

Method Number: TM 230

Updated: 13/12/2023

Issue Number: 08

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**Method Summary****Determination of Alkalinity in Aqueous Sludge and Soil Extracts****Scope and Range**

This method is applicable to aqueous extractions of soil and sludge samples with a pH greater than 4.5. The reportable LOD is 10mg/kg as CaCO₃.

This method is not Accredited

References

The Determination of Alkalinity and Acidity in water HMSO, 1981
Method 2320B and 4500-CO₂D, AWWA/APHA 20th^h Edition, 1998

Principle

Preparation and Extraction:

Soils:

High purity deionised water is added to the soil sample. The sample is then allowed to shake for 1 hour, after which it is filtered through a Whatman 542 or equivalent filter paper.

Sludges:

High purity deionised water is added to the sample. The sample is then allowed to shake for 1 hour, after which it is filtered through a Whatman 542 or equivalent filter paper.

Analysis:

The extracted sludge or soil sample is titrated with standardised Hydrochloric acid, to end points of pH 8.3 and/or pH 4.5

Interferences

Oily samples are not suitable for testing. Any problems associated with manual colour changes in samples which are coloured, are overcome using a pH meter.