

QUALITY WORK INSTRUCTIONS (QWI) SULFUR ANALYSIS PROCEDURE ASH

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1.0 EQUIPMENT NEEDED

Burner
Muffle furnace
Crucible
Crucible holder
Desiccator

2.0 PROCEDURE

- (1) Weigh the crucible alone. Record this weight before burning.
- (2) Weigh accurately a 5-gram sulfur sample into crucible.
- (3) Heat over burner until sample has finished burning.
- (4) Place in hot muffle furnace for 30 minutes.
- (5) Remove and cool in desiccator.
- (6) Weigh to find total weight after burning, and use the formula below to calculate % Ash.

$$\text{Ash \%} = \frac{(\text{Total weight after burning} - \text{weight of crucible}) \times 100}{5\text{-gram original sample weight}}$$