



ANALYTICAL TEST REPORT

Contract no: 127573

Contract name: Hazelbadge Rd, Poynton, SK12 1HE

Client reference: Topsoil Stockpile 1

Clients name: DHI Excavations

Clients address: 11-13 Church Street
Farnworth
Bolton
BL4 8AG

Samples received: 17 October 2023

Analysis started: 17 October 2023

Analysis completed: 02 November 2023

Report issued: 02 November 2023

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
NAD	No Asbestos Detected

Approved by:

E. McCulloch

Ellis McCulloch
Senior Reporting Administrator

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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.

Lab ref	Sample id	Depth (m)	Sample description	Material removed	% Removed	% Moisture
127573-1	SP1 Sample 1	-	Sandy Clayey Loam with Gravel & Roots	-	-	21.5

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SOILS

Lab number			127573-1
Sample id			SP1 Sample 1
Depth (m)			-
Date sampled			16/10/2023
Test	Method	Units	
Arsenic (total)	CE264 ^M	mg/kg As	5.5
Barium (total)	CE264 ^U	mg/kg Ba	71.9
Cadmium (total)	CE264 ^M	mg/kg Cd	2.5
Chromium (total)	CE264 ^U	mg/kg Cr	28.2
Copper (total)	CE264 ^M	mg/kg Cu	505.3
Lead (total)	CE264 ^U	mg/kg Pb	119.1
Mercury (total)	CE264 ^U	mg/kg Hg	<2
Nickel (total)	CE264 ^M	mg/kg Ni	37.9
Selenium (total)	CE264	mg/kg Se	<3
Vanadium (total)	CE264 ^U	mg/kg V	39.3
Zinc (total)	CE264 ^M	mg/kg Zn	416.3
pH	CE004 ^M	units	7.2
Sulphate (acid extractable)	CE062 ^M	mg/kg SO ₄	484
Cyanide (free)	CE077	mg/kg CN	<1
Cyanide (total)	CE077	mg/kg CN	<1
Phenols (total)	CE078	mg/kg PhOH	<0.5
PAH			
Naphthalene	CE087 ^M	mg/kg	<0.02
Acenaphthylene	CE087 ^M	mg/kg	<0.02
Acenaphthene	CE087 ^M	mg/kg	0.04
Fluorene	CE087 ^U	mg/kg	0.03
Phenanthrene	CE087 ^M	mg/kg	0.27
Anthracene	CE087 ^U	mg/kg	0.10
Fluoranthene	CE087 ^M	mg/kg	0.38
Pyrene	CE087 ^M	mg/kg	0.35
Benzo(a)anthracene	CE087 ^U	mg/kg	0.18
Chrysene	CE087 ^M	mg/kg	0.21
Benzo(b)fluoranthene	CE087 ^M	mg/kg	0.18
Benzo(k)fluoranthene	CE087 ^M	mg/kg	0.09
Benzo(a)pyrene	CE087 ^U	mg/kg	0.19
Indeno(123cd)pyrene	CE087 ^M	mg/kg	0.11
Dibenz(ah)anthracene	CE087 ^M	mg/kg	0.02
Benzo(ghi)perylene	CE087 ^M	mg/kg	0.11
PAH (total of USEPA 16)	CE087	mg/kg	2.27
TPH			
VPH Aromatic (>EC5-EC7)	\$	mg/kg	<0.05
VPH Aromatic (>EC7-EC8)	\$	mg/kg	<0.05
VPH Aromatic (>EC8-EC10)	\$	mg/kg	<0.05
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<10
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	21
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	<1

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SOILS

Lab number			127573-1
Sample id			SP1 Sample 1
Depth (m)			-
Date sampled			16/10/2023
Test	Method	Units	
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	102
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	13
VPH Aliphatic (>C5-C6)	\$	mg/kg	<0.05
VPH Aliphatic (>C6-C8)	\$	mg/kg	<0.1
VPH Aliphatic (>C8-C10)	\$	mg/kg	<0.05
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<6
EPH Aliphatic (>C12-C16)	CE250	mg/kg	<6
EPH Aliphatic (>C16-C35)	CE250	mg/kg	<15
EPH Aliphatic (>C35-C44)	CE250	mg/kg	<10
Total Aliphatic (>C5-C44)	CE225	mg/kg	<15
Total Aromatic (>C5-C44)	CE225	mg/kg	136.21
Total Aliphatic/Aromatic (>C5-C44)	CE225	mg/kg	136.21
Volatiles			
Vinyl chloride	CE174	mg/kg	<0.01
1,1-Dichloroethene	CE174	mg/kg	<0.01
Trans-1,2-Dichloroethene	CE174	mg/kg	<0.01
Cis-1,2-Dichloroethene	CE174	mg/kg	<0.01
1,1,1-Trichloroethane	CE174	mg/kg	<0.01
Carbon tetrachloride	CE174	mg/kg	<0.01
1,2-Dichloroethane	CE174	mg/kg	<0.01
Trichloroethene	CE174	mg/kg	<0.01
1,1,2-Trichloroethane	CE174	mg/kg	<0.01
Tetrachloroethene	CE174	mg/kg	<0.01
1,1,1,2-Tetrachloroethane	CE174	mg/kg	<0.01
Subcontracted Analysis			
Asbestos (qualitative)	\$	-	NAD

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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE264	Arsenic (total)	Aqua Regia Extraction, ICPOES	Dry	M	3	mg/kg As
CE264	Barium (total)	Aqua Regia Extraction, ICPOES	Dry	U	4.0	mg/kg Ba
CE264	Cadmium (total)	Aqua Regia Extraction, ICPOES	Dry	M	2	mg/kg Cd
CE264	Chromium (total)	Aqua Regia Extraction, ICPOES	Dry	U	2	mg/kg Cr
CE264	Copper (total)	Aqua Regia Extraction, ICPOES	Dry	M	2	mg/kg Cu
CE264	Lead (total)	Aqua Regia Extraction, ICPOES	Dry	U	3	mg/kg Pb
CE264	Mercury (total)	Aqua Regia Extraction, ICPOES	Dry	U	2	mg/kg Hg
CE264	Nickel (total)	Aqua Regia Extraction, ICPOES	Dry	M	3	mg/kg Ni
CE264	Selenium (total)	Aqua Regia Extraction, ICPOES	Dry	U	3	mg/kg Se
CE264	Vanadium (total)	Aqua Regia Extraction, ICPOES	Dry	U	4	mg/kg V
CE264	Zinc (total)	Aqua Regia Extraction, ICPOES	Dry	M	4	mg/kg Zn
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE062	Sulphate (acid extractable)	HCl extract, analysed by ICP-OES	Dry	M	100	mg/kg SO ₄
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE077	Cyanide (total)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		0.5	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0.34	mg/kg
\$	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.05	mg/kg
\$	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.05	mg/kg
\$	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.05	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
\$	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.05	mg/kg
\$	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.1	mg/kg
\$	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.05	mg/kg

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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		15	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		10	mg/kg
CE225	Total Aromatic (>C5-C44)	Sum of Aromatic VPH (>C5-C10) & EPH (>C10-C44)	As received		19	mg/kg
CE225	Total Aliphatic (>C5-C44)	Sum of Aliphatic VPH (>C5-C10) & EPH (>C10-C44)	As received		19	mg/kg
CE225	Total Aliphatic/Aromatic (>C5-C44)	Sum of Aliphatic & Aromatic VPH (>C5-C10) & EPH (>C10-C44)	As received		19	mg/kg
CE174	Vinyl chloride	Headspace GC-MS	As received		0.01	mg/kg
CE174	1,1-Dichloroethene	Headspace GC-MS	As received		0.01	mg/kg
CE174	Trans-1,2-Dichloroethene	Headspace GC-MS	As received		0.01	mg/kg
CE174	Cis-1,2-Dichloroethene	Headspace GC-MS	As received		0.01	mg/kg
CE174	1,1,1-Trichloroethane	Headspace GC-MS	As received		0.01	mg/kg
CE174	Carbon tetrachloride	Headspace GC-MS	As received		0.01	mg/kg
CE174	1,2-Dichloroethane	Headspace GC-MS	As received		0.01	mg/kg
CE174	Trichloroethene	Headspace GC-MS	As received		0.01	mg/kg
CE174	1,1,2-Trichloroethane	Headspace GC-MS	As received		0.01	mg/kg
CE174	Tetrachloroethene	Headspace GC-MS	As received		0.01	mg/kg
CE174	1,1,1,2-Tetrachloroethane	Headspace GC-MS	As received		0.01	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-
\$	Asbestos (quantitative)	HSG 248, Microscopy & Gravimetry	Dry	U	0.001	% w/w

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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)
127573-1	SP1 Sample 1	-	N	

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ADDITIONAL INFORMATION

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 4 weeks from initial receipt unless otherwise instructed.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

Moisture Content Calculated on a Wet Weight basis

DECLARATION OF COMPLIANCE (BS3882:2015)

Lab ref 127573-1
Contract name Hazelbadge Rd, Poynton, SK12 1HE
Sample ID SP1 Sample 1
OS Grid reference Not supplied
Date sampled 16 October 2023

Date received 17 October 2023
Analysis started 17 October 2023
Analysis completed 02 November 2023
Report issued 02 November 2023

Test	Units	Result	Compliant with Multipurpose? (Y/N)	Compliant with specific purpose? (Y/N)				
				Acidic	Calcareous	Low Fertility	Low F Acidic	Low F Calcareous
Texture								
Clay content	% w/w	18						
Silt content	% w/w	32						
Sand content	% w/w	49						
Soil texture	class	SANDY LOAM	Y	Y	Y	Y	Y	Y

Stone content								
>2mm	% w/w	3	Y	Y	Y	Y	Y	Y
>20mm	% w/w	0	Y	Y	Y	Y	Y	Y
>50mm	% w/w	0	Y	Y	Y	Y	Y	Y

Mass loss on ignition								
Clay 5-20%	% w/w	10.0	Y	Y	Y	Y	Y	Y
Clay 20-35%	% w/w	-	-	-	-	-	-	-
pH ¹	pH units	7.2	Y	N	N	Y	N	N
Carbonate (calcareous only)	% w/w CaCO ₃	1.1			Y			Y
Nitrogen (total)	% w/w N	0.24	Y	Y	Y			
Carbon:Nitrogen ratio	-	16.5	Y	Y	Y	Y	Y	Y
Phosphorus (extractable)	mg/l P	37	Y	Y	Y	N	N	N
Potassium (extractable)	mg/l K	589	Y	Y	Y			
Magnesium (extractable)	mg/l Mg	115.49	Y	Y	Y			
Electrical conductivity ²	µS/cm	130	Y					

Phytotoxic contaminants (by soil pH)								
Copper (Nitric acid extract)	mg/kg Cu	22	Y	Y	Y	Y	Y	Y
Nickel (Nitric acid extract)	mg/kg Ni	15	Y	Y	Y	Y	Y	Y
Zinc (Nitric acid extract)	mg/kg Zn	62	Y	Y	Y	Y	Y	Y

VISIBLE CONTAMINANTS								
(air-dried soil)	% w/w	<0.1	Y	Y	Y	Y	Y	Y
...of which plastics	% w/w	<0.1	Y	Y	Y	Y	Y	Y
Sharps	% w/w	None	Y	Y	Y	Y	Y	Y

¹ Results are accredited to MCERTS if matrix confirmed as soil

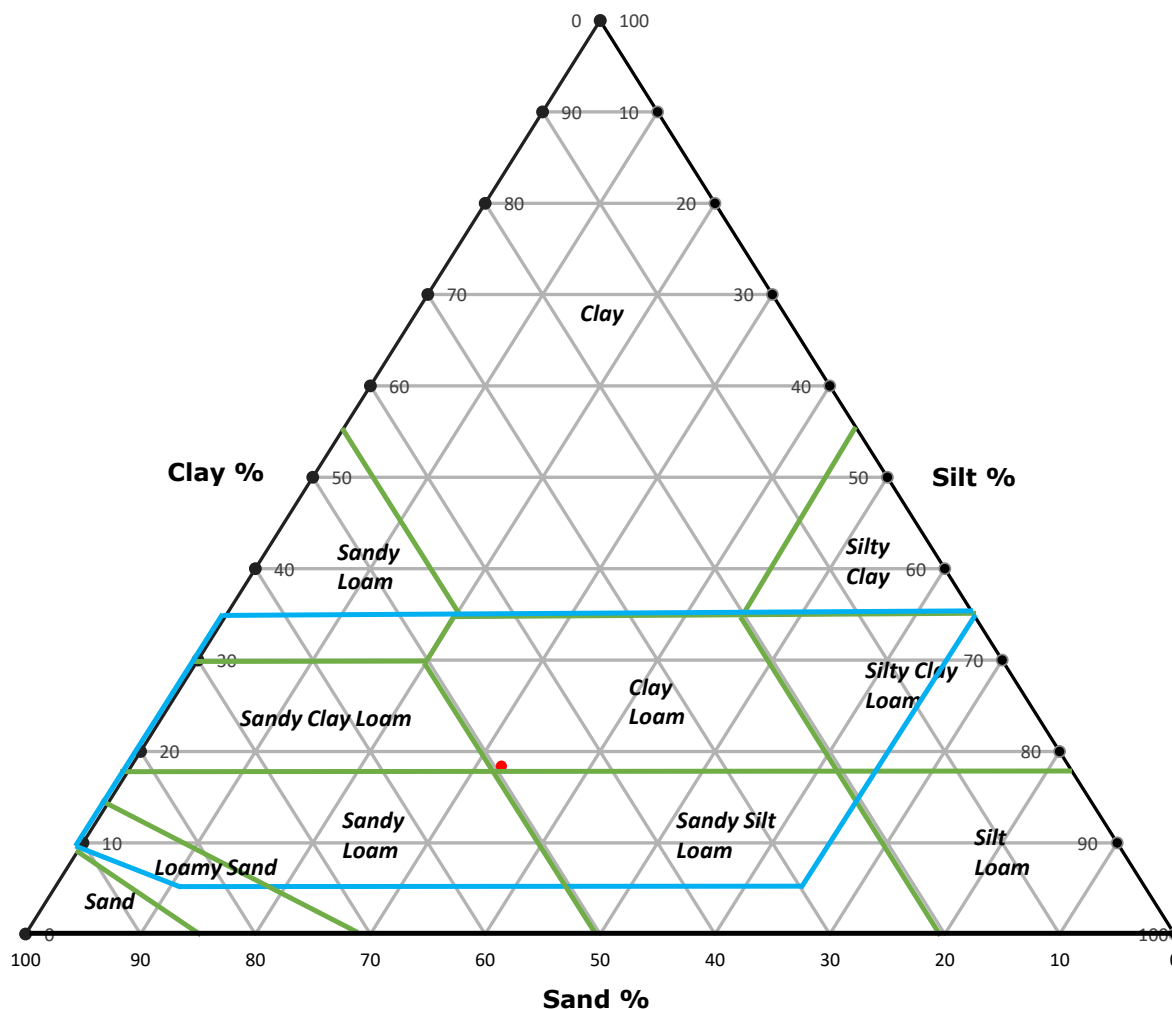
² Results in leachate are accredited to ISO17025

Disclaimer: The limits in this report are provided for guidance only and values are transcribed from BS3882:2015

Chemtech Environmental Ltd does not take responsibility for any errors or omissions in the transcription, and all data should be verified by the end user.

Any assessments made are based on the published results from the Laboratory and make no assessment of uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. Method uncertainty levels can be provided independently upon request.

Assessment is outside the scope of the laboratory's UKAS accreditation.



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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE001	Moisture Content	Gravimetry, reported on Wet Weight basis	As received		0.1	% w/w
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE007	Electrical conductivity	Conductivity Meter	As received	U	10	µS/cm
CE197	Total Carbon	Carbon Analyser	Dry		0.1	% w/w C
CE197	Total Organic Carbon (TOC)	Carbon Analyser	Dry		0.1	% w/w C
CE197	Inorganic Carbon (by difference)	Calculation: Total Carbon - Total Organic Carbon	Dry		0.1	% w/w C
CE198	Nitrogen (total)	Combustion, Nitrogen analyser	Dry		0.01	% w/w N
CE222	C:N Ratio	Calculation: TOC/Nitrogen (total)	Dry		-	-
CE118	Soil texture	Sieve & Sedimentation	As received		0.1	% w/w
CE054	Copper (Nitric acid extract)	Nitric Acid Digestm ICPMS	Dry		1	mg/kg Cu
CE054	Nickel (Nitric acid extract)	Nitric Acid Digestm ICPMS	Dry		1	mg/kg Ni
CE054	Zinc (Nitric acid extract)	Nitric Acid Digestm ICPMS	Dry		1	mg/kg Zn
CE088	Magnesium (extractable)	Ammonium Nitrate, ICP-MS	Dry		2	ng/kg
CE088	Potassium (extractable)	Ammonium Nitrate, ICP-MS	Dry		2	ng/kg
CE089	Phosphorus (extractable)	Sodium bicarbonate extraction, ICP-MS	Dry		10	ng/kg

Statement of Conformity

Statement of Conformity

Where Chemtech reports a statement of conformity to a specification, the decision rules applied are derived from the Ilac document ILAC G8:09/2019.

Acceptance limits (AL), applied are derived from the tolerance limits (TL) by you the client or applicable standard (e.g. 2003.33.EC Council Decision, BS3882, BS8601)

Agreed and reported Decision Rule:

"PASS" if the result < TL, and the bias / precision values for the process meet the targets defined within the methodology and/or applied accreditation.

Reported Decisions:

Result < TL for determinands: PASS

Result > TL for determinands: FAIL

Definitions Used:

Acceptance limit (AL) Specified upper or lower bounds of permissible measured quantity values.

Tolerance limit (TL) Specified upper or lower bound of permissible values of a property.

Accreditation of WAC/BS3882/BS8601

Accreditation in Soil to MCERTS is only applicable for specific matrix types identified as soil (Sand/Loam/Clay) during the sample assessment

If the sample is classified as not soil, not accreditation is conveyed