

Colorado Procedure – Laboratory 4215-15

Standard Method of Test for

Determination of Percent Moisture in Rock Salt

(Designated as CP 35 prior to the 2010 FMM.)

1. SCOPE

- 1.1 This method describes the procedures for the quantitative determination of the percent moisture contained in rock salt.

2. APPARATUS

- 2.1 *Balance or Scale* - Balance of sufficient capacity and sensitive to 0.1 grams or 0.02 percent of the principal sample weight, whichever is greater.
- 2.2 *Drying Apparatus* – Oven or other suitable device.
- 2.3 *Sample Splitter* – Riffle type sample splitter to reduce sample to test portion size in accordance with CP 32, Method A (except that moisture shall not be added.)
- 2.4 *Small Flat, Square-End Scoop with Sides* - If selecting the specimen in accordance with CP 32 Method C.

3. FIELD SAMPLE

- 3.1 Obtain the field sample from random parts of the load as it is being transferred from the conveyance vehicle to the stockpile.
- 3.2 Seal the container lid with tape or other airtight method to prevent moisture evaporation before weighing the specimen.

4. SIZE OF TEST SPECIMEN

- 4.1 The minimum weight of the test specimen shall be 500 grams.

5. PROCEDURE

- 5.1 Immediately after obtaining the specimen, weigh to the nearest 0.1g and then dry to a constant weight of not over 220°F ± 5° (105°C ± 5°). When dry, weigh to the nearest 0.1g and report as oven dry weight.

6. CALCULATIONS

6.1 Determine the total percent moisture on an oven dry basis as follows:

$$\% \text{ Moisture} \\ \text{oven dry} \\ \text{basis} = \frac{\text{Wet wt.} - \text{Dry wt.}}{\text{Dry wt.}} \times 100$$