TITLE: TOTAL SOLIDS IN SUSPENSION IN WATER FOR USE AND CONSUMPTION

BASIS:

A previously homogenised sample is filtered using a standard glass-fibre filter (Whatman 934-AH; particle retention size 1.5 µm), tared beforehand when dry. The residue retained in the filter is dried to constant weight at 103 – 105º C.

The increase in the weight of the filter represents the total solids in suspension.

APPARATUS.

Filtering equipment

Pasteur drying oven

Precision scales

Watch glass

Filters (Whatman 934-AH; particle retention size 1.5 µm)

Normal laboratory material

PROCEDURE

The standard filters needed are individually tared on glass plates and the initial dry weight is noted, determined at 103-105ºC.

A determined volume of homogenised sample is filtered through a tared filter, with a vacuum pump.

It is oven-dried at 103-105ºC until constant weight.

CALCULATIONS:

*Total solids (mg/litre) = [(A-B)*1000]/Sample volume (ml)*

A: weight of dry residue + filter (mg); B: filter tare (mg).