

QUALITY WORK INSTRUCTIONS (QWI)
SULFUR ANALYSIS PROCEDURE
HEAT LOSS – TM 18
(Method can be used for 70°, 80°, 100°)

Document #: QWI-14
Revision #: 1
Effective Date: 12/2/09

1.0 EQUIPMENT NEEDED

Pre-dried aluminum weighing dish
Scale
Oven
Desiccator

2.0 PROCEDURE

- (1) Weigh the pre-dried aluminum-weighing dish alone. (dry for minimum of 30 min.)
- (2) Weigh accurately sulfur sample (min. 5 grams) into the pre-dried aluminum-weighing dish. Record this total weight before drying.
- (3) Heat in the preheated oven for 2 hours (or per customer requirement), then remove and cool in desiccator.
- (4) Weigh to find total weight after drying, and use the formula below to calculate % Heat Loss.

$$\% \text{ Heat loss} = \frac{(\text{Total weight before drying} - \text{Total weight after drying}) \times 100}{\text{original sulfur sample weight}}$$

- (5) Place the sample in the preheated oven for one more hour, remove and cool in desiccator.
- (6) Weigh to find total weight after drying, and use the formula above to calculate % Heat Loss.
- (7) If weight has changed from before, repeat steps (5) and (6) until a constant weight is obtained.