

**IA Checklist  
 R-58  
 DRY PREPARATION OF DISTURBED SOIL AND SOIL-  
 AGGREGATES SAMPLES FOR TEST**

	Procedure	P	F	NA
1	Dry the soil sample as received from the field thoroughly in air or the drying apparatus at a temperature not exceeding 60°C [140°F]. Obtain a representative test sample of the amount required to perform the desired tests by splitting or quartering. Break up the aggregations of soil particles in the pulverizing apparatus in such a way as to avoid reducing the natural size of individual particles.			
2	Weigh the portion of the dried sample selected for particle- sized analysis and physical tests (including specific gravity), and record that mass as the mass of total sample uncorrected for hygroscopic moisture. Separate this portion into fractions by one of the following methods:			
3	<b><i>Alternate Methods Using 2.00-mm (No. 10) Sieve</i></b> —Separate the dried sample into two fractions using a 2.00-mm (No. 10) sieve. Grind the fraction retained on the sieve with the pulverizing apparatus until the aggregations of soil particles are broken into separate grains. Separate the ground soil into two fractions using the 2.00-mm (No. 10) sieve.			
4	<b><u>TEST SAMPLE FOR PARTICLE SIZE ANALYSIS AND SPECIFIC GRAVITY</u></b> Set aside the fraction retained on the 2.00-mm (No. 10) or that retained on the 4.75-mm (No. 4) sieve after the second sieving, for use in sieve analysis of the coarse material.			
5	Thoroughly mix the fractions passing the 2.00-mm (No. 10) sieve in both sieving operations by splitting or quartering, obtain representative portions having approximate masses that meet T-88, T-89 and T-90.			
6	<b><u>TEST SAMPLE FOR PHYSICAL TESTS ( Liquid Limit and Plastic Limit)</u></b> Separate the remaining portion of the material passing the 2.00-mm (No. 10) sieve into two parts by means of a 0.425-mm (No. 40) sieve. Grind the fraction retained on the 0.425-mm (No. 40) sieve with the pulverizing apparatus in such a manner as to break up the aggregations without fracturing the individual grains. If the sample contains brittle particles, such as flakes of mica, fragments of sea shells, etc., carefully perform the pulverizing operation with just enough pressure to free the finer material that adheres to the coarser particles. Separate the ground soil into two fractions by means of the 0.425mm (No. 40) sieve, and regrind the material retained on the sieve. When Repeated grinding produces only a small quantity of soil passing the 0.425-mm (No. 40) sieve; discard the material retained on the 0.425-mm (No. 40) sieve. Thoroughly mix the several fractions passing the 0.425-mm (No. 40) sieve obtained from the grinding and sieving operations and set aside for use in performing the physical tests.			

Remarks: