

METHOD STATEMENT



Determinand:

Pseudomonas spp.

Matrix:

Raw and Potable waters

Principle of Method:

A known volume of the water sample is filtered through a membrane filter with 0.45µm pores upon which the bacteria are retained. The filter is then placed on a selective growth medium and incubated at 30°C for 48 hours after which colonies characteristic of *Pseudomonas* spp. are counted, and then confirmed by a positive Oxidase reaction.

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/l¹ should counteract up to 5mg/l¹ of free and combined residual chlorine.

Performance of Method:

Range of Application:	0 - 100 cfu/100ml without dilution
Limit of Detection:	1 cfu/100ml
Normal Reporting Level:	0 cfu/100ml = Not Detected

References:

Environment Agency - The Microbiology of Drinking Water (2002) - Part 1 - Water Quality and Public Health.

Collins and Lyne's Microbiological Methods. Sixth Edition 1989. Page 133, Membrane Filter Counts.

Environment Agency - The Microbiology of Drinking Water (2010) - Part 2 - Practices and Procedures for Sampling.

BBL Dryslide Oxidase Manufacturer's Instructions Ref. L-000/46, Revised May 1999.

BS EN ISO 13720:2010 Meat and meat products - Enumeration of presumptive *Pseudomonas* spp.

Environment Agency - The Microbiology of Drinking Water (2015) - Part 8 - Methods for the isolation and enumeration of *Aeromonas* and *Pseudomonas aeruginosa*.