



METHOD STATEMENT

Determinand:

8:2 Fluorotelomer alcohol

Matrix:

Surface and ground waters. Untreated and treated effluent waters.

Principle of Method:

The neutral perfluorinated compound is isolated from aqueous matrix using solid phase extraction (SPE) and eluted from the SPE cartridges with a methanol. The methanol extract is further extracted with pentane before being analysed by GC-MSMS with Positive Chemical Ionization (PCI). Quantification is based upon an internal standardisation procedure.

Sampling and Sample Preparation:

Samples should be taken in Azlon bottles with no preservative.

Samples are stored between $3 \pm 2^\circ\text{C}$ prior to analysis.

Interferences:

MS/MS is an extremely selective technique and interferences should only be encountered very rarely, however in theory, any compound which is extracted by the procedure, which has a chromatographic retention time similar to the compound of interest and which produces both precursor and product ions similar to that of the compounds in question, may interfere.

Performance of Method:

Range of Application: 0.005-0.250 $\mu\text{g/l}$ without dilution

FTOH	AQC Sample
Concentration, $\mu\text{g/L}$	0.200
Mean Recovery, $\mu\text{g/L}$	0.207
Total Standard Deviation, $\mu\text{g/L}$	0.0108
Bias, %	3.73
Precision (RSD), %	5.19
Uncertainty, %	14.1

References:

In-house developed method.