

QUALITY WORK INSTRUCTIONS (QWI) SULFUR ANALYSIS PROCEDURE HEAT LOSS AT 80°C – INCOMING MOLTEN ONLY

Document #: QWI-13

Revision #: 1

Effective Date: 12/2/09

1.0 EQUIPMENT NEEDED

Pre-dried aluminum weighing dish
Scale
Oven
Desiccator
Incoming Molten Chart (Form 30)

2.0 PROCEDURE

- (1) Weigh the pre-dried aluminum-weighing dish alone.
- (2) Weigh accurately a 10-gram sulfur sample into the pre-dried aluminum-weighing dish. Record this total weight before drying.
- (3) Heat in an 80°C oven for 3 hours, then remove and cool in desiccator.
- (4) Weigh to find total weight after drying, and use the formula below to calculate % Heat Loss.

$$\% \text{ Heat Loss} = \frac{(\text{Total weight before drying} - \text{Total weight after drying}) \times 100}{10\text{-gram original sulfur sample weight}}$$

Note: The following is for Incoming Molten Sulfur only

- (5) Record the test results on Incoming Molten Chart (Form 30) in the Incoming Inspection Log Book. Any response above the specified limit should be reported immediately to the Plant Manager. Report the condition, sulfur supplier, and date received.