

6. A 25.0 mL aliquot of a well-shaken and filtered sample of river water is pipetted into an evaporating dish. The sample was heated to dryness. Assume the density of the river water was 1.01 g/mL. The following data were collected Trial 1. Complete the table. (See Report Sheet.) Record calculated values with the correct number of significant figures.

A. Total Dissolved Solids (TDS) Calculation

Zone	1
Mass of evaporating dish (g)	26.217
Mass of water sample plus evaporating dish (g)	51.467
Mass of water sample (g)	25.0
Mass of dried sample plus evaporating dish (g)	35.291
Mass of dissolved solids in 25-mL aliquot of filtered sample (g)	0.206
Mass of dissolved solids per total mass of sample (g solids/g sample)	0.00824

Show calculation.

7. Total solids (g solids/kg sample, ppt)

The following data were collected for determining the concentration of suspended solids in a water sample (density 1.01 g/mL). Express all calculated data with the correct number of significant figures (see Data Analysis).

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6
Volume of sample (mL)	25.0	20.0	50.0	25.0	20.0	25.0
Mass of sample (g)	25.25	20.20	50.50	25.25	20.20	25.25
Mass of dry solid (g)	10.767	8.436	21.770	10.826	8.671	10.942
Mass of solid/mass of sample (g/g)	0.427	0.417	0.433	0.427	0.430	0.433

al. What is the average TSS in the water sample? Express this measurement in ppt (parts per thousand, g/kg). See Data Analysis, B.

b. Calculate the standard deviation and the relative standard deviation (RSD) for the analyses. See Data Analysis, C and D.

Contact Me For Any

Homework / Project / Assignment / Paper

drjack9650@gmail.com

