

A Rapid Method for the Analysis of Lead-210 in Environmental and Waste Samples.

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The determination of Lead-210 (^{210}Pb) has traditionally been performed by alpha spectrometry (^{210}Po daughter) or by gas flow proportional counting (GFPC). These methods are labor intensive, time consuming and generate significant quantities of waste. A new method combining a commercially available Lead specific extraction column (EiChroM Industries, Inc.) with Liquid Scintillation Counting (LSC) is described. A stable lead carrier is used to gravimetrically determine the yield of the analysis. Yields ranged from 70-90%. A typical batch of samples can be prepared for counting in as little as one hour. The application of this method for the isolation and measurement of ^{210}Pb in a variety of environmental and waste matrices is described.

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