

METHOD STATEMENT

Determinand:

Acinetobacter baumannii

Matrix:

Water

Principle of Method:

Aliquots of sample are filtered through a 0.45µm membrane filter upon which the bacteria are retained. The filter is placed onto a selective growth medium MacConkey agar. The plates are examined after 18 – 24 hours incubation and then again after 40-48 hours incubation. Presumptive *Acinetobacter baumannii* appear as (all shades of) yellow colonies. The number of yellow colonies are counted and confirmed via MALDI TOF.

Sampling and Sample Preparation:

Once taken, microbiological samples should be transferred immediately to dark storage conditions and kept at a temperature between 2 - 8°C for transport to the laboratory. If samples are not analysed immediately on receipt in the laboratory, they should be kept at a temperature between 2 - 8°C, in dark conditions until analysis commences.

Samples should be analysed as soon as practicable on the day of collection. In exceptional circumstances, if there is a delay, storage under the above conditions should not exceed 24 hours before the commencement of analysis.

Interferences:

Chlorine and chloramines. Neutralise by adding sodium thiosulphate, which at a concentration of 18mg/l should counteract up to 5mg/l of free and combined residual chlorine.

Plasticisers can interfere in the mass spectrometry analysis. Only certified, non-plasticising plastic materials should be used.

Reporting of Results:

The number of *Acinetobacter baumannii* is reported as colony forming units (cfu) per 100ml.

References:

World Health Organisation (HO) Guidelines for Drinking-water Quality, Fourth Edition 2011

I.J.A.B.R, VOL. 4(1) 2014: 4-8, ISOLATION AND IDENTIFICATION OF ACINETOBACTER BAUMANNII IN HILLA CITY, aRASHA .J .M.AL-WARID&bAZHAR A. L. AL-THAHAB Department of Biology, College of Science, University of Babylon, Babylon, Iraq Department of Biology, College of Science, University of Babylon, Babylon, Iraq

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