



Determination of Multiple Metal Analytes in Sediment Samples

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Summary

Blaise Bullimore, of the Milford Haven Waterway Environmental Surveillance Group (MHWESG), required the analysis of 30 sediment samples for their metal and metalloid content, moisture content and organic carbon content. The MHWESG specified that the metals/metalloids were to be extracted from the sediment samples by two different procedures one involving hydrofluoric (HF) and perchloric (HClO₄) acids and the second by leaching with Aqua Regia. These two acidic extraction protocols have been specified so as to allow the comparison of historical data sets with the data set produced in this study.

The analytical requirements were agreed during the tender process with the MHWESG. The samples were analysed on an "as received" basis according to worksheet AJ1415001. Separate sediment samples were used for particle size analysis (PSA), according to the National Marine Biological Analytical Quality Control Scheme (NMBAQC) best practice guide. The PSA work is outside of the scope of the ISO 9001:2008 certification for the ARF.