

QUALITY WORK INSTRUCTIONS (QWI) SULFUR ANALYSIS PROCEDURE FINENESS – WET SCREEN FOR PRILL

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1.0 EQUIPMENT NEEDED

Clean dry sieve
Liquid dishwashing soap
Acetone
Oven

2.0 PROCEDURE

- (1) Place 10 grams of sulfur on a clean dry sieve.
- (2) Add a small amount of liquid dishwashing soap to sulfur in sieve.
- (3) Under a gentle stream of water, use your index finger to stir soap, product, and water together until rinse water runs clear. Use care to not push product through screen by using too much pressure.
- (4) Rinse with acetone to remove water.
- (5) Place in 80°C oven to dry for 15 minutes.
- (6) Remove from oven and use the formula below to calculate % of sulfur passing through sieve.

$$\% \text{ through sieve} = 100\% - \frac{\text{Weight of residue} \times 100}{10\text{-gram original sample weight}}$$

Note: For prill sulfur it has been found that the standard Rotap procedure mechanically degrades the sulfur particles, resulting in an erroneous answer on fine mesh screens. The above method was developed to provide an accurate reproducible screen result.