

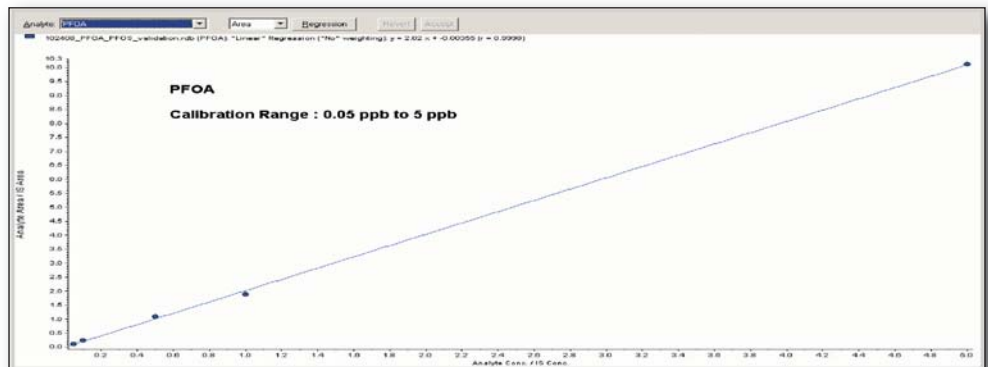
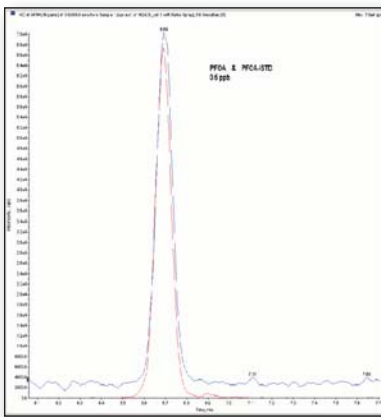
PFOA and PFOS

Perfluorinated Octanoic Acid (PFOA) and Perfluorinated Octane Sulfonic Acid (PFOS) are two examples of persistent environmental contaminants derived from industrial and consumer usage. PFOA has been used industrially as a surfactant for emulsion polymerizations, in the production of fluoroelastomers, and most recently in its use as a stain repellent. PFOA also is a by-product and degradant to many higher order fluorinated polymers including fluorotelomer alcohols. PFOA is toxic to the liver has a current limit of 0.5 ppb. Similarly, PFOS has also been used as an industrial surfactant and stain repellent. The sulfonic moiety provides suitability for the production of foams; specifically flame retarding foams used for fighting fires. PFOS has been shown to be an immunosuppressor compromising the health of wildlife markers and is currently detected in human blood samples. PFOS is considered to be toxic and the current reference dose limit is set at 0.3 ppb.

Activation Laboratories has recently developed a highly sensitive LC/MS method to simultaneously quantify the amount of PFOA and PFOS present in water samples. This in-house method is capable of detection of PFOA and PFOS in the low parts per trillion (ppt) range, with a calibration curve spanning 50 parts per trillion to 5 parts per billion.

Calibration Range: 50 ppt - 5 ppb R-value > 0.99

PFOA



PFOS

