

## Department of Sustainable Natural Resources

# SOIL SURVEY STANDARD TEST METHOD

## SAMPLE RECEIPT, PREPARATION AND STORAGE

<b>ABBREVIATED NAME</b>	SRPS
<b>TEST NUMBER</b>	S1
<b>TEST METHOD TYPE</b>	A
<b>VERSION NUMBER</b>	5

### SAMPLE RECEIPT

Immediately a group of samples is received, allocate a laboratory number such as the following:

WEL/99/35/3 (Third sample of the 35th job group received in 1999  
at the State Soil Survey Laboratory in Wellington.)

This consists of the laboratory identification code followed by a forward slash (/), the last two digits of the year, followed by a forward slash (/), followed by a sequentially incremented job number. For each group of related samples, give each one a further sample number e.g. 1, 2, 3. Label each sample with the laboratory number.

Enter all details of the sample on the registration sheet. The laboratory number is to be indicated on any information sheets sent with the sample and on all test result sheets.

## SAMPLE PREPARATION

**ANY SAMPLE PREPARATION PROCEDURES USED WILL DEPEND ON THE SOIL TESTS TO BE CARRIED OUT. IT IS IMPERATIVE THAT THESE TESTS BE CONSIDERED BEFORE CARRYING OUT ANY OF THE FOLLOWING:**

### **Air-Drying**

Place the sample in a clean calico bag making sure the bag is clearly labelled. If the sample consists of large clods, it is advisable to break them to aid in drying and crushing. Alternatively, the samples can be spread on trays to dry. Hang the bag on the drying rack until air-dry or place in an oven at a maximum temperature of 40 °C.

### **Aggregate Separation**

Remove any aggregates required and place in a labelled container.

### **Wind-Erodible Aggregates Percentage**

If fine sieving, the [Non-Wind Erodible Aggregates \(P21A/1\)](#) is to be carried out. Air-dry soil has to be used before the soil is ground <2 mm.

### **Fractionation**

1. Remove large stones by hand, and break all clods using a rubber mallet. Carry out any additional steps as required by the tests (e.g. [Unified Soil Classification System: Field Method](#)) to be carried out on the sample.
2. The fine earth fraction (<2.0 mm) can be obtained by passing through the soil crusher. Mix well.
3. Place all size fractions to be retained for analysis in a labelled plastic bag.

### **Samples for Engineering Tests** (e.g. linear shrinkage)

Take a representative sample, by coning and quartering, of the material <2.0 mm. Gently grind the soil in a mortar with a rubber pestle, being careful not to crush any large sand particles.

### **Finely-Ground Samples For Chemical Tests**

1. Take a representative sub-sample, by coning and quartering, of the <2.0 mm soil fraction.
2. Pass the sub-sample through a sieve of the desired size (usually 0.425 mm). Regrind in a mortar and pestle until all the sample has passed through the sieve.

## **SAMPLE STORAGE**

1. When testing is completed, put the samples in a numbered storage bin in the soil preparation room. Enter the bin number on the sample storage record.
2. Retain the samples for at least 6 months or until otherwise notified.