



Client: Ivy House Environmental Ltd
Project Name: Stoney Park Farm
Project No: 21091166
Date Issued: 28/09/2021

Samples Analysed

<u>Sample Reference</u>	<u>Text ID</u>	<u>Sample Date</u>	<u>Sample Type</u>
TP1-0-ES-0.10	21091166-001	14/09/2021 00:00:00	SOLID
TP1-0-ES-1.00	21091166-002	14/09/2021 00:00:00	SOLID
TP2-0-ES-0.60	21091166-003	14/09/2021 00:00:00	SOLID
TP2-0-ES-1.30	21091166-004	14/09/2021 00:00:00	SOLID
TP4-0-ES-0.50	21091166-005	14/09/2021 00:00:00	SOLID
TP4-0-ES-0.90	21091166-006	14/09/2021 00:00:00	SOLID
TP4-0-ES-1.00	21091166-007	14/09/2021 00:00:00	SOLID
TP3-0-ES-1.60	21091166-008	14/09/2021 00:00:00	SOLID

Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006	007
					Customer ID	TP1-0-ES-0.10	TP1-0-ES-1.00	TP2-0-ES-0.60	TP2-0-ES-1.30	TP4-0-ES-0.50	TP4-0-ES-0.90	TP4-0-ES-1.00
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021
>C6-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM							<0.285 c	<0.274
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM							<0.014 c	<0.014
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM							0.437 c	<0.274
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg [^]	UM							<0.057 c	<0.055
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM							<0.285	<0.274
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg [^]	UM							<0.014 c	<0.014
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg [^]	UM							0.573	<0.274
pH (2.5:1 extraction)	PHSOIL	1	pH units	U		11.5	8.3	8.1		8.1		
Chromium (VI) as Cr	KONENS	0.1	mg/kg [^]	N		<0.1		<0.1		<0.1		
Total Cyanide	SFAPI	0.5	mg/kg [^]	UM		<0.6		<0.6		<0.6		
Soil Organic Matter	WSLM59	0.04	% m/m [^]	U		1.82		5.50		2.68		
Arsenic as As	ICPMSS	0.3	mg/kg [^]	UM		6.1		5.6		7.9		
Cadmium as Cd	ICPMSS	0.2	mg/kg [^]	UM		4.2		1.0		2.4		
Copper as Cu	ICPMSS	1.6	mg/kg [^]	UM		24.7		21.2		46.9		
Lead as Pb	ICPMSS	0.7	mg/kg [^]	UM		88.0		36.7		99.3		
Mercury as Hg	ICPMSS	0.5	mg/kg [^]	UM		<0.5		<0.5		<0.5		
Nickel as Ni	ICPMSS	2	mg/kg [^]	UM		15.9		9.9		16.5		
Selenium as Se	ICPMSS	0.5	mg/kg [^]	UM		<0.5		<0.5		<0.5		
Total Chromium as Cr	ICPMSS	1.2	mg/kg [^]	UM		19.2		11.2		20.4		

Analysis Results

					Sample ID
					008
					Customer ID
					TP3-0-ES-1.60
					Sample Type
					SOLID
					Sampling Date
					14/09/2021
Analysis	Method Code	MDL	Units	Accred.	
>C6-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM	
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM	
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM	
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg^	UM	
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM	
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM	
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg^	UM	
pH (2.5:1 extraction)	PHSOIL	1	pH units	U	8.4
Chromium (VI) as Cr	KONENS	0.1	mg/kg^	N	
Total Cyanide	SFAPI	0.5	mg/kg^	UM	
Soil Organic Matter	WSLM59	0.04	% m/m^	U	
Arsenic as As	ICPMSS	0.3	mg/kg^	UM	
Cadmium as Cd	ICPMSS	0.2	mg/kg^	UM	
Copper as Cu	ICPMSS	1.6	mg/kg^	UM	
Lead as Pb	ICPMSS	0.7	mg/kg^	UM	
Mercury as Hg	ICPMSS	0.5	mg/kg^	UM	
Nickel as Ni	ICPMSS	2	mg/kg^	UM	
Selenium as Se	ICPMSS	0.5	mg/kg^	UM	
Total Chromium as Cr	ICPMSS	1.2	mg/kg^	UM	

Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006	007
					Customer ID	TP1-0-ES-0.10	TP1-0-ES-1.00	TP2-0-ES-0.60	TP2-0-ES-1.30	TP4-0-ES-0.50	TP4-0-ES-0.90	TP4-0-ES-1.00
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021
Vanadium as V	ICPMSS	0.6	mg/kg^	N		26.9		15.0		29.4		
Zinc as Zn	ICPMSS	16	mg/kg^	UM		106.0		68.2		321.7		
Water Soluble Sulphate as SO4 2:1 Ext	ICPWSS	10	mg/l	U		<10	46	91		376		
Acid Soluble Sulphate as SO4	ICPACIDS	20	mg/kg^	UM		3910		907		1810		
Benzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM							<14 c	<14
Ethylbenzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM							<14 c	<14
m/p-Xylene HS_1D_AR	BTEXHSA	20	µg/kg^	UM							<29 c	<27
o-Xylene HS_1D_AR	BTEXHSA	10	µg/kg^	UM							<14 c	<14
Toluene HS_1D_AR	BTEXHSA	10	µg/kg^	UM							<14 c	<14
Acenaphthene	PAHMSUS	0.08	mg/kg^	UM		<0.09		<0.10		<0.09		
Acenaphthylene	PAHMSUS	0.08	mg/kg^	U		<0.09		<0.10		<0.09		
Anthracene	PAHMSUS	0.08	mg/kg^	U		0.21		0.14		0.26		
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg^	UM		0.57		0.44		0.75		
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg^	UM		0.58		0.54		0.84		
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		0.56		0.51		0.85		
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg^	UM		0.21		0.21		0.35		
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		0.26		0.24		0.34		
Chrysene	PAHMSUS	0.08	mg/kg^	UM		0.59		0.39		0.73		
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.09		<0.10		<0.09		

Analysis Results

					Sample ID
					008
					Customer ID
					TP3-0-ES-1.60
					Sample Type
					SOLID
					Sampling Date
					14/09/2021
Analysis	Method Code	MDL	Units	Accred.	
Vanadium as V	ICPMSS	0.6	mg/kg^	N	
Zinc as Zn	ICPMSS	16	mg/kg^	UM	
Water Soluble Sulphate as SO4 2:1 Ext	ICPWSS	10	mg/l	U	22
Acid Soluble Sulphate as SO4	ICPACIDS	20	mg/kg^	UM	
Benzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM	
Ethylbenzene HS_1D_AR	BTEXHSA	10	µg/kg^	UM	
m/p-Xylene HS_1D_AR	BTEXHSA	20	µg/kg^	UM	
o-Xylene HS_1D_AR	BTEXHSA	10	µg/kg^	UM	
Toluene HS_1D_AR	BTEXHSA	10	µg/kg^	UM	
Acenaphthene	PAHMSUS	0.08	mg/kg^	UM	
Acenaphthylene	PAHMSUS	0.08	mg/kg^	U	
Anthracene	PAHMSUS	0.08	mg/kg^	U	
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg^	UM	
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg^	UM	
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg^	UM	
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg^	UM	
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg^	UM	
Chrysene	PAHMSUS	0.08	mg/kg^	UM	
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg^	UM	

Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006	007
					Customer ID	TP1-0-ES-0.10	TP1-0-ES-1.00	TP2-0-ES-0.60	TP2-0-ES-1.30	TP4-0-ES-0.50	TP4-0-ES-0.90	TP4-0-ES-1.00
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021
Fluoranthene	PAHMSUS	0.08	mg/kg^	UM		1.13		0.74		1.39		
Fluorene	PAHMSUS	0.08	mg/kg^	UM		<0.09		<0.10		0.12		
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg^	UM		0.23		0.24		0.39		
Naphthalene	PAHMSUS	0.08	mg/kg^	UM		<0.09		<0.10		0.10		
Phenanthrene	PAHMSUS	0.08	mg/kg^	UM		0.48		0.31		0.54		
Pyrene	PAHMSUS	0.08	mg/kg^	UM		0.93		0.63		1.12		
Total PAH 16	PAHMSUS	1.28	mg/kg^	U		6.21		4.87		8.04		
Total TPH >C8-C40 EH_1D_Total	TPHFIDUS	10	mg/kg^	UM				557	1130			
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U							<5.71	<5.49
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U							20.9	<5.49
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U							243	7.16
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg^	U							7000	352
>C35-C44 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	6	mg/kg^	N							1390	79.4
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg^	U							8430	420
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U							<5.71	<5.49
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U							8.48	<5.49
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U							123	7.83
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg^	U							2580	155
>C35-C44 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	6	mg/kg^	N							396	20.9

Analysis Results

					Sample ID
					008
					Customer ID
					TP3-0-ES-1.60
					Sample Type
					SOLID
					Sampling Date
					14/09/2021
Analysis	Method Code	MDL	Units	Accred.	
Fluoranthene	PAHMSUS	0.08	mg/kg^	UM	
Fluorene	PAHMSUS	0.08	mg/kg^	UM	
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg^	UM	
Naphthalene	PAHMSUS	0.08	mg/kg^	UM	
Phenanthrene	PAHMSUS	0.08	mg/kg^	UM	
Pyrene	PAHMSUS	0.08	mg/kg^	UM	
Total PAH 16	PAHMSUS	1.28	mg/kg^	U	
Total TPH >C8-C40 EH_1D_Total	TPHFIDUS	10	mg/kg^	UM	
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U	
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U	
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U	
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg^	U	
>C35-C44 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	6	mg/kg^	N	
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg^	U	
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U	
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U	
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U	
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg^	U	
>C35-C44 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	6	mg/kg^	N	

Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006	007
					Customer ID	TP1-0-ES-0.10	TP1-0-ES-1.00	TP2-0-ES-0.60	TP2-0-ES-1.30	TP4-0-ES-0.50	TP4-0-ES-0.90	TP4-0-ES-1.00
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021	14/09/2021
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg^	U							3060	185
Total Moisture at 105°C	TMSS	0.1	%	U		12.5		17.2	24.9	11.5	29.9	27.1
Total Moisture at 35°C	CLANDPREP	0.1	%	N		12.2	16.0	17.8	22.1	12.0	29.0	26.3
Colour of Material	CLANDPREP		-	N		Brown		Brown	Brown/Grey	Brown	Brown/Grey	Brown/Grey
Major Constituents	CLANDPREP		-	N		MADE GROUND		SILT	CLAY	SILT	CLAY	CLAY
Minor Constituents	CLANDPREP		-	N		None		Clay	Gravel	Gravel	Gravel	Gravel
Miscellaneous Constituents	CLANDPREP		-	N		na		Gravel	na	Brick + Concrete	Oil	na
Description of Solid Material	CLANDPREP		-	N			CLAY					
Asbestos Identification	SUB020		-	N		NAIIS		CH		NAIIS		
Asbestos Stage 2	SUB020	0.001	%	N				1.120				

Analysis Results

					Sample ID
					008
					Customer ID
					TP3-0-ES-1.60
					Sample Type
					SOLID
					Sampling Date
					14/09/2021
Analysis	Method Code	MDL	Units	Accred.	
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg^	U	
Total Moisture at 105°C	TMSS	0.1	%	U	
Total Moisture at 35°C	CLANDPREP	0.1	%	N	14.2
Colour of Material	CLANDPREP		-	N	
Major Constituents	CLANDPREP		-	N	
Minor Constituents	CLANDPREP		-	N	
Miscellaneous Constituents	CLANDPREP		-	N	
Description of Solid Material	CLANDPREP		-	N	CLAY
Asbestos Identification	SUB020		-	N	
Asbestos Stage 2	SUB020	0.001	%	N	

CERTIFICATE OF ANALYSIS

ANALYSIS REQUESTED BY: SOCOTEC UK Ltd
Environmental Chemistry
PO Box 100
Burton upon Trent
Staffordshire
DE15 0XD

CONTRACT NO: S20906-7

DATE OF ISSUE: 28.09.21

DATE SAMPLES RECEIVED: 21.09.21

DATE ANALYSIS COMPLETED: 28.09.21

DESCRIPTION: Three soil/loose aggregate samples each weighing approximately 0.5-0.8kg.

ANALYSIS REQUESTED: Qualitative and quantitative analysis of soil/loose aggregate samples for mass determination of asbestos.

METHODS:

Qualitative - The samples were analysed qualitatively for asbestos by polarised light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative - The analysis was carried out using our documented in-house method based on HSE Contract Research Report No. 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies *et al*, 1996) and HSG 248. Our method includes initial examination of the entire sample, detailed analysis of a representative sub-sample and quantification by hand picking/weighing and/or fibre counting/sizing as appropriate.

RESULTS:

Initial Screening

Asbestos was detected in one of the soil samples by stereo-binocular and polarised light microscopy.

A summary of the qualitative and quantitative results are given in Tables 1 & 2 respectively.



CONTRACT NO: S20906-7
DATE OF ISSUE: 28.09.21

RESULTS: (cont.)

Table 1: Qualitative Results

SOCOTEC Job I.D: 21091166

IOM sample number	SOCOTEC Sample ID	Client Sample ID	ACM type detected	PLM result
S85070	21091166-001-11	TP1-0-ES-0.10	-	No Asbestos Detected
S85071	21091166-003-11	TP2-0-ES-0.60	Cement ¹	Chrysotile
S85072	21091166-005-11	TP4-0-ES-0.50	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

Table 2: Quantitative Analysis Results

SOCOTEC Sample ID	Client Sample ID	Sample Weight (g)	% Asbestos in Sample from ACM's	% Asbestos in Sample as Unbound Fibres	Total % Asbestos in Sample
21091166-003-11	TP2-0-ES-0.60	795	1.120	-	1.120

Our limit of quantification for gravimetric analysis of soil samples is 0.001%.

COMMENTS:

¹ ACM was visible during initial examination of the sample.

² ACM was detected during microscopic examination of the sample.

IOM Consulting cannot accept responsibility for samples that have been incorrectly collected or despatched by external clients.

Any opinions and interpretations expressed herein are out with the scope of our UKAS accreditation.

AUTHORISED BY:

J Simpson
Senior Scientific Technician

Deviating Sample Report

Sample Reference	Text ID	Reported Name	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
TP4-0-ES-0.90	21091166-006	BTEXHSA			✓			
TP4-0-ES-1.00	21091166-007	BTEXHSA			✓			

Analysis Method

<u>Analysis</u>	<u>Analysis Type</u>	<u>Analysis Method</u>
BTEXHSA	ORGANIC	As Received
CLANDPREP	PHYS	As Received
GROHSA	ORGANIC	As Received
GROHSA/BTEXHSA	ORGANIC	
ICPACIDS	METALS	Air Dried & Ground
ICPMSS	METALS	Air Dried & Ground
ICPWSS	METALS	Air Dried & Ground
ICPWSSEXT	METALS	Air Dried & Ground
KONENS	INORGANIC	Air Dried & Ground
PAHMSUS	ORGANIC	As Received
PHSOIL	INORGANIC	As Received
SFAPI	INORGANIC	As Received
SUB020	SUBCON	
TMSS	PHYS	As Received
TPHFIDUS	ORGANIC	As Received
TPHFIDUS (Aliphatic)	ORGANIC	As Received
TPHFIDUS (Aromatic)	ORGANIC	As Received
WSLM59	INORGANIC	Air Dried & Ground

Result Report Notes

Letters alongside results signify that the result has associated report notes.
 The report notes are as follows:

<u>Letter</u>	<u>Note</u>
A	Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.
B	The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.
C	Due to matrix interference the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.
D	A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.
E	Due to recoveries beyond our calibration range and following the maximum size of dilution allowed, the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only.
F	Based on the sample history, appearance and smell a dilution was applied prior to testing. Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.

HWOL Acronym Key

<u>Acronym</u>	<u>Description</u>
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e everything extracted by the solvent(s)
CU	Clean up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
+	Operator to indicate cumulative e.g. EH_CU+HS_1D_Total

Additional Information

This report refers to samples as received, and SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

In the accreditation column of analysis report the codes are as follows:

U = UKAS accredited analysis
M = MCERT accredited analysis
N = Unaccredited analysis

Any units marked with ^ signify results are reported on a dry weight basis of 105° c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35° c.

This report shall not be reproduced except in full and with approval from the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any samples marked with * are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following (Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with ‡ have had MCERTS accreditation removed for this result

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

IS = Insufficient Sample to complete analysis
NA = Sample is not amenable for the required analysis
ND = Results cannot be determined

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the Subcontracted lab for information regarding any deviancies for this analysis.

End of Certificate of Analysis

Moisture Content

Report No: DAM0083154/721/M2 **Report Date:** 24 September 2021

Client: IVY HOUSE ENVIRONMENTAL LTD **Our Contract Ref:** 51065068

Address: Scotland Farm **Tested By:** SOCOTEC Central
Far Lane
Oakbrook
Derby
DE72 3RX

Date Sampled: 14 Sep 2021

Date Received: 15 Sep 2021

Date Tested: 16 Sep 2021

Client Contact: Not Advised

Site: IV.254.21 - Stoney Park Farm, Consall

Material Supplier: Client **Sampling Certificate:** Not Received

Material Source: Site **Samples Submitted by:** Client

Method of preparation: BS1377-1:1990 7.4.2 **Sampled by:** Client

Results:

Sample Reference	Clients Reference	Location	Moisture Content(%)	Sample Type	Description
45390719	Sample 1	TP1 @ 1.20	23	Tub	Red/Brown/Grey Silty, Sandy, Slightly Gravelly CLAY
45390720	Sample 2	TP2 @ 1.60	19	Tub	Red/Brown/Grey Sandy, Silty, Slightly Gravelly CLAY
45390721	Sample 3	TP3 @ 0.8	20	Tub	Brown Clayey SAND/SILT

Certified that the Moisture Content were determined in accordance with BS1377-2:1990 3.2

Signed:



Maria Chandler - Laboratory Manager
for and on behalf of SOCOTEC UK Limited

Liquid and Plastic Limits and Plasticity Indices

Report No: DAM0083154/721/M1 **Report Date:** 24 September 2021

Client: IVY HOUSE ENVIRONMENTAL LTD **Our Contract Ref:** 51065068

Address: SCOTLAND FARM **Tested By:** SOCOTEC Central
FAR LANE
OAKBROOK
DERBY
DE72 3RX

Client Contact: Not Advised **Date Sampled:** 14 Sep 2021

Site: IV.254.21 - Stoney Park Farm, Consall **Date Received:** 15 Sep 2021

Material Supplier: Client **Date Tested:** 21 Sep 2021

Material Source: Site **Sample Type:** TUB

Method of preparation: BS1377-1:1990 7.4.3 & BS 1377-2:1990 4.2 **Sampling Certificate:** Not Received

Samples Submitted by: Client

Sampled by: Client

Results:

Sample Reference	Client's Ref	Location	Description	Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing on 425 µm
45390719	Sample 1	TP1 @ 1.20	Red/Brown/Grey Silty, Sandy, Slightly Gravelly CLAY	23	38	18	20	**91
45390720	Sample 2	TP2 @ 1.60	Red/Brown/Grey Sandy, Silty, Slightly Gravelly CLAY	19	26	13	13	**96
45390721	Sample 3	TP3 @ 0.8	Brown Clayey SAND/SILT	20	25	Non Plastic	N/A	**100

* Washed over 425µm BS Test Sieve

** As received, coarse particles removed by hand prior to test

Certified that the Liquid and Plastic Limits and Plasticity Indices were determined in accordance with BS1377-2:1990
Clauses 4.4, 5.0 and 5.4 respectively
Certified that the Moisture Content was determined in accordance with BS1377-2:1990 3.2

Signed:



Maria Chandler - Laboratory Manager
for and on behalf of SOCOTEC UK Limited

APPENDIX F



Tier 1 Generic Assessment Criteria

	Residential With Produce	Residential Without Produce	Allotments	Commercial (office)	Commercial (warehouse)
Arsenic	32.40	35.00	43.00	635.00	635.00
Cadmium	5.17	17.70	1.05	230.00	230.00
Mercury, elemental	1.02	1.02	316.00	109.00	83.40
Mercury, inorganic	169.00	238.00	80.30	3640.00	3640.00
Mercury, methyl	11.40	14.10	7.97	407.00	409.00
Selenium	350.00	595.00	121.00	13000.00	13000.00
Phenol	415.00	519.00	282.00	37600.00	38000.00
Toluene	611.00	2710.00	118.00	189000.00	166000.00
Lead	210.00	210.00	84.00	2300.00	2300.00
Nickel	130.00	130*	180.00	980.00	980.00
Total Cyanide	34.00	34.00			
Benzo(a)pyrene	3.00	3.20	3.50	36.00	14.40
Dibenzo(a,h)anthracene	0.30	0.32	0.43	3.60	13.00
Acenaphthene	1100.00	6000.00	200.00	100000.00	103000.00
Acenaphthylene	920.00	6000.00	160.00	100000.00	103000.00
Anthracene	11000.00	37000.00	2200.00	540000.00	542000.00
Benzo(a)anthracene	13.00	15.00	13.00	180.00	97.50
Benzo(b)fluoranthene	3.70	4.00	3.90	45.00	103.00
Benzo(g,h,i)perylene	350.00	360.00	640.00	4000.00	661.00
Benzo(k)fluoranthene	100.00	110.00	130.00	1200.00	144.00
Chrysene	27.00	32.00	19.00	350.00	143.00
Fluoranthene	890.00	1600.00	290.00	23000.00	22700.00
Fluorene	860.00	4500.00	160.00	71000.00	70700.00
Indeno(1,2,3-c,d)pyrene	41.00	46.00	39.00	510.00	61.70
Phenanthrene	440.00	1500.00	90.00	23000.00	22600.00
Pyrene	2000.00	3800.00	620.00	54000.00	54500.00
Napthalene	13.00	13.00	24.00	1100.00	875.00
Chromium VI	3.38	4.12	2.11	34.20	34.20
Chromium III	627.00	627.00	15300.00	8840.00	8840.00
Copper	2330.00	6200*	524.00	71700.00	71700.00
Vanadium	79.00	226.00	17.90	5590.00	5590.00
Zinc	3750.00	40400*	618.00	665000.00	665000.00

Note:

All figures are in mg/kg

Values calculated using CLEA v1.071

Soil type chosen is sandy loam, pH 7

All organic determinands calculated using 6% SOM

PAH = S4UL (except warehouse model - CLEAv1.071)

* Phytotoxic assessment based on pH range of <6.0 to >7.0

Copper = 100 - 200mg/kg

Nickel = 60 - 110mg/kg

Zinc = 200 - 300mg/kg



Generic Assessment Criteria

Contaminants	Land Use Scenario				
	Residential With Produce	Residential Without Produce	Allotments	Commercial (office)	Commercial (warehouse)
Benzene	0.33	1.00	0.07	94.70	80.30
Ethylbenzene	354.00	843.00	91.20	65700.00	55600.00
Phenol	415.00	519.00	282.00	37600.00	38000.00
Toluene	611.00	2710.00	118.00	189000.00	166000.00
Xylene, o-	246.00	321.00	159.00	34600.00	27600.00
Xylene, m-	240.00	302.00	175.00	32700.00	26100.00
Xylene, p-	228.00	288.00	164.00	31400.00	25100.00
Aliphatic C5 - C6	113.00	113.00	3910.00	12800.00	10800.00
Aliphatic C6 - C8	48.10	48.20	13300.00	5470.00	4620.00
Aliphatic C8 - C10	108.00	109.00	1710.00	11900.00	10200.00
Aliphatic C10 - C12	537.00	538.00	7280.00	49300.00	43700.00
Aliphatic C12 - C16	3030.00	3040.00	13400.00	90500.00	89600.00
Aliphatic C16 - C35	88400.00	89100.00	281000.00	1910000.00	1910000.00
Aliphatic C35 - C44	88400.00	89100.00	281000.00	1910000.00	1910000.00
Aromatic C5 - C7	275.00	978.00	57.30	89900.00	76800.00
Aromatic C7 - C8	611.00	2710.00	118.00	189000.00	166000.00
Aromatic C8 - C10	151.00	189.00	50.50	17800.00	15700.00
Aromatic C10 - C12	346.00	866.00	73.80	34500.00	33800.00
Aromatic C12 - C16	593.00	1710.00	134.00	37800.00	37800.00
Aromatic C16 - C21	770.00	1340.00	260.00	28600.00	28600.00
Aromatic C21 - C35	1230.00	1340.00	1550.00	28600.00	28600.00
Aromatic C35 - C44	1230.00	1340.00	1550.00	28600.00	28600.00
Combined Ali & Aro C44 - C70	1300.00	1340.00	2950.00	28600.00	28600.00

Note:

All figures are in mg/kg

Values calculated using CLEA v1.071

Soil type chosen is sandy loam, pH 7

All organic determinands calculated using 6% SOM