

EXP No: 09

DETERMINATION OF TOTAL DISSOLVED SOLID CONTENT IN WATER

Aim : To find the total dissolved solid Content present in water sample.

Requirements : water sample, crucible, burners, etc.

Theory : The dissolved solid content of a sample is important in deciding whether the water is suitable for boiler feed purposes.

Dissolved solids denote mainly the various kinds of minerals present in water. However, some organic substances present in water also contribute to TDS.

Procedure : Take 50ml of water sample in a crucible which is previously weighed. Evaporate the water till you obtain the residue. Cool the residue. Weigh the crucible along with the residue

Calculations : Total dissolved solid present in 50ml of water
= weight of (crucible+ residue) - weight of crucible
=W (gms)

$$\text{TDS in (ppm)} = \frac{W}{50} \times 10^6$$

= _____ppm.

Result : Total dissolved solids present in the water sample = _____ppm