



Final Report

Report No.: 22-35242-1
Initial Date of Issue: 22-Sep-2022
Client SOCOTEC
Client Address: Unit 11
Cowley Mill Trading Estate
Longbridge Way
Uxbridge
UB8 2YG
Contact(s): Cameo Searle
Mat Admin
Mohamed Jaffer
Project UXB0556235 Nestles Avenue, Hayes
HENRY CONSTRUCTION

Quotation No.:		Date Received:	14-Sep-2022
Order No.:	191821UXB	Date Instructed:	14-Sep-2022
No. of Samples:	10		
Turnaround (Wkdays):	7	Results Due:	23-Sep-2022
Date Approved:	22-Sep-2022		

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: UXB0556235 Nestles Avenue, Hayes HENRY

CONSTRUCTION

Client: SOCOTEC	Chemtest Job No.:				22-35242	22-35242	22-35242	22-35242	22-35242	22-35242	22-35242	22-35242	22-35242
Quotation No.:	Chemtest Sample ID.:				1506507	1506508	1506509	1506510	1506511	1506512	1506513	1506514	1506515
Order No.: 191821UXB	Client Sample Ref.:				1	2	3	4	5	6	7	8	9
	Client Sample ID.:				26788013-F1-1	26788014-F1-2	26788015-F2-1	26788016-F2-2	26788017-F2-3	26788018-F2-4	26788019-F3-1	26788020-F3-2	26788021-F3-3
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Date Sampled:				01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022
	Asbestos Lab:				DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	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	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	4.5	4.6	4.1	6.2	1.6	6.9	6.6	3.0	3.0
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Beige	Brown	Brown
Other Material	N	2040		N/A	Stones	Roots and Stones	Stones and Roots	Stones and Roots	Roots, Stones and Wood	Stones and Roots	Stones and Roots	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Gravel
pH	M	2010		4.0	10.0	9.7	8.9	9.0	9.0	9.2	8.6	8.7	9.7
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	1.5	1.7	2.8	3.2	2.0	1.7	3.5	3.3	4.4
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Arsenic	M	2455	mg/kg	0.5	7.9	10	7.5	7.7	7.8	5.7	10	5.4	6.4
Beryllium	U	2455	mg/kg	0.5	0.5	0.6	0.5	0.5	0.5	< 0.5	0.7	< 0.5	< 0.5
Cadmium	M	2455	mg/kg	0.10	< 0.10	0.13	0.16	0.13	0.14	0.31	0.15	< 0.10	0.11
Copper	M	2455	mg/kg	0.50	10	12	23	21	100	18	21	14	32
Mercury	M	2455	mg/kg	0.05	0.12	0.16	0.27	0.42	0.24	0.13	0.64	1.5	0.32
Nickel	M	2455	mg/kg	0.50	13	15	14	20	15	12	17	9.1	18
Lead	M	2455	mg/kg	0.50	21	140	230	53	44	46	57	37	33
Selenium	M	2455	mg/kg	0.25	0.41	0.45	0.36	0.36	0.42	0.28	0.43	0.30	0.33
Vanadium	U	2455	mg/kg	0.5	19	22	22	25	23	19	27	14	20
Zinc	M	2455	mg/kg	0.50	39	56	130	200	100	96	210	110	91
Chromium (Trivalent)	N	2490	mg/kg	1.0	12	15	21	29	19	13	20	9.8	26
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fraction of Organic Carbon	M	2625		0.0010	0.0056	0.0034	0.0082	0.0094	0.0063	0.015	0.019	0.0067	0.0063
TPH >C6-C10	N	2670	mg/kg	1.0	[C] < 1.0	[C] < 1.0	< 1.0	< 1.0	[C] < 1.0	[C] < 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C21	N	2670	mg/kg	1.0	[C] 7.0	[C] 6.7	6.8	7.7	[C] 7.0	[C] 14	5.6	7.8	7.1
TPH >C21-C40	N	2670	mg/kg	1.0	[C] 60	[C] 55	35	59	[C] 34	[C] 140	41	83	28
Total TPH >C6-C40	M	2670	mg/kg	10	[C] 67	[C] 62	42	66	[C] 41	[C] 150	46	91	35
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	0.39	0.52	0.55	0.51	0.63	0.49	0.77	< 0.10	1.0
Anthracene	M	2800	mg/kg	0.10	0.16	0.22	0.21	0.29	0.27	0.15	0.30	< 0.10	0.26
Fluoranthene	M	2800	mg/kg	0.10	1.2	1.3	1.3	1.5	1.8	0.91	1.7	0.64	1.5
Pyrene	M	2800	mg/kg	0.10	1.2	1.2	1.2	1.4	1.5	0.88	1.7	0.79	1.3
Benzo[a]anthracene	M	2800	mg/kg	0.10	0.70	0.60	0.72	0.99	1.1	0.46	1.1	0.59	0.85

Results - Soil

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CONSTRUCTION

Client: SOCOTEC	Chemtest Job No.:				22-35242	22-35242	22-35242	22-35242	22-35242	22-35242	22-35242	22-35242	22-35242
Quotation No.:	Chemtest Sample ID.:				1506507	1506508	1506509	1506510	1506511	1506512	1506513	1506514	1506515
Order No.: 191821UXB	Client Sample Ref.:				1	2	3	4	5	6	7	8	9
	Client Sample ID.:				26788013-F1-1	26788014-F1-2	26788015-F2-1	26788016-F2-2	26788017-F2-3	26788018-F2-4	26788019-F3-1	26788020-F3-2	26788021-F3-3
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Date Sampled:				01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022	01-Sep-2022
	Asbestos Lab:				DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD									
Chrysene	M	2800	mg/kg	0.10	0.55	0.48	0.55	0.92	1.0	0.41	1.1	0.52	0.70
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	0.72	0.92	1.2	1.6	1.2	0.60	1.9	0.87	1.0
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	0.23	0.30	0.42	0.61	0.29	0.26	0.62	0.31	0.48
Benzo[a]pyrene	M	2800	mg/kg	0.10	0.61	0.83	1.2	1.2	1.0	0.53	1.4	0.73	0.73
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	N	2800	mg/kg	2.0	5.8	6.4	7.4	9.0	8.8	4.7	11	4.5	7.8
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

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CONSTRUCTION

Client: SOCOTEC	Chemtest Job No.:				22-35242
Quotation No.:	Chemtest Sample ID.:				1506516
Order No.: 191821UXB	Client Sample Ref.:				10
	Client Sample ID.:				26788022-F4-4
	Sample Type:				SOIL
	Date Sampled:				01-Sep-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	4.1
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones, Roots and Wood
Soil Texture	N	2040		N/A	Sand
pH	M	2010		4.0	9.9
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	3.7
Cyanide (Free)	M	2300	mg/kg	0.50	0.90
Arsenic	M	2455	mg/kg	0.5	4.8
Beryllium	U	2455	mg/kg	0.5	< 0.5
Cadmium	M	2455	mg/kg	0.10	0.13
Copper	M	2455	mg/kg	0.50	9.5
Mercury	M	2455	mg/kg	0.05	0.27
Nickel	M	2455	mg/kg	0.50	8.6
Lead	M	2455	mg/kg	0.50	25
Selenium	M	2455	mg/kg	0.25	0.25
Vanadium	U	2455	mg/kg	0.5	15
Zinc	M	2455	mg/kg	0.50	110
Chromium (Trivalent)	N	2490	mg/kg	1.0	12
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Fraction of Organic Carbon	M	2625		0.0010	0.0060
TPH >C6-C10	N	2670	mg/kg	1.0	< 1.0
TPH >C10-C21	N	2670	mg/kg	1.0	9.0
TPH >C21-C40	N	2670	mg/kg	1.0	130
Total TPH >C6-C40	M	2670	mg/kg	10	140
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	1.7
Anthracene	M	2800	mg/kg	0.10	0.28
Fluoranthene	M	2800	mg/kg	0.10	2.1
Pyrene	M	2800	mg/kg	0.10	1.7
Benzo[a]anthracene	M	2800	mg/kg	0.10	0.78

Results - Soil

Project: UXB0556235 Nestles Avenue, Hayes HENRY

CONSTRUCTION

Client: SOCOTEC	Chemtest Job No.:		22-35242		
Quotation No.:	Chemtest Sample ID.:		1506516		
Order No.: 191821UXB	Client Sample Ref.:		10		
	Client Sample ID.:		26788022-F4-4		
	Sample Type:		SOIL		
	Date Sampled:		01-Sep-2022		
	Asbestos Lab:		DURHAM		
Determinand	Accred.	SOP	Units	LOD	
Chrysene	M	2800	mg/kg	0.10	0.64
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	0.78
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	0.38
Benzo[a]pyrene	M	2800	mg/kg	0.10	0.85
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	9.2
Total Phenols	M	2920	mg/kg	0.10	< 0.10

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1506507	1	26788013-F1-1		01-Sep-2022	C	Plastic Tub 1000g
1506508	2	26788014-F1-2		01-Sep-2022	C	Plastic Tub 1000g
1506511	5	26788017-F2-3		01-Sep-2022	C	Plastic Tub 1000g
1506512	6	26788018-F2-4		01-Sep-2022	C	Plastic Tub 1000g

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
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.
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
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

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