


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 7541 Accredited to ISO/IEC 17025:2017	James Hutton Ltd – a commercial subsidiary of the James Hutton Institute Issue No: 023 Issue date: 25 February 2025	
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Testing performed at the above address only		

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
BIOLOGICAL MATERIALS	<u>Chemical Tests</u> Moisture Content and Loss of Material on Ignition Isotopes: ^{13}C , ^{15}N , Total Carbon, Total Nitrogen Qualitative identification / composition	Documented In-House Methods DM007 using Gravimetry AM002 using Continuous Flow Isotope Ratio Mass Spectrometry (CF-IRMS) FM001 using Fourier Transform - Infra Red Spectroscopy (FTIR)
BOTANICAL MATERIAL AND ANIMAL FEEDINGSTUFFS	<u>Chemical Tests</u> Total Carbon and Total Nitrogen	Documented In-House Methods DM001 using Elemental Analyser / Dumas Combustion
BOTANICAL MATERIAL AND ANIMAL FEEDINGSTUFFS	<u>Isotopic Tests</u> Isotopes: ^{13}C , ^{15}N , Total Carbon and Total Nitrogen	Documented In-House Methods AM002 using Continuous Flow Isotope Ratio Mass Spectrometry (CF-IRMS)



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CHEMICAL PRODUCTS, CHEMICALS: ORGANIC CHEMICALS: INORGANIC	<u>Chemical Tests</u> Qualitative identification / composition Qualitative identification / characterisation Quantitative estimation of phase composition <u>Isotopic Tests</u> Isotopes: ¹³ C, ¹⁵ N, Total Carbon and Total Nitrogen	Documented In-House Methods EM001 using Scanning Electron Microscopy (SEM) FM001 using FTIR GM001 and GM003 using XRD EM002 using EDS and SEM GM004 using X-ray Diffraction (XRD) Documented In-House Methods AM002 using Continuous Flow Isotope Ratio Mass Spectrometry (CF-IRMS)
FIBRE PRODUCTS – NATURAL / ARTIFICIAL	<u>Chemical Tests</u> Qualitative identification / composition	Documented In-House Methods EM001 using SEM FM001 using FT-IR EM002 using SEM and Energy Dispersing Spectroscopy (EDS)
PLASTICS AND PRODUCTS	<u>Chemical Tests</u> Qualitative identification / composition	Documented In-House Methods FM001 using FTIR



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ROCKS / GEOLOGICAL MATERIALS, SEDIMENTS AND SOILS, CLAY AND CLAY PRODUCTS	<u>Geological Tests</u> Semi-quantitative mineralogical composition Qualitative identification / characterisation Quantitative estimation of mineralogical composition Cation Exchange Capacity using Cobalt Hexamine Trichloride	Documented In-House Methods GM005 using XRD GM001 and GM003 using XRD FM001 using FTIR EM001 using SEM EM002 using EDS and SEM GM002 and GM004 using X-ray Diffraction (XRD) GM006 by colorimetry using a Discrete Analyser
ROCKS / GEOLOGICAL MATERIALS, SEDIMENTS AND SOILS	<u>Isotopic Tests</u> Isotopes: Sr	Documented In-House Methods AM005 using Thermal Ionisation Mass Spectrometry (TIMS)
SEDIMENTS AND SOILS	<u>Chemical Tests</u> <u>Exchangeable cations:</u> Ca, Mg, Na, K <u>Moisture Content and Loss of Material on Ignition</u> <u>Total Carbon and Total Nitrogen</u> pH	Documented In-House Methods DM004 Extraction Procedure BM014 using ICP-OES DM007 using Gravimetry DM001 using Elemental Analyser / Dumas Combustion DM006 using Glass Electrode
SEDIMENTS AND SOILS	<u>Isotopic Tests</u> Isotopes: ¹³ C and ¹⁵ N <u>Total Carbon</u> <u>Total Nitrogen</u>	Documented In-House Methods AM002 using Continuous Flow Isotope Ratio Mass Spectrometry (CF-IRMS)
MARINE SEDIMENTS	<u>Tributyltin (TBT)</u>	CM006 by GCMS



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MARINE SEDIMENTS	PCBs: <u>PCB28</u> <u>PCB52</u> <u>PCB101</u> <u>PCB118</u> <u>PCB153</u> <u>PCB180</u> <u>PCB186</u>	CM007 by GCMS
WATER / WATERS	<u>Chemical Tests</u> Anions: chloride, nitrate and sulphate pH	Documented In-House Methods BM002 using Ion Chromatography DM006 using Glass Electrode
WATERS (and soil extracts)	<u>Chemical Tests</u> Conductivity Total Organic Carbon (TOC) Total Nitrogen (TN) <u>Isotopic Tests</u> Isotopes: Sr <u>Chemical Tests</u>	Documented In-House Methods DM012 by Glass Electrode BM019 using Non-dispersive Infra-Red Spectroscopy and Chemiluminescence Documented In-House Methods AM005 using Thermal Ionisation Mass Spectrometry (TIMS)
FLEXIBLE SCOPE ENCOMPASSING: ROCKS / GEOLOGICAL MATERIALS, SEDIMENTS, SOILS, ANIMAL TISSUE, LEACHATES, WATERS, CHEMICAL PRODUCTS (Liquids, Solids, Organic, Inorganic) ANIMAL FEEDINGSTUFFS, BOTANICAL MATERIAL, CROPS	Inorganic elements <i>The organisation holds a flexible scope of accreditation for these tests. Please contact the organisation for details of the further individual determinands they can analyse using this method.</i>	Documented In-House Method by acid digestion method DM009 and Inductively Coupled Plasma – Optical Emission Spectroscopy (ICP-OES), Developed and Validated according to Method BM014 (flexible scope) Documented In-House Method acid digestion method DM009 and by Inductively Coupled Plasma – Mass Spectrometry (ICP-MS), Developed and Validated according to Method BM015 (flexible scope)



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FLEXIBLE SCOPE: NON-TURBID WATER AND WATER BASED SAMPLES	Inorganic analytes <i>The organisation holds a flexible scope of accreditation for these tests. Please contact the organisation for details of the further individual determinands they can analyse using this method.</i>	Documented In-House Method by discrete colorimetric analyser, developed and validated according to Method BM023 (flexible scope)
END		