

Determination of ^{137}Cs in large volume seawater using Cu-hexacyanoferrate cartridge filters

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Abstract. A simple method to determine ^{137}Cs in seawater has been developed based on the use of a Cu-hexacyanoferrate scavenger. The Cu-hexacyanoferrate supported on cotton wound cartridge filter was used to absorb ^{137}Cs from seawater by passing large volumes over the cartridge filters with flowrate of 240 L hr^{-1} . Results from the Cu-hexacyanoferrate method were proved acceptable for accuracy with bias below $\pm 20 \%$ i.e. -9.16 to $+18.55 \%$ when compared with the traditional ammonium molybdophosphate pre-concentration method. This developed method is cost-effective and less time consuming. In addition it can be easily performed at sampling fields.

