

METHOD STATEMENT

Determinand:

Preparation of sludge samples prior to analysis of the liquid extract for Alkalinity as per method WWC9

Matrix:

Sample Type: Sludge samples

Principle of Method:

The alkalinity of a sample is determined by titration with standard 0.02M sulphuric acid to pH 4.5 using either an instrumental or visual pH indicator end point. Sludge samples are either filtered or centrifuged prior to analysis on the liquid.

Interferences:

Substances usually present at their normal concentrations in sludges do not cause interference with the alkalinity determination. Difficulties in end-point detection may be experienced in the presence of organic substances.

Performance of Method:

Range of Application:

Normal Reporting Limit: 40mg/l as CaCO₃

Limit of Detection:

39.7696mg/l as CaCO₃

Recoveries of Compounds and Uncertainty of measurement:

	<u>Sludge</u>	<u>Spike</u>	<u>AQC</u>
Mg/l CaCO ₃	675.387	1858.523	484.135
RSD mg/l CaCO ₃ (%)	2.45	2.15	2.18
% Recovery	-	87.64	96.83

References:

The Determination of Alkalinity and Acidity in Water. 1981. Methods for the Examination of Waters and Associated Materials. HMSO. ISBN 0117516015.

