

HUMBERSIDE MATERIALS LABORATORY

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North Lincolnshire, DN20 8AR
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CHEMICAL ANALYSIS & WASTE ACCEPTANCE CRITERIA

Summary sheet

Sample Ref: S/59569

Client: CLS Demolition

Site: Baildon Mill, Baildon
Location: Site Spoil (2B)
Material: Sandy Clay with Gravel
Date sampled: 01/06/2021
Sampled by: Client

Analytical report results:

Enclosed test reports						
<i>Test subcontractor:</i>		Chemtech Environmental Ltd				
<i>Subcontractor Contract No.:</i>		96916				
Samples					Testing	
					<i>Waste Acceptance Criteria (WAC)</i>	<i>Analytical test pages (metals suite)</i>
<i>Subcontractor sample ref.</i>	<i>HML sample ref.</i>	<i>Location</i>	<i>Sample Type</i>	<i>Sampling depth (m bgl)</i>	<i>Accompanying test pages</i>	<i>Accompanying test pages</i>
96916-1	S/59569	2B	Sandy Clay with Gravel	N/A	Page 6 of 6 (Labelled Page 1 of 1)	Pages 1 to 5 of 6 (Labelled Page 1 to 5 of 5)

Comments:

Sample 96916-1 Has results above the inert waste limit for Total Organic Carbon. No elevated levels have been noted with the solids Metal suite. Results should be made available to the intended waste management facility prior to disposal for their assessment.

File ref: 0524/5503
Date tested: 03/06/2021
Date reported: 15/06/2021

Signed: - D. Driver M. Driver C. Driver
Director

*Certificate of sampling when submitted is retained by the Laboratory and available upon request.
Samples will normally be kept for 14 days from the date reported.
Tested by UKAS laboratory 2531.*



ANALYTICAL TEST REPORT

Contract no: 96916
Contract name: Baildon Mill, Baildon
Client reference: 0524/5503
Clients name: Humberside Materials Laboratory
Clients address: Atherton Way
Brigg
North Lincolnshire
DN20 8AR
Samples received: 03 June 2021
Analysis started: 03 June 2021
Analysis completed: 10 June 2021
Report issued: 10 June 2021

Notes: Opinions and interpretations expressed herein are outside the UKAS accreditation scope. Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling. All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing. Methods, procedures and performance data are available on request. Results reported herein relate only to the material supplied to the laboratory. This report shall not be reproduced except in full, without prior written approval. Samples will be disposed of 6 weeks from initial receipt unless otherwise instructed.

Key: U UKAS accredited test
M MCERTS & UKAS accredited test
\$ Test carried out by an approved subcontractor
I/S Insufficient sample to carry out test
N/S Sample not suitable for testing

Approved by:

John Campbell
Director

Chemtech Environmental Limited

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

All results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.
Analytical results are inclusive of stones.

Lab ref	Sample id	Depth (m)	Sample description	Material removed	% Removed	% Moisture
96916-1	S/59569 Site Spoil / 2B	-	Sandy Clay with Gravel	-	-	28.3

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SOILS

Lab number	96916-1		
Sample id	S/59569		
Location	Site Spoil /2B		
Depth (m)	-		
Date sampled	01/06/2021		
Test	Method	Units	
Antimony (total)	CE127 ^U	mg/kg Sb	1.3
Arsenic (total)	CE127 ^M	mg/kg As	13
Barium (total)	CE127 ^M	mg/kg Ba	122
Cadmium (total)	CE127 ^M	mg/kg Cd	0.3
Chromium (total)	CE127 ^M	mg/kg Cr	95
Copper (total)	CE127 ^M	mg/kg Cu	60
Lead (total)	CE127 ^M	mg/kg Pb	192
Mercury (total)	CE127 ^M	mg/kg Hg	<0.5
Molybdenum (total)	CE127 ^M	mg/kg Mo	8.7
Nickel (total)	CE127 ^M	mg/kg Ni	21
Selenium (total)	CE127 ^M	mg/kg Se	1.3
Zinc (total)	CE127 ^M	mg/kg Zn	87

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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE127	Antimony (total)	Aqua regia digest, ICP-MS	Dry	U	0.2	mg/kg Sb
CE127	Arsenic (total)	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg As
CE127	Barium (total)	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg Ba
CE127	Cadmium (total)	Aqua regia digest, ICP-MS	Dry	M	0.2	mg/kg Cd
CE127	Chromium (total)	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg Cr
CE127	Copper (total)	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg Cu
CE127	Lead (total)	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg Pb
CE127	Mercury (total)	Aqua regia digest, ICP-MS	Dry	M	0.5	mg/kg Hg
CE127	Molybdenum (total)	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg Mo
CE127	Nickel (total)	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg Ni
CE127	Selenium (total)	Aqua regia digest, ICP-MS	Dry	M	0.3	mg/kg Se
CE127	Zinc (total)	Aqua regia digest, ICP-MS	Dry	M	5	mg/kg Zn

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DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

N	No (not deviating sample)
Y	Yes (deviating sample)
NSD	Sampling date not provided
NST	Sampling time not provided (waters only)
EHT	Sample exceeded holding time(s)
IC	Sample not received in appropriate containers
HP	Headspace present in sample container
NCF	Sample not chemically fixed (where appropriate)
OR	Other (specify)

Lab ref	Sample id	Depth (m)	Deviating	Tests (Reason for deviation)
96916-1	S/59569 Site Spoil / 2B	-	N	

Waste Acceptance Criteria Testing BS EN 12457-Part 3, 2 Stage Process



Sample Details

Contract Name Baildon Mill, Baildon
 Lab Number 96916-1
 Sample ID S/59569 Site Spoil/ 2b
 Date Sampled 1 June 2021
 Date Received 3 June 2021
 Particle Size (<4mm) -
 Method of size reduction N/A
 Non-crushable matter N/A

Test Values

Mass of Raw Test Portion (MW) kg 0.244
 Mass of Dried Test Portion (MD) kg 0.175
 Moisture Content Ratio (MC) % 39.51
 Dry Matter Content Ratio (DR) % 71.68
 Leachant Volume (1) (L2) Litre 0.281
 Leachant Volume (2) (L8) Litre 1.400
 Eluate Volume (1) (VE1) Litre 0.200
 Eluate Volume (2) (VE2) Litre 1.190

Eluate Analysis	Conc in Eluate	
Liquid : Waste Ratio	2:1	8:1
pH (units)	7.6	7.6
Temperature (°C)	20	20
Conductivity (µS/cm)	466	144
Antimony (µg/l Sb)	5.6	2.7
Arsenic (µg/l As)	4.76	3.84
Barium (µg/l Ba)	71.0	26.3
Cadmium (µg/l Cd)	<0.07	<0.07
Chromium (µg/l Cr)	<0.2	0.7
Copper (µg/l Cu)	14.6	12.9
Lead (µg/l Pb)	10.7	22.7
Mercury (µg/l Hg)	0.038	0.027
Molybdenum (µg/l Mo)	11.7	14.7
Nickel (µg/l Ni)	1.7	1.3
Selenium (µg/l Se)	0.58	0.53
Zinc (µg/l Zn)	20	5
Chloride (mg/l Cl)	4.1	1.6
Fluoride (mg/l F)	0.2	0.4
Sulphate (mg/l SO ₄)	223	40
Total Dissolved Solids (mg/l TDS)	355	110
Phenol Index (µg/l PhOH)	<10	<10
Dissolved Organic Carbon (mg/l C)	33	15

Amount Leached		BS EN 12457-3 Limit Values mg/kg at L:S 10:1		
2:1 mg/kg	10:1 mg/kg	Inert Waste	Non-reactive Hazardous Waste	Hazardous Waste
0.011	0.030	0.06	0.7	5
0.010	0.039	0.5	2	25
0.142	0.314	20	100	300
<0.0002	<0.0007	0.04	1	5
<0.0004	<0.006	0.5	10	70
0.029	0.131	2	50	100
0.021	0.213	0.5	10	50
0.00008	0.00028	0.01	0.2	2
0.023	0.144	0.5	10	30
0.003	0.013	0.4	10	40
0.001	0.005	0.1	0.5	7
0.041	0.065	4	50	200
8.1	19	800	15000	25000
0.4	3.6	10	150	500
447	607	1000	20000	50000
710	1380	4000	60000	100000
<0.02	<0.1	1		
65	167	500	800	1000

Waste Analysis	Units	Result			
Total Organic Carbon	% w/w	6.7	3%	5%	6%
Loss on Ignition	% w/w	13.8			10%
BTEX	mg/kg	<0.06	6		
PCBs (7 congeners)	mg/kg	<0.045	1		
TPH (C10 - C40)	mg/kg	311	500		
PAH (total)	mg/kg	1.68	100		
pH	pH units	7.3		>6	
Acid Neutralisation Capacity (pH4)	mol/kg	0.13		To be evaluated	
Acid Neutralisation Capacity (pH7)	mol/kg	0.01		To be evaluated	

Disclaimer : The Landfill Waste Acceptance Criteria limits in this report are provided for guidance only.
 Chemtech Environmental Ltd does not take responsibility for any errors or omissions. Data is correct as of 01/09/2005.
 Samples will be disposed of 6 weeks from initial receipt unless written instructions are received and further storage is agreed.
 Waste Acceptance Criteria testing is outside the scope of the laboratory's UKAS accreditation.

Comments

Authorised by: *J. Campbell* Name: John Campbell
 Report date: 10 June 2021 Position: Director

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