

**OHD L-20  
METHOD OF TEST FOR  
PREPARATION OF CALICHE SOIL AGGREGATE SAMPLES**

- I. **SCOPE.** This method covers the preparation of caliche soil aggregate samples by washing, for mechanical analysis and determination of soil characteristics. This method prevents degradation and deterioration of the sample.
- II. **APPARATUS.** The apparatus shall consist of the following:
  - A. **Balance.** A balance sensitive to 0.1 gram.
  - B. **Sieves.** Sieves conforming to the Standard Specifications for Sieves for Testing Purposes (AASHTO M 92).
  - C. **Sampler.** A riffle sampler or sample splitter for quartering the samples.
  - D. **Oven.** Thermostatically controlled drying oven for use at 140° F (60° C) or below.
  - E. **Miscellaneous.** Large pans for soaking and washing the test sample.
- III. **SAMPLE.** A test sample shall be obtained from a representative sample by quartering or by using a riffle sampler. A moisture sample shall be taken and the test sample weighed. This weight, corrected for hygroscopic moisture content, shall be the total weight for sieve analysis calculations.
- IV. **PROCEDURE.**
  - A. Place the test sample in a large pan and cover with water. Allow the sample to soak for a period of six to eighteen (6-18) hours. After the soaking period, the material is washed over the Number 4 sieve. Any soft material which has not broken up during the soaking period shall be broken with the fingers while washing. The material retained on the Number 4 sieve shall be oven-dried and sieved for gradation according to AASHTO T 27.
  - B. The portion of the test sample passing the Number 4 sieve shall be added to the portion washed through the Number 4 sieve and this is set aside to allow the soil particles to settle for decantation. If they do not settle, then the water must be evaporated. After the wash water is removed, the total material shall be dried to a constant weight at a temperature not to exceed 140° F (60° C). The percentage passing the Number 4 sieve shall be determined by AASHTO T 27.
  - C. A representative portion of the material passing the Number 4 sieve shall be hand sieved over the Number 10 sieve to provide test samples for the liquid and plastic limits. The test samples shall be prepared according to AASHTO T 87.