

Table 1 Comparison of standard method on perfluorinated alkyl substances (PFASs)

	ISO 25101:2009 ¹	EPA METHOD 537 Version 1.1 September 2009 ²	DIN 38407-42:2011 ³ (ISO/WD PFC-HPLC/MS- MS)	JIS K 0450-70-10: 2011 ⁴
Title	Water quality – Determination of perfluorooctanesulfonate (PFOS) and perfluorooctanoate (PFOA) – Method for unfiltered water samples using solid phase extraction and liquid chromatography with mass spectrometry	Determination of selected perfluorinated alkyl acids in drinking water by solid phase extraction and liquid chromatography/tandem mass spectrometry (LC/MS/MS)	Determination of selected polyfluorinated compounds (PFC) in water - Method using high performance liquid chromatography and mass spectrometric detection (HPLC/MS-MS) after solid-liquid extraction	Testing methods for perfluorooctanesulfonate (PFOS) and perfluorooctanoate (PFOA) in industrial water and wastewater
Target matrices	drinking water, ground water and surface water (fresh water and sea water)	drinking water (Accuracy and precision data have been generated in reagent water, and finished ground and surface waters)	drinking water, ground water, surface water, treated waste water	industrial water and wastewater (drinking water, ground water and surface water (fresh water and sea water) as Annex: informative)
Target compounds	PFOS, PFOA	PFBS, PFHxS, PFOS, PFHxA, PFHpA, PFOA, PFNA, PFDA, PFUnDA, PFDoDA, PFTrDA, PFTeDA, NtEFOsAA, NMeFOsAA	PFBS, PFHxS, PFOS, PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFNA, PFDA	PFOS, PFOA (PFBS, PFHxS, PFHpS, PFDS, FOSA, PFBA, PFPeA, PFHxA, PFHpA, PFNA, PFDA, PFUnDA, PFDoDA, PFTrDA, PFTeDA, PFHxDA, PFOcDA as Annex: informative)
Quantification	Internal standard method (ISTD)	Internal standard method (ISTD)	Internal standard method (ISTD) External standard method (ESTD)	Internal standard method (ISTD) (External standard method (ESTD) as Annex)

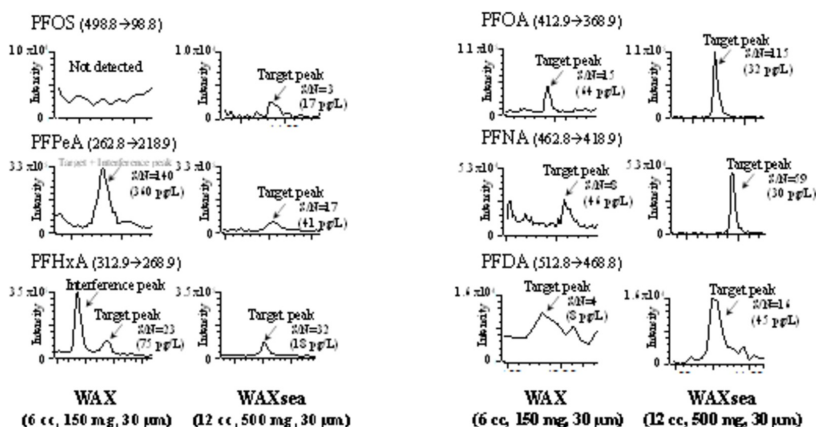


Figure 1. PFASs chromatograms of seawater samples collected from the Pacific Ocean those were extracted by WAX(150 mg, 30 µm) and WAXSea (500 mg, 30 µm)⁷