National Laboratory Service

Method Summary for Target Based Multi Residue Screening Method

Determinand: Any compound in the Hazardous Chemicals Database extracted

under the specific method conditions that can be separated (in time) by gas chromatography and produce a unique mass spectrum that

can be identified

Matrix: Saline, surface and groundwaters, sewage and trade effluents,

leachates and sediments.

Instrumentation:

Principle: An internal standard is added to the sample which is then double

extracted (neutral-acid) with dichloromethane, and separated. The two extracts are combined, concentrated and analysed by gas chromatography with mass spectrometric detection (GC-MS). Identification is made via the automated Deconvolution Reporting

Software

Range of Application: Up to the capability of the analytical column and chemical properties

of compounds detected. The range can be extended by dilution of

the sample or extract

MRV: Available upon request.

Container: Glass 1 litre.

Storage/Preservation: Cold Storage at $5^{\circ}C \pm 3^{\circ}C$

Interferences: Any substance that co-maximises will not be deconvoluted by AMDIS

(<0.5 scan)

Within Laboratory Quality Control & Performance Criteria:

Total Error Target < 20% Bias Target < 10% Precision Targets < 5% RSD

External Quality Control: Aquacheck.