



Environmental
Chemistry

Certificate of Analysis

Client: Wilson Bio-Chemical

Project: 22100373

Quote: BEC221027125 V1.1

Project Ref: Wilson Bio

Site: Soil Analysis

Contact: Pete Metcalf

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Hassacarr Close
Dunnington
York
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Phone: 01246 264950

No. Samples Received: 3

Date Received: 06/10/2022

Analysis Date: 20/10/2022

Date Issued: 20/10/2022

Report Type: Final Version 01

This report supersedes any versions previously issued by the laboratory

Reported by



Client: Wilson Bio-Chemical
Project Name: Wilson Bio-Soil Analysis
Project No: 22100373
Date Issued: 20/10/2022

Samples Analysed

<u>Text ID</u>	<u>Sample Reference</u>	<u>Sampling Date</u>	<u>Sample Type</u>	<u>Sample Description</u>
22100373-001	B52		SOLID	Soil Sample
22100373-002	B53		SOLID	Soil Sample
22100373-003	B55		SOLID	Soil Sample



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Analysis Results

					Sample ID	001	002	003
					Customer ID	B52	B53	B55
					Sample Type	SOLID	SOLID	SOLID
					Sampling Date			
Analysis	Method Code	MDL	Units	Accred.				
PFOA: Perfluorooctanoic Acid	SUB024	0.03	µg/kg	N	0.05	<0.03	0.09	
PFOS: Perfluorooctanesulfonic Acid	SUB024	0.03	µg/kg	N	<0.03	<0.03	<0.03	

TEST REPORT ASC/55516

Customer: Environmental Chemistry
SOCOTEC
Etwall Building
Bretby Business Park
Ashby Road
Burton Upon Trent
DE15 0XD

Testing Facility: Advanced Chemistry and Research
SOCOTEC
Etwall Building
Bretby Business Park
Ashby Road
Burton Upon Trent
DE15 0YZ

Purchase Order Number: 22100373

Date Samples Received: 06 October 2022

Condition of Samples: Ambient and Satisfactory

Approved by:



Approver's name: Kiran Kular

Job Title: Analyst

Test Report Date: 20 October 2022

Sample and Method Descriptions

Number of Samples Received	Matrix / Sample Description	Method ID	Description
3	Soil	IHM	IHM – DETERMINATION OF PFOS & PFOA USING LC/MS/MS – Sample was solid phase extracted and analysed by LC/MS/MS against a calibration of PFOS & PFOA utilising stable isotope ¹³ C labelled internal standardisation.

Results

Table 1:

		Units	µg/Kg	µg/Kg
		Method ID (ASC/SOP/xxx)	IHM	IHM
		Method Limit of Detection	0.03	0.03
		UKAS	NO	NO
Customer Sample Reference	Laboratory Sample Reference		PFOA	PFOS
22100373-001	ASC/55516.001		0.05	<0.03
22100373-002	ASC/55516.002		<0.03	<0.03
22100373-003	ASC/55516.003		0.09	<0.03

1. PFOA denotes Perfluorooctanoic acid
2. PFOS denotes Perfluorooctanesulfonic acid

END OF TEST REPORT



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Deviating Sample Report

<u>Sample Reference</u>	<u>Text ID</u>	<u>Method Code</u>	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
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Analysis Method

<u>Method Code</u>	<u>Method Description</u>	<u>Analysis Method</u>
SUB024	PFOA: Perfluorooctanoic Acid in Solids	
SUB024	PFOS: Perfluorooctanesulfonic Acid in Solids	

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 the parameter value being beyond our calibration range (and following the maximum size of dilution allowed, where applicable), 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.
G	The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.



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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. SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

The accreditation 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, without written approval of 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

Items listed with a 'SUB' method code prefix have been carried out by an external subcontracted laboratory.

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.

Summaries of analysis methods are available upon request.

End of Certificate of Analysis