

Standard Operating Procedure 221 Soil Sampling - Hand Tools

Purpose

Use hand tools to collect soil samples near the ground surface for field screening and laboratory analysis.

Safety Equipment

Wear a dedicated pair of nitrile gloves at each sample location to reduce the risk of potential cross-contamination between samples and to reduce the incidence of skin contact with the soil.

Required Equipment

- Measuring tape
- Metal shovel, hand spade, or post hole digger
- Rock hammer or pick (optional)
- Alconox, clean water, brush, and two 5-gallon buckets
- Note pad for field notes

Procedure

1. Ensure all field equipment is clean before starting.
2. Determine the appropriate location and identification prior to sampling. Use a tape measure to determine the distance (within 1 foot) from site landmarks. Identify the sample location with the letter "H" (or other specified identifier) followed by a number unique to the site. Begin with number 1 and sequentially assign numbers for all sample locations at the site.
3. If necessary, use a rock hammer or pick to loosen hard soil at the sample location.
4. Insert a metal shovel, spade, or post hole digger to the appropriate sampling depth at the designated location to obtain a representative soil sample. Withdraw the tool and soil.
5. Use a gloved hand to transfer the soil from near the tip of the tool directly into a sample container as described in SOP 215 – Collecting Soil Samples for Laboratory Analysis.
6. Record the sample identifier, depth, and time of sample collection on the sample container. Examples of properly labeled samples are: H-1 (6") or H-2 (1-2'). Record pertinent information about the sample location and sample content in the field notes.

7. Decontaminate the shovel or spade between sample locations as described in SOP 810. Discard gloves and use new gloves for the next sample location.