

Revision Gravimetric Analysis

Name:

- 1) Salt is to be mined from a geological deposit of sedimentary rock. A small sample of the rock was supplied and tested for the percentage of salt, by mass, contained in the sample.
A silver nitrate solution was used to precipitate the chloride ions found in a 4.50g sample of the rock .

i) Write a chemical equation for the precipitation reaction.

ii) If the sample was found to contain 61.2% chloride, by mass, what was the mass of the precipitate obtained from the investigation?

- 2) A rock contains an ore of aluminium sulphate ($\text{Al}_2(\text{SO}_4)_3$). A 3.48 g sample of the ore is crushed and the sulphate precipitated as barium sulphate $\text{BaSO}_4(\text{s})$. If 2.65 g of barium sulphate is obtained what is the percentage by mass of sulphur in the ore given to the right number of significant figures?