Schedule of Accreditation

issued by

United Kingdom Accreditation Service

21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

2506

Accredited to ISO/IEC 17025:2005

Centre for Ecology & Hydrology

Issue No: 009 **Issue date:** 07 July 2010

Lancaster Environment Centre
Library Avenue
Bailrigg
Lancaster
LA1 4AP

Contact: Mr D Sleep
Tel: +44 (0)1524 595800
Fax: +44 (0)1524 61536
E-Mail: dsleep@ceh.ac.uk
Website: www.ceh.ac.uk/products/facilities/index.html

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
ENVIRONMENTAL SAMPLES	<u>Chemical Analysis</u>	Documented In-House Methods:
Aqueous Samples (Natural water, waste waters, effluents)	Metals: Aluminium (Al) Calcium (Ca) Iron (Fe) Magnesium (Mg) Potassium (K) Sodium (Na)	SOP 3104/SOP 3502 by ICP-OES
	Trace Metals: Aluminium (Al) Antimony (Sb) Arsenic (As) Barium (Ba) Beryllium (Be) Cadmium (Cd) Caesium (Cs) Chromium (Cr) Cobalt (Co) Copper (Cu) Iron (Fe) Lead (Pb) Lithium (Li) Manganese (Mn) Molybdenum (Mo) Nickel (Ni) Rubidium (Rb) Scandium (Sc) Selenium (Se) Strontium (Sr) Titanium (Ti) Tungsten (W) Uranium (U) Vanadium (V) Zinc (Zn)	SOP 3105/SOP 3504 by ICP-MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
ENVIRONMENTAL SAMPLES	Chemical Analysis	Documented In-House Methods:
Aqueous Samples (Natural water, waste waters, effluents) (cont'd)	Conductivity	SOP 3106 by conductivity meter
	pH	SOP 3110 by combination electrode
	Ammonium (NH4-N)	SOP 3115b and SOP 3515 by Colorimeter
	Mercury	SOP 3133 by Cold Vapour Atomic Fluorescence Spectrometer
Aqueous Samples (Natural and surface waters)	Chloride (Cl) Nitrate (NO_3) Nitrite(NO_2) Sulphate (SO_4) Fluoride (F) Bromide (Br)	SOP 3149 by Ion Chromatography
Biota, Vegetation, Soils and Sediments	% Dry Loss on Ignition	SOP 3101 by gravimetry
Biota, Vegetation, Soils, Sediments and Particulates from Waters	Total Carbon (C) and Nitrogen (N)	SOP 3102 by Elemental Analyser
Biota, Vegetation and Soils	$\delta^{15}N$	SOP 2102/SOP 2501 and SOP 2104/SOP 2502 by Elemental Analyser and Isotope Ratio Mass Spectrometer
	$\delta^{13}C$	SOP 2101/SOP 2501 and SOP 2103/SOP 2502 by Elemental Analyser and Isotope Ratio Mass Spectrometer
Carbon Dioxide (CO_2) in air	$\delta^{13}C$	SOP 2105/SOP 2503 by Trace Gas Preconcentrator and Isotope Ratio Mass Spectrometer

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Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
ENVIRONMENTAL SAMPLES	<u>Radiochemical Analysis</u>	Documented In House methods
Biota, Vegetation, Soils, Sediments, Natural Waters, Waste Waters, Effluents. Foodstuffs - Fish. Other materials within density range: 0.1g ml^{-1} - 1.2 g ml^{-1}	Gamma Emitting nuclides Energy Range: 59.5 keV - 1836 keV	SOP 4505/SOP 4504 by high resolution gamma spectrometry
Waters (Natural, Freshwaters) Soils, Sediments, Vegetation, Biota	Plutonium isotopes; $Pu^{239+240}$, Pu^{238} Americium isotopes; Am^{241}	SOP 4107/4507 by alpha spectrometry
	END	