

Our Ref: EXR/250390 (Ver. 1)

Your Ref:

October 17, 2017



Environmental Chemistry

SOCOTEC UK Limited

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Staffordshire

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A Morris
White Rock Geo Environmental Ltd
EnviroArm Limited
597 Walsall Road
Great Wyrley
Walsall
Staffordshire
WS6 6AE

For the attention of A Morris

Dear A Morris

Sample Analysis - Parrys Quarry

Samples from the above site have been analysed in accordance with the schedule supplied.

The sample details and the results of analyses for these samples are given in the appended report.

An invoice for this work will follow under a separate cover.

Please be aware that our policy for the retention of paper based laboratory records and analysis reports is 6 years.

The work was carried out in accordance with SOCOTEC UK Limited (Multi-Sector Services) Standard Terms and Conditions of Contract.

If I can be of any further assistance please do not hesitate to contact me.

Yours sincerely

for SOCOTEC UK Limited

A handwritten signature in black ink, appearing to be 'A Tave', written over a horizontal line.

A Tave

Project Co-ordinator

01283 554463

TEST REPORT



Report No. EXR/250390 (Ver. 1)

White Rock Geo Environmental Ltd
EnviroArm Limited
597 Walsall Road
Great Wyrley
Walsall
Staffordshire
WS6 6AE

Site: Parrys Quarry

The 14 samples described in this report were registered for analysis by SOCOTEC UK Limited on 10-Oct-2017. This report supersedes any versions previously issued by the laboratory.

The analysis was completed by: 17-Oct-2017

Tests where the accreditation is set to N or No, and any individual data items marked with a * are not UKAS accredited. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The following tables are contained in this report:

Table 1 Main Analysis Results (Pages 2 to 3)
Analytical and Deviating Sample Overview (Pages 4 to 5)
Table of Additional Report Notes (Page 6)
Table of Method Descriptions (Page 7)
Table of Report Notes (Page 8)
Table of Sample Descriptions (Appendix A Page 1 of 1)

On behalf of
SOCOTEC UK Lim 
Tim Barnes
Operations Director
Energy & Waste Services

Date of Issue: 17-Oct-2017

Tests marked '^' have been subcontracted to another laboratory.

Where samples have been flagged as deviant on the Analytical and Deviating Sample Overview, for any reason, the data may not be representative of the sample at the point of sampling and the validity of the data may be affected.

SOCOTEC UK Limited accepts no responsibility for any sampling not carried out by our personnel.

Sample Analysis

SOCOTEC UK Environmental Chemistry
Analytical and Deviating Sample Overview

W250390

Customer White Rock Geo Environmental Ltd
Site Parrys Quarry
Report No W250390

Consignment No W127337
Date Logged 10-Oct-2017
In-House Report Due 17-Oct-2017

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID		CUSTOMER	ICPMSW	Nickel as Ni MS (Dissolved)	Chromium as Cr MS (Dissolved)	Cadmium as Cd MS (Dissolved)	Copper as Cu MS (Dissolved)	Lead as Pb MS (Dissolved)	Zinc as Zn MS (Dissolved)	Manganese as Mn MS (Dissolved)	Mercury as Hg MS (Dissolved)	Total Sulphur as SO4 (Diss) VAR	Calcium as Ca (Dissolved) VAR	Magnesium as Mg (Dissolved) VAR	Sodium as Na (Dissolved) VAR	Potassium as K (Dissolved) VAR	Iron as Fe (Dissolved) VAR	Chloride as Cl (Kone)	Ammoniacal Nitrogen (Kone)	Phenols - HPLC
		Matrix Type	Sampled																			
EX/1833911	BHA	Groundwater	04/10/17																			
EX/1833912	BHB	Groundwater	04/10/17																			
EX/1833913	BHC	Groundwater	04/10/17																			
EX/1833914	BHC1	Groundwater	04/10/17																			
EX/1833915	BHD	Groundwater	04/10/17																			
EX/1833916	BHE	Groundwater	04/10/17																			
EX/1833917	BHF	Groundwater	04/10/17																			
EX/1833918	BHF1	Groundwater	04/10/17																			
EX/1833919	BHG	Groundwater	04/10/17																			
EX/1833920	BHH	Groundwater	04/10/17																			
EX/1833921	BHI	Groundwater	04/10/17																			
EX/1833922	BHJ	Groundwater	04/10/17																			
EX/1833923	BHK	Groundwater	04/10/17																			
EX/1833924	BHK1	Groundwater	04/10/17																			

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key	
A	The sample was received in an inappropriate container for this analysis
B	The sample was received without the correct preservation for this analysis
C	Headspace present in the sample container
D	The sampling date was not supplied so holding time may be compromised - applicable to all analysis
E	Sample processing did not commence within the appropriate holding time
F	Sample processing did not commence within the appropriate handling time
Requested Analysis Key	
	Analysis Required
	Analysis dependant upon trigger result - Note: due date may be affected if triggered
	No analysis scheduled
^	Analysis Subcontracted - Note: due date may vary

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Where individual results are flagged see report notes for status.

Sample Analysis

SOCOTEC UK Environmental Chemistry Analytical and Deviating Sample Overview

W250390

Customer White Rock Geo Environmental Ltd
Site Parrys Quarry
Report No W250390

Consignment No W127337
Date Logged 10-Oct-2017
In-House Report Due 17-Oct-2017

Please note the results for any subcontracted analysis (identified with a '^') is likely to take up to an additional five working days.

ID Number	Description	MethodID		SFAPI	WSLM12	WSLM13	WSLM2	WSLM20	WSLM3
		Matrix Type	Sampled	Cyanide (Total) as CN SFA	Total Alkalinity as CaCO3	Total Organic Carbon	Conductivity uS/cm @ 25C	Biochemical Oxygen Demand	pH units
				✓	✓	✓	✓	✓	✓
EX/1833911	BHA	Groundwater	04/10/17					E	
EX/1833912	BHB	Groundwater	04/10/17	B				E	
EX/1833913	BHC	Groundwater	04/10/17					E	
EX/1833914	BHC1	Groundwater	04/10/17					E	
EX/1833915	BHD	Groundwater	04/10/17					E	
EX/1833916	BHE	Groundwater	04/10/17					E	
EX/1833917	BHF	Groundwater	04/10/17					E	
EX/1833918	BHF1	Groundwater	04/10/17					E	
EX/1833919	BHG	Groundwater	04/10/17					E	
EX/1833920	BHH	Groundwater	04/10/17					E	
EX/1833921	BHI	Groundwater	04/10/17					E	
EX/1833922	BHJ	Groundwater	04/10/17					E	
EX/1833923	BHK	Groundwater	04/10/17					E	
EX/1833924	BHK1	Groundwater	04/10/17					E	

Note: We will endeavour to prioritise samples to complete analysis within holding time; however any delay could result in samples becoming deviant whilst being processed in the laboratory.

If sampling dates are missing or matrices unclassified then results will not be ISO 17025 accredited. Please contact us as soon as possible to provide missing information in order to reinstate accreditation.

Deviating Sample Key

- A The sample was received in an inappropriate container for this analysis
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- E Sample processing did not commence within the appropriate holding time
- F Sample processing did not commence within the appropriate handling time

Requested Analysis Key

- Analysis Required
- Analysis dependant upon trigger result - **Note: due date may be affected if triggered**
- No analysis scheduled
- ^ Analysis Subcontracted - **Note: due date may vary**

The integrity of data for samples/analysis that have been categorised as Deviating may be compromised. Data may not be representative of the sample at the time of sampling.

Where individual results are flagged see report notes for status.

Report Number : W/EXR/250390

Additional Report Notes

Method Code	Sample ID	The following information should be taken into consideration when using the data contained within this report
WSLM20	EX/1833914/21	Based on the sample history/appearance/smell, a dilution was applied prior to testing. Unfortunately the result is below our lower range for this sample volume, therefore the detection limit has been raised.

Method Descriptions

Matrix	MethodID	Analysis Basis	Method Description
Water	ICPMSW	As Received	Direct quantitative determination of Metals in water samples using ICPMS
Water	ICPWATVAR	As Received	Direct determination of Metals and Sulphate in water samples using ICPOES
Water	KONENS	As Received	Direct analysis using discrete colorimetric analysis
Water	PHEHPLCUV	As Received	Determination of Phenols by HPLC with UV Detection
Water	SFAPI	As Received	Segmented flow analysis with colorimetric detection
Water	WSLM12	As Received	Titration with Sulphuric Acid to required pH
Water	WSLM13	As Received	Instrumental analysis using acid/persulphate digestion and non-dispersive IR detection
Water	WSLM2	As Received	Determination of the Electrical Conductivity ($\mu\text{S}/\text{cm}$) by electrical conductivity probe.
Water	WSLM20	As Received	Determination of Biological Oxygen Demand using 5 day incubation and dissolved oxygen probe
Water	WSLM3	As Received	Determination of the pH of water samples by pH probe

Report Notes

Generic Notes

Soil/Solid Analysis

Unless stated otherwise,

- Results expressed as mg/kg have been calculated on the basis indicated in the Method Description table.
All results on MCERTS reports are reported on a 105°C dry weight basis with the exception of pH and conductivity.
- Sulphate analysis not conducted in accordance with BS1377
- Water Soluble Sulphate is on a 2:1 water:soil extract

Waters Analysis

Unless stated otherwise results are expressed as mg/l

Nil: Where "Nil" has been entered against Total Alkalinity or Total Acidity this indicates that a measurement was not required due to the inherent pH of the sample.

Oil analysis specific

Unless stated otherwise,

- Results are expressed as mg/kg
- SG is expressed as g/cm³@ 15°C

Gas (Tedlar bag) Analysis

Unless stated otherwise, results are expressed as ug/l

Asbestos Analysis

CH Denotes Chrysotile

TR Denotes Tremolite

CR Denotes Crocidolite

AC Denotes Actinolite

AM Denotes Amosite

AN Denotes Anthophyllite

NAIIS No Asbestos Identified in Sample

NADIS No Asbestos Detected In Sample

Symbol Reference

^ Sub-contracted analysis.

\$\$ Unable to analyse due to the nature of the sample

¶ Samples submitted for this analyte were not preserved on site in accordance with laboratory protocols.

This may have resulted in deterioration of the sample(s) during transit to the laboratory.

Consequently the reported data may not represent the concentration of the target analyte present in the sample at the time of sampling

¥ Results for guidance only due to possible interference

& Blank corrected result

I.S Insufficient sample to complete requested analysis

I.S(g) Insufficient sample to re-analyse, results for guidance only

Intf Unable to analyse due to interferences

N.D Not determined

N.Det Not detected

N.F No Flow

NS Information Not Supplied

Req Analysis requested, see attached sheets for results

▮ Raised detection limit due to nature of the sample

* All accreditation has been removed by the laboratory for this result

‡ MCERTS accreditation has been removed for this result

§ accreditation has been removed for this result as it is a non-accredited matrix

Note: The Laboratory may only claim that data is accredited when all of the requirements of our Quality System have been met. Where these requirements have not been met the laboratory may elect to include the data in its final report and remove the accreditation from individual data items if it believes that the validity of the data has not been affected. If further details are required of the circumstances which have led to the removal of accreditation then please do not hesitate to contact the laboratory.

Sample Descriptions

Client : White Rock Geo Environmental Ltd
Site : Parrys Quarry
Report Number : W25_0390

[illegible]