clarkebond

Validation of remedial capping for gardens and areas of landscaping

Site	Boreham Road, Warminster, BA12 9JP		
Developer	Backhouse Housing Ltd.		
NHBC Project No.	SNIN 0006141094		
Plot(s) number	Plot 2.		
Tested by	M Briggs	**Date tested**	23/06/2023
Area of use	Garden.		
Topsoil description	Grey brown loamy sand.		
Topsoil origin	London Rock Supplies Ltd.		
Topsoil certificate attached	YES – Tim O'Hare assessment, Ref TOHA/22/7764/SS.		
Subsoil description	Orange brown/cream clayey cobbley gravel, as dug subsoil.		
Subsoil origin	Land West of Silver Street, Midsomer Norton.		
Subsoil certificate attached	YES – Extract from Ruddleston geotechnical report Ref TN/SR/20188/GICAR, lab testing undertaken by i2 Labs.		
Remedial requirements	Capping soil to be certified suitable for use and 600mm thick.		

Depth of soil cap measured	600mm	**Textile present**	Yes	**Passed**	YES



View of Plot 2 rear garden.



Topsoil detail.

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Topsoil detail and upper part of subsoil.	View of full capping showing membrane at base.

TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

London Rock Supplies Ltd

Mr Dan Luxton
London Rock Supplies Ltd
Unit 5, Delta Court
Manor Way
Borehamwood
Hertfordshire WD6 1FJ

9th December 2022
Our Ref: TOHA/22/7764/SS
Your Ref: see below

Dear Sirs

Topsoil Analysis Report: Hatford Topsoil

We have completed the analysis of the soil sample recently submitted to our office, referenced *Hatford Topsoil* and have pleasure reporting our findings.

The purpose of the analysis was to determine the suitability of the sample for general landscape purposes (trees, shrubs, amenity grass). In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Topsoil *(BS3882:2015 – Specification for Topsoil - Table 1, Multipurpose Topsoil)*.

This report presents the results of analysis for the sample submitted to our office, and it should be considered 'indicative' of the topsoil source. The report and results should therefore not be used by third parties as a means of verification or validation testing or waste designation purposes, especially after the topsoil has left the London Rock Supplies Ltd site.

SAMPLE EXAMINATION

The sample was described as a very dark greyish brown (Munsell Colour 10YR 3/2), moist, friable, moderately calcareous LOAMY SAND with a weakly developed, very fine to fine and occasionally medium granular structure*. The sample was very slightly stony and contained a moderate proportion of organic fines and occasional small woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

*This appraisal of soil structure was made from examination of a disturbed sample. Structure is a key soil characteristic that may only be accurately assessed by examination in an in-situ state.

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Registered in England No. OC324049 Registered Office: The Innovation Centre, Howbery Park, Wallingford, Oxfordshire OX10 8BA

ANALYTICAL SCHEDULE

The sample was submitted to a UKAS and MCERTS accredited laboratory for a range of physical and chemical tests to confirm the composition and fertility of the soil, and the concentration of selected potential contaminants. The following parameters were determined:

- detailed particle size analysis (% 5 sands, silt, clay);
- stone content (2-20mm, 20-50mm, >50mm);
- pH and electrical conductivity values;
- exchangeable sodium percentage;
- major plant nutrients (N, P, K, Mg);
- organic matter content;
- C:N ratio;
- heavy metals (As, B, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn);
- total cyanide and total (mono) phenols;
- speciated PAHs (US EPA16 suite);
- aromatic and aliphatic TPH (C5-C35 banding);
- benzene, toluene, ethylbenzene, xylene (BTEX);
- asbestos screen.

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

RESULTS OF ANALYSIS

Detailed Particle Size Analysis and Stone Content

The sample fell into the *loamy sand* texture class, which is usually considered suitable for general landscape applications provided the soil's physical condition is maintained.

Further detailed particle size analysis found the sample to have a sufficiently narrow particle size distribution and a predominance of *medium sand* (0.25-0.50mm) and smaller proportions of *coarse sand* (0.50-1.0mm). This is usually ideal for topsoil in general landscape applications as reasonable porosity levels are generally maintained in a consolidated state and the risk of particle interpacking is reduced. The sample should therefore provide adequate drainage and aeration properties for general landscape applications.

The sample was virtually stone-free and as such, stones should not restrict the use of the soil for general landscape purposes.

pH and Electrical Conductivity Values

The sample was strongly alkaline in reaction (pH 8.5). This pH value would be considered suitable for general landscape purposes provided species with a wide pH tolerance or those known to prefer alkaline soils are selected for planting, turfing and seeding.

The electrical conductivity (salinity) value (water extract) was low, which indicates that soluble salts should not be present at levels that would be harmful to plants.

The electrical conductivity value by $CaSO_4$ extract (*BS3882* requirement) fell below the maximum specified value (3300 µS/cm) given in *BS3882:2015 – Table 1*.

Organic Matter and Fertility Status

The sample was adequately supplied with organic matter and all major plant nutrients.

The C:N ratio of the sample was acceptable for general landscape purposes.

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Potential Contaminants

With reference to *BS3882:2015 - Table 1*: Notes 3 and 4, there is a recommendation to confirm levels of potential contaminants in relation to the topsoil's proposed end use. This includes human health, environmental protection and metals considered toxic to plants. In the absence of site-specific assessment criteria, the concentrations that affect human health have been compared with the *residential with home-grown produce* land use in the Suitable For Use Levels (S4ULs) presented in *The LQM/CIEH S4ULs for Human Health Risk Assessment* (2015) and the DEFRA SP1010: *Development of Category 4 Screening Levels* (C4SLs) *for Assessment of Land Affected by Contamination – Policy Companion Document* (2014).

Of the potential contaminants determined, none exceeded their respective guideline values.

Phytotoxic Contaminants

Of the phytotoxic (toxic to plants) contaminants determined (copper, nickel, zinc), none was found at levels that exceeded the maximum permissible levels specified in *BS3882:2015 – Table 1*.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil sample for general landscape purposes. The analysis has also been undertaken to determine the sample's compliance with the requirements of the British Standard for Topsoil *(BS3882:2015 – Specification for Topsoil - Table 1, Multipurpose Topsoil).*

From the soil examination and subsequent laboratory analysis, the sample was described as a strongly alkaline, non-saline, moderately calcareous loamy sand with a weakly developed structure and a very low stone content. The sample was adequately supplied with organic matter and all major plant nutrients. Of the potential contaminants determined, none exceeded their respective guideline values.

To conclude, based on our findings, the topsoil represented by this sample would be considered suitable for general landscape purposes (trees, shrubs and amenity grass), provided species with a wide pH tolerance or those known to prefer alkaline soils are selected and the physical condition of the soil is satisfactory.

The topsoil was also fully compliant with the requirements of the British Standard for Topsoil *(BS3882:2015 – Specification for Topsoil – Table 1, Multipurpose Topsoil).*

Soil Handling Recommendations

It is important to maintain the physical condition of the soil and avoid structural damage during all phases of soil handling (e.g. stockpiling, respreading, cultivating, planting, seeding or turfing). As a consequence, soil handling operations should be carried out when soil is reasonably dry and non-plastic (friable) in consistency.

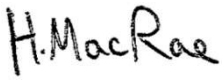
It is important to ensure that the soil is not unnecessarily compacted by trampling or trafficking by site machinery, and soil handling should be stopped during and after heavy rainfall and not continued until the soil is friable in consistency. If the soil is structurally damaged and compacted at any stage during the course of soiling or landscaping works, it should be cultivated appropriately to relieve the compaction and to restore the soil's structure prior to any planting, turfing or seeding.

Further details on soil handling are provided in Annex A of *BS3882:2015.*

London Rock Supplies Ltd

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if we can be of further assistance.

Yours faithfully





Harriet MacRae
BSc MSc
Graduate Soil Scientist

Tim O'Hare
BSc MSc FISoilSci FBIAC CSci
Principal Consultant

For & on behalf of Tim O'Hare Associates LLP

London Rock Supplies Ltd

TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Client:	**London Rock Supplies Ltd**
Project:	**Hatford Topsoil**
Job:	**Topsoil Analysis (BS3882:2015)**
Date:	**09/12/2022**
Job Ref No:	**TOHA/22/7764/SS**

Sample Reference			**Hatford Topsoil**
		Accreditation	
Clay (<0.002mm)	%	UKAS	12
Silt (0.002-0.063mm)	%	UKAS	6
Very Fine Sand (0.05-0.15mm)	%	UKAS	8
Fine Sand (0.15-0.25mm)	%	UKAS	13
Medium Sand (0.25-0.50mm)	%	UKAS	41
Coarse Sand (0.50-1.0mm)	%	UKAS	17
Very Coarse Sand (1.0-2.0mm)	%	UKAS	3
Total Sand	%	UKAS	82
Texture Class (UK Classification)	--	UKAS	LS
Stones (2-20mm)	% DW	GLP	1
Stones (20-50mm)	% DW	GLP	0
Stones (>50mm)	% DW	GLP	0
pH Value (1:2.5 water extract)	units	UKAS	8.5
Electrical Conductivity (1:2.5 water extract)	uS/cm	UKAS	498
Electrical Conductivity (1:2 $CaSO_4$ extract)	uS/cm	UKAS	2431
Exchangeable Sodium Percentage	%	UKAS	1.6
Organic Matter (LOI)	%	UKAS	4.7
Total Nitrogen (Dumas)	%	UKAS	0.42
C : N Ratio	ratio	UKAS	7
Extractable Phosphorus	mg/l	UKAS	62
Extractable Potassium	mg/l	UKAS	702
Extractable Magnesium	mg/l	UKAS	107
Total Arsenic (As)	mg/kg	MCERTS	10
Total Cadmium (Cd)	mg/kg	MCERTS	< 0.2
Total Chromium (Cr)	mg/kg	MCERTS	10
Hexavalent Chromium (Cr VI)	mg/kg	MCERTS	< 1.8
Total Copper (Cu)	mg/kg	MCERTS	13
Total Lead (Pb)	mg/kg	MCERTS	16
Total Mercury (Hg)	mg/kg	MCERTS	< 0.3
Total Nickel (Ni)	mg/kg	MCERTS	11
Total Selenium (Se)	mg/kg	MCERTS	< 1.0
Total Zinc (Zn)	mg/kg	MCERTS	46
Water Soluble Boron (B)	mg/kg	MCERTS	0.9
Total Cyanide (CN)	mg/kg	MCERTS	< 1.0
Total (mono) Phenols	mg/kg	MCERTS	< 1.0
Naphthalene	mg/kg	MCERTS	< 0.05
Acenaphthylene	mg/kg	MCERTS	< 0.05
Acenaphthene	mg/kg	MCERTS	< 0.05
Fluorene	mg/kg	MCERTS	< 0.05
Phenanthrene	mg/kg	MCERTS	< 0.05
Anthracene	mg/kg	MCERTS	< 0.05
Fluoranthene	mg/kg	MCERTS	< 0.05
Pyrene	mg/kg	MCERTS	< 0.05
Benz(a)anthracene	mg/kg	MCERTS	< 0.05
Chrysene	mg/kg	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	MCERTS	< 0.05
Benzo(k)fluoranthene	mg/kg	MCERTS	< 0.05
Benzo(a)pyrene	mg/kg	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	MCERTS	< 0.05
Dibenzo(a,h)anthracene	mg/kg	MCERTS	< 0.05
Benzo(g,h,i)perylene	mg/kg	MCERTS	< 0.05
Total PAHs (sum USEPA16)	mg/kg	MCERTS	< 0.80
Aliphatic TPH >C5 - C6	mg/kg	MCERTS	< 0.001
Aliphatic TPH >C6 - C8	mg/kg	MCERTS	< 0.001
Aliphatic TPH >C8 - C10	mg/kg	MCERTS	< 0.001
Aliphatic TPH >C10 - C12	mg/kg	MCERTS	< 1.0
Aliphatic TPH >C12 - C16	mg/kg	MCERTS	< 2.0
Aliphatic TPH >C16 - C21	mg/kg	MCERTS	< 8.0
Aliphatic TPH >C21 - C35	mg/kg	MCERTS	< 8.0
Aliphatic TPH (C5 - C35)	mg/kg	MCERTS	< 10
Aromatic TPH >C5 - C7	mg/kg	MCERTS	< 0.001
Aromatic TPH >C7 - C8	mg/kg	MCERTS	< 0.001
Aromatic TPH >C8 - C10	mg/kg	MCERTS	< 0.001
Aromatic TPH >C10 - C12	mg/kg	MCERTS	< 1.0
Aromatic TPH >C12 - C16	mg/kg	MCERTS	< 2.0
Aromatic TPH >C16 - C21	mg/kg	MCERTS	< 10
Aromatic TPH >C21 - C35	mg/kg	MCERTS	< 10
Aromatic TPH (C5 - C35)	mg/kg	MCERTS	< 10
Benzene	mg/kg	MCERTS	< 0.001
Toluene	mg/kg	MCERTS	< 0.001
Ethylbenzene	mg/kg	MCERTS	< 0.001
p & m-xylene	mg/kg	MCERTS	< 0.001
o-xylene	mg/kg	MCERTS	< 0.001
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	MCERTS	< 0.001
Asbestos	ND/D	ISO 17025	Not-detected

LS = LOAMY SAND

Visual Examination

The sample was described as a very dark greyish brown (Munsell Colour 10YR 3/2), moist, friable, moderately calcareous LOAMY SAND with a weakly developed, very fine to fine and occasionally medium granular structure. The sample was very slightly stony and contained a moderate proportion of organic fines and occasional small woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

H.MacRae

Harriet MacRae
BSc MSc
Graduate Soil Scientist

Results of analysis should be read in conjunction with the report they were issued with

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London Rock Supplies Ltd

CONTAMINATION LABORATORY TESTING

Tim New
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The Stables
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Exeter
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e: Ruddlesden -

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-98893

Project / Site name:	Silver Street, Midsomer Norton	**Samples received on:**	07/05/2020
Your job number:	20188	**Samples instructed on:**	07/05/2020
Your order number:	20188	**Analysis completed by:**	18/05/2020
Report Issue Number:	1	**Report issued on:**	18/05/2020
Samples Analysed:	9 soil samples		

Signed: A. Czerwińska

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.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 20-98893

Project / Site name: Silver Street, Midsomer Norton
Your Order No: 20188

Lab Sample Number				1506656	1506657	1506658	1506659	1506660
Sample Reference				TP01	TP03	TP05	TP07	TP08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.10	0.30	0.10
Date Sampled				05/05/2020	05/05/2020	05/05/2020	05/05/2020	05/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	25	21	15	18	21
Total mass of sample received	kg	0.001	NONE	0.70	0.70	0.70	0.70	0.70
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	6.8	7.6	7.8	7.8	7.6
Total Sulphate as SO_4	%	0.005	MCERTS	-	-	-	-	-
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.020	0.012	0.019	0.015	0.010
Total Sulphur	%	0.005	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	6.6	5.0	3.4	4.9	5.4
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	32	39	28	38	51
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	2.0	2.0	2.2	2.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	70	89	79	54	77
Copper (aqua regia extractable)	mg/kg	1	MCERTS	28	30	25	25	34
Lead (aqua regia extractable)	mg/kg	1	MCERTS	48	47	34	31	44
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	54	61	54	36	62
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	4.4	3.8	3.8	< 1.0	3.8
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	130	100	98	130
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 20-98893

Project / Site name: Silver Street, Midsomer Norton
Your Order No: 20188

Lab Sample Number				1506656	1506657	1506658	1506659	1506660
Sample Reference				TP01	TP03	TP05	TP07	TP08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.10	0.30	0.10
Date Sampled				05/05/2020	05/05/2020	05/05/2020	05/05/2020	05/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	< 0.2	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	< 0.2	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	< 0.1	-	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	< 0.3	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	-	< 0.05

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Analytical Report Number: 20-98893

Project / Site name: Silver Street, Midsomer Norton
Your Order No: 20188

Lab Sample Number				1506656	1506657	1506658	1506659	1506660
Sample Reference				TP01	TP03	TP05	TP07	TP08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.10	0.30	0.10
Date Sampled				05/05/2020	05/05/2020	05/05/2020	05/05/2020	05/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
SVOCs TICs								
SVOCs TICs Compound Name		N/A	NONE	9,10-Methanoanthracen-11-ol, 9,10-dihydro-9,10,11-trimethyl-	-	ND	-	ND
SVOC % Match	%	N/A	NONE	94	-	0	-	0

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Analytical Report Number: 20-98893

Project / Site name: Silver Street, Midsomer Norton
Your Order No: 20188

Lab Sample Number				1506661	1506662	1506663	1506664	
Sample Reference				SP02	TP02	TP03	TP05	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				None Supplied	1.00	1.00	2.00	
Date Sampled				05/05/2020	05/05/2020	05/05/2020	05/05/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	28	17	10	16	
Total mass of sample received	kg	0.001	NONE	0.70	0.20	0.20	0.20	
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	-	
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.6	7.5	8.0	8.0	
Total Sulphate as SO_4	%	0.005	MCERTS	-	0.028	0.044	0.028	
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.020	0.0097	0.016	0.025	
Total Sulphur	%	0.005	MCERTS	-	0.013	0.021	0.016	
Organic Matter	%	0.1	MCERTS	5.0	-	-	-	
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	-	-	
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	38	-	-	-	
Boron (water soluble)	mg/kg	0.2	MCERTS	2.2	-	-	-	
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-	
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	-	
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	70	-	-	-	
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27	-	-	-	
Lead (aqua regia extractable)	mg/kg	1	MCERTS	39	-	-	-	
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	55	-	-	-	
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	4.3	-	-	-	
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	-	-	-	
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	< 10	-	-	-	

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Analytical Report Number: 20-98893

Project / Site name: Silver Street, Midsomer Norton
Your Order No: 20188

Lab Sample Number				1506661	1506662	1506663	1506664	
Sample Reference				SP02	TP02	TP03	TP05	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				None Supplied	1.00	1.00	2.00	
Date Sampled				05/05/2020	05/05/2020	05/05/2020	05/05/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	

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Analytical Report Number: 20-98893

Project / Site name: Silver Street, Midsomer Norton
Your Order No: 20188

Lab Sample Number				1506661	1506662	1506663	1506664	
Sample Reference				SP02	TP02	TP03	TP05	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				None Supplied	1.00	1.00	2.00	
Date Sampled				05/05/2020	05/05/2020	05/05/2020	05/05/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
SVOCs TICs								
SVOCs TICs Compound Name		N/A	NONE	-	-	-	-	
SVOC % Match	%	N/A	NONE	-	-	-	-	

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Analytical Report Number : 20-98893

Project / Site name: Silver Street, Midsomer Norton

* 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 *
1506656	TP01	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
1506657	TP03	None Supplied	0.20	Brown loam and clay with gravel and vegetation.
1506658	TP05	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
1506659	TP07	None Supplied	0.30	Brown loam and clay with gravel and vegetation.
1506660	TP08	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
1506661	SP02	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
1506662	TP02	None Supplied	1.00	Brown clay and sand.
1506663	TP03	None Supplied	1.00	Light brown clay and sand with gravel and vegetation.
1506664	TP05	None Supplied	2.00	Light brown clay and sand.

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Analytical Report Number : 20-98893

Project / Site name: Silver Street, Midsomer Norton

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
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
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
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
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-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
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
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
Tentatively identified compounds (SVOC) in soil	Determination of semi-volatile organic compounds total ion count in soil by extraction with dichloromethane and hexane followed by GC-MS followed by a full library scan.	In-house method based on USEPA 8270	L064-PL	D	NONE
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	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

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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BIOACCESSIBILITY TESTING

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Analytical Report Number : 21-53403

Project / Site name:	Land west of Silver Street, Midsomer Northon, Somerset	**Samples received on:**	28/01/2021
Your job number:	20188	**Samples instructed on/ Analysis started on:**	28/01/2021
Your order number:	20188	**Analysis completed by:**	05/02/2021
Report Issue Number:	1	**Report issued on:**	05/02/2021
Samples Analysed:	2 soil samples		

Signed: A. Czerwińska

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.

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Analytical Report Number: 21-53403
Project / Site name: Land west of Silver Street, Midsomer Northon, Somerset
Your Order No: 20188

Lab Sample Number				1749946	1749947
Sample Reference				TP101	TP103
Sample Number				None Supplied	None Supplied
Depth (m)				0.20	0.10
Date Sampled				21/01/2021	25/01/2021
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	22	24
Total mass of sample received	kg	0.001	NONE	1.2	1.2
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	31	57
Stomach Phase					
Arsenic (Bioaccessible)	mg/kg	0.1	NONE	2.4	0.9
Arsenic Bioaccessible Fraction	%	-	NONE	7.7	1.5
Stomach and Intestine Phase					
Arsenic (Bioaccessible)	mg/kg	0.1	NONE	3.8	< 0.1
Arsenic Bioaccessible Fraction	%	-	NONE	12.1	< 0.1

Bioaccessibility Summary Data (Maximum value) Stomach Phase (S) or Stomach and Intestine Phase (SI)

Arsenic Bioaccessible Fraction	%	-	NONE	**12.1 % (SI)**	**1.5 % (S)**

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 21-53403
Project / Site name: Land west of Silver Street, Midsomer Northon, Somerset

* 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 *
1749946	TP101	None Supplied	0.2	Brown clay and loam with gravel and vegetation.
1749947	TP103	None Supplied	0.1	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 21-53403
Project / Site name: Land west of Silver Street, Midsomer Northon, Somerset

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
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
BARGE-UBM Bioaccessibility Test for Metals	Bioaccessibility extraction method for metals. Test portion sieved to < 250 um. Analytes as defined on the report.	ISO 17924: 2018 Soil quality for the assessment of human exposure from ingestion of soil and soil material	UBM-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

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.