg	0.5	18	17
Zinc	M	2455	mg/kg	0.50	77	78
Organic Matter	M	2625	%	0.40	2.0	6.0
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	6.9	< 1.0
TPH >C16-C21	N	2670	mg/kg	1.0	13	< 1.0
TPH >C21-C35	N	2670	mg/kg	1.0	36	< 1.0
Total TPH >C5-C35	N	2670	mg/kg	10	56	< 10
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	0.87	0.80
Anthracene	M	2800	mg/kg	0.10	0.30	0.28
Fluoranthene	M	2800	mg/kg	0.10	2.8	2.8
Pyrene	M	2800	mg/kg	0.10	2.6	2.5
Benzo[a]anthracene	M	2800	mg/kg	0.10	1.8	1.5

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:				22-33497	22-33497
Quotation No.:	Chemtest Sample ID.:				1498817	1498818
	Client Sample ID.:				TS	SS
	Sample Location:				Plot 2	Plot 2
	Sample Type:				SOIL	SOIL
	Top Depth (m):				0.0	0.2
	Bottom Depth (m):				0.2	0.6
	Date Sampled:				31-Aug-2022	31-Aug-2022
	Asbestos Lab:				DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD		
Chrysene	M	2800	mg/kg	0.10	1.5	1.6
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	2.6	2.2
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	1.0	0.83
Benzo[a]pyrene	M	2800	mg/kg	0.10	2.2	2.0
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	1.6	1.3
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.21	0.21
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	1.3	1.2
Total Of 16 PAH's	N	2800	mg/kg	2.0	19	17

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS

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Final Report

Report No.:	22-33490-1		
Initial Date of Issue:	07-Sep-2022		
Client	Brown 2 Green Associates		
Client Address:	Suite 1, Wenden Court Station Road Wendens Ambo Nr. Saffron Walden Essex CB11 4LB		
Contact(s):	Philip Miles Radu Mihai Ilie		
Project	2293 102 Northumberland Park, Tottenham		
Quotation No.:		Date Received:	02-Sep-2022
Order No.:		Date Instructed:	02-Sep-2022
No. of Samples:	1		
Turnaround (Wkdays):	5	Results Due:	08-Sep-2022
Date Approved:	07-Sep-2022		
Approved By:			
Details:	Stuart Henderson, Technical Manager		

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33490		
Quotation No.:	Chemtest Sample ID.:		1498787		
	Client Sample ID.:		TS		
	Sample Location:		Plot 7		
	Sample Type:		SOIL		
	Top Depth (m):		0.0		
	Bottom Depth (m):		0.25		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	7.3
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones
Soil Texture	N	2040		N/A	Gravel
pH	M	2010		4.0	8.2
Arsenic	M	2455	mg/kg	0.5	5.5
Cadmium	M	2455	mg/kg	0.10	0.14
Chromium	M	2455	mg/kg	0.5	13
Copper	M	2455	mg/kg	0.50	19
Mercury	M	2455	mg/kg	0.05	0.09
Nickel	M	2455	mg/kg	0.50	10
Lead	M	2455	mg/kg	0.50	62
Selenium	M	2455	mg/kg	0.25	0.25
Vanadium	U	2455	mg/kg	0.5	19
Zinc	M	2455	mg/kg	0.50	78
Organic Matter	M	2625	%	0.40	3.1
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	2.3
TPH >C10-C12	N	2670	mg/kg	1.0	3.9
TPH >C12-C16	N	2670	mg/kg	1.0	11
TPH >C16-C21	N	2670	mg/kg	1.0	17
TPH >C21-C35	N	2670	mg/kg	1.0	60
Total TPH >C5-C35	N	2670	mg/kg	10	94
Naphthalene	M	2800	mg/kg	0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	0.91
Anthracene	M	2800	mg/kg	0.10	0.26
Fluoranthene	M	2800	mg/kg	0.10	2.5
Pyrene	M	2800	mg/kg	0.10	2.2
Benzo[a]anthracene	M	2800	mg/kg	0.10	1.2

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33490		
Quotation No.:	Chemtest Sample ID.:		1498787		
	Client Sample ID.:		TS		
	Sample Location:		Plot 7		
	Sample Type:		SOIL		
	Top Depth (m):		0.0		
	Bottom Depth (m):		0.25		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Chrysene	M	2800	mg/kg	0.10	1.2
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	2.1
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	0.69
Benzo[a]pyrene	M	2800	mg/kg	0.10	1.7
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	1.1
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.24
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	1.2
Total Of 16 PAH's	N	2800	mg/kg	2.0	15

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2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
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2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS

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Final Report

Report No.: 22-33495-1

Initial Date of Issue: 07-Sep-2022

Client Brown 2 Green Associates

Client Address: Suite 1, Wenden Court
Station Road
Wendens Ambo
Nr. Saffron Walden
Essex
CB11 4LB

Contact(s): Philip Miles
Radu Mihai Ilie

Project 2293 102 Northumberland Park,
Tottenham

Quotation No.: **Date Received:** 02-Sep-2022

Order No.: **Date Instructed:** 02-Sep-2022

No. of Samples: 1

Turnaround (Wkdays): 5 **Results Due:** 08-Sep-2022

Date Approved: 07-Sep-2022

Approved By:

Details: Stuart Henderson, Technical Manager

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33495		
Quotation No.:	Chemtest Sample ID.:		1498815		
	Client Sample ID.:		TS		
	Sample Location:		Plot 8		
	Sample Type:		SOIL		
	Top Depth (m):		0.0		
	Bottom Depth (m):		0.25		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	3.6
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones
Soil Texture	N	2040		N/A	Gravel
pH	M	2010		4.0	8.4
Arsenic	M	2455	mg/kg	0.5	5.0
Cadmium	M	2455	mg/kg	0.10	0.19
Chromium	M	2455	mg/kg	0.5	12
Copper	M	2455	mg/kg	0.50	17
Mercury	M	2455	mg/kg	0.05	0.07
Nickel	M	2455	mg/kg	0.50	9.3
Lead	M	2455	mg/kg	0.50	53
Selenium	M	2455	mg/kg	0.25	< 0.25
Vanadium	U	2455	mg/kg	0.5	17
Zinc	M	2455	mg/kg	0.50	65
Organic Matter	M	2625	%	0.40	3.0
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	1.5
TPH >C10-C12	N	2670	mg/kg	1.0	4.9
TPH >C12-C16	N	2670	mg/kg	1.0	12
TPH >C16-C21	N	2670	mg/kg	1.0	21
TPH >C21-C35	N	2670	mg/kg	1.0	46
Total TPH >C5-C35	N	2670	mg/kg	10	85
Naphthalene	M	2800	mg/kg	0.10	0.12
Acenaphthylene	N	2800	mg/kg	0.10	0.27
Acenaphthene	M	2800	mg/kg	0.10	0.12
Fluorene	M	2800	mg/kg	0.10	0.14
Phenanthrene	M	2800	mg/kg	0.10	1.4
Anthracene	M	2800	mg/kg	0.10	0.59
Fluoranthene	M	2800	mg/kg	0.10	5.1
Pyrene	M	2800	mg/kg	0.10	4.6
Benzo[a]anthracene	M	2800	mg/kg	0.10	2.7

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33495		
Quotation No.:	Chemtest Sample ID.:		1498815		
	Client Sample ID.:		TS		
	Sample Location:		Plot 8		
	Sample Type:		SOIL		
	Top Depth (m):		0.0		
	Bottom Depth (m):		0.25		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Chrysene	M	2800	mg/kg	0.10	2.7
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	3.2
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	1.3
Benzo[a]pyrene	M	2800	mg/kg	0.10	2.5
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	2.4
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.28
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	2.0
Total Of 16 PAH's	N	2800	mg/kg	2.0	29

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com



Final Report

Report No.: 22-33480-1

Initial Date of Issue: 07-Sep-2022

Client Brown 2 Green Associates

Client Address: Suite 1, Wenden Court
Station Road
Wendens Ambo
Nr. Saffron Walden
Essex
CB11 4LB

Contact(s): Philip Miles

Project 2293 102 Northumberland Park,
Tottenham

Quotation No.:

Order No.:

No. of Samples: 1

Turnaround (Wkdays): 5

Date Approved: 07-Sep-2022

Approved By:

Date Received: 02-Sep-2022

Date Instructed: 02-Sep-2022

Results Due: 08-Sep-2022

Details: Stuart Henderson, Technical Manager

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33480		
Quotation No.:	Chemtest Sample ID.:		1498754		
	Client Sample ID.:		TS		
	Sample Location:		Plot CA		
	Sample Type:		SOIL		
	Top Depth (m):		0.0		
	Bottom Depth (m):		0.4		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	12
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones
Soil Texture	N	2040		N/A	Clay
pH	M	2010		4.0	8.7
Arsenic	M	2455	mg/kg	0.5	6.6
Cadmium	M	2455	mg/kg	0.10	0.19
Chromium	M	2455	mg/kg	0.5	14
Copper	M	2455	mg/kg	0.50	21
Mercury	M	2455	mg/kg	0.05	0.12
Nickel	M	2455	mg/kg	0.50	11
Lead	M	2455	mg/kg	0.50	74
Selenium	M	2455	mg/kg	0.25	0.36
Vanadium	U	2455	mg/kg	0.5	20
Zinc	M	2455	mg/kg	0.50	86
Organic Matter	M	2625	%	0.40	2.6
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	12
TPH >C16-C21	N	2670	mg/kg	1.0	30
TPH >C21-C35	N	2670	mg/kg	1.0	110
Total TPH >C5-C35	N	2670	mg/kg	10	150
Naphthalene	M	2800	mg/kg	0.10	0.13
Acenaphthylene	N	2800	mg/kg	0.10	0.22
Acenaphthene	M	2800	mg/kg	0.10	0.16
Fluorene	M	2800	mg/kg	0.10	0.20
Phenanthrene	M	2800	mg/kg	0.10	2.1
Anthracene	M	2800	mg/kg	0.10	0.67
Fluoranthene	M	2800	mg/kg	0.10	5.2
Pyrene	M	2800	mg/kg	0.10	4.7
Benzo[a]anthracene	M	2800	mg/kg	0.10	2.6

Results - Soil

Project: 2293 102 Northumberland Park, Tottenham

Client: Brown 2 Green Associates	Chemtest Job No.:		22-33480		
Quotation No.:	Chemtest Sample ID.:		1498754		
	Client Sample ID.:		TS		
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	Sample Type:		SOIL		
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	Bottom Depth (m):		0.4		
	Date Sampled:		31-Aug-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
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Benzo[a]pyrene	M	2800	mg/kg	0.10	2.4
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	2.1
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.24
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	1.9
Total Of 16 PAH's	N	2800	mg/kg	2.0	31

Test Methods

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2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS

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