

Standard Method of Test for
**Method of Preparing Coarse Aggregate Sample for
pH and Resistivity Testing in the Laboratory**

SCDOT Designation: SC-T-143 (7/09)

1. SCOPE

This test method outlines the procedure for preparing a sample of coarse aggregate for the purpose of testing pH and resistivity when used as backfill for MSE walls. A sample weighing 2000 grams is required.

2. REFERENCED DOCUMENTS

- 2.1 ASTM Standards
 - D1125 Standard Test Method for Electrical Conductivity and Resistivity of Water
 - D1293 Standard Test Method for pH of Water

3. APPARATUS

- 3.1 One gallon (3.8 litres) wide-mouth plastic jug with lid
- 3.2 Coarse filter paper (Fisher Q8 or equivalent)
- 3.3 Electronic scales or balance

4. TEST SPECIMENS

- 4.1 Select a representative sample of coarse aggregate weighing approximately 2000 grams.

5. PROCEDURE

- 5.1. Weigh the coarse aggregate sample to the nearest gram.
- 5.2 Place the coarse aggregate sample into the 1-gallon jug. Add an equal weight of deionized or distilled water to the sample and let stand for 30 minutes.
- 5.3 At the end of the 30 minute period, place the lid on the jug and agitate the mixture for 3 minutes.
- 5.4 Repeat this agitation at the 2 and 4 hour intervals.
- 5.5 Upon completion of the 4 hour interval agitation, allow the sample to stand for 20 hours so the solids will settle out.
- 5.6 At this time, remove a sufficient quantity of the solution and filter through a coarse filter paper to obtain the supernate to be tested for pH according to ASTM D1293 and resistivity according to ASTM D1125.

6. CALCULATIONS

None.

7. REPORT

None.