1.0 Purpose

The purpose of this procedure is to describe how to determine the percent solids of slurry product.

2.0 Scope

This procedure applies to all in-coming slurry products to the QA Laboratory.

3.0 Responsibility

Lab Associate is responsible for testing all slurry products.

4.0 Safety Considerations

Appropriate PPE is to be worn in the laboratory.

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or the community.

5.0 Materials/Equipment

- Weighing balance -- B440 Satorius
- Gardner cup with lid

6.0 Procedure

Record the following data on forms *Slurry Testing (L12-FM-200-009)* or *Tetra Slurry Testing (L12-FM-200-010).*

1. After recording data from slurry sample bottle shake sample until all settling has re-suspended.
2. Place empty Gardner cup with lid on balance and tare to zero.
3. Remove cup from balance, remove lid and fill cup to just below the top edge.
4. Replace lid on cup evenly.
5. Excess slurry should seep out the hole in the lid, if no slurry comes out hole then remove lid and add more slurry.
6. Wipe excess slurry off the cup and place back on the balance.
7. For Gabbs, Superior and Aspers use the **exact sequence** of the following formula for solids results:

weight (g) ÷ 10 – 7.20 ÷ 95% x 10 = % solids

Example: 128.20g ÷ 10 – 7.20 ÷ 95% x 10 = 59.16

8. For Martin Marietta (MM) and Tetra material divide the weight by 10 and use the % solids chart.

% SOLIDS CHART

% Solids	lbs/gal	% Solids	lbs/gal	% Solids	lbs/gal
40.0	10.82	50.0	11.68	60.0	12.67
40.5	10.85	50.5	11.72	60.7	12.74
41.0	10.90	51.0	11.76	61.1	12.78
41.5	10.95	51.5	11.80	62.0	12.87
42.0	10.99	52.0	11.85	62.3	12.92
42.5	11.05	52.5	11.90	62.5	12.94
43.0	11.09	53.0	11.94	63.0	12.99
43.5	11.11	53.5	11.99	63.4	13.03
44.0	11.15	54.0	12.03	64.0	13.07
44.5	11.20	54.5	12.09	64.2	13.09
45.0	11.25	55.0	12.14	64.3	13.10
45.5	11.29	55.5	12.20	65.0	13.17
46.0	11.33	56.0	12.25	65.4	13.21
46.5	11.37	56.5	12.30	65.6	13.23
47.0	11.41	57.0	12.35	67.1	13.36
47.5	11.45	57.5	12.40	67.6	13.41
48.0	11.50	58.0	12.46	68.2	13.47
48.5	11.54	58.5	12.51	68.5	13.50
49.0	11.59	59.0	12.56	68.8	13.53
49.5	11.63	59.5	12.62	69.1	13.59

7.0 Reference Documents

Slurry Testing (L12-FM-200-009)
Tetra Slurry Testing (L12-FM-200-010)

8.0 Change Information

Updated procedure using *SOP Template Instructions (Q12-PR-100-004)* and *Document Numbering (Q12-PR-100-003)*