Single Tube Sampling

Single tube sampling is the fastest way to obtain soil samples at shallow depths. Sampling will begin from the surface and continue through the same hole for subsequent samples, providing caving or swelling does not occur and there are no concerns about cross contamination. Single tube samplers may also be used telescopically through larger direct push systems or through the ID of a hollowstem auger. They may also be used in prebored holes prepared with our heavy duty tooling for obtaining greater depths. Our heavy duty tooling is helpful in tighter lithology and for obtaining greater depths.

**Features**
- Quickly take shallow soil samples in non-heaving, non-caving material, up to 10' below ground surface in depth.
- Great for telescopic sampling techniques.
- Ability to handle high pressure, in comparison to conventional spitz-spoon methods.
- Use the same borehole for continuous and interval specific sampling.
- Variety of sampler sizes and options available.
- Core catcher tip available.

**Single Tube Sampling Application:**
The AMS single tube system is used to collect soil samples easily and efficiently at shallow depths.
- Direct push the single tube sampler from the surface. (Figure 1)
- Remove the sampler and retrieve the sample. (Figure 2)
- Put a decontaminated sampler with new liner into the borehole. (Figure 3)
- Add inner extensions and direct push to the next sampling interval. (Figure 4)
- Remove the sampler and retrieve the sample. (Figure 5)

The steps shown in Figures 4 and 5 can be repeated to maximum depth desired or as long as the borehole stays open. (i.e. no caving or extreme swelling)

If pre-boring is necessary or required, begin sampling at the bottom of the pre-boring.

For sample retrieval, change the drive head adapter for a pull cap.

**Adapter Options**
- 2 1/8” – 1 1/4” Adapter
- 2 1/8” – 1 5/8” Adapter
- 2 3/8” – 1 1/4” Adapter
- 2 3/8” – 1 5/8” Adapter
- 2 1/2” – 3 1/4” Adapter

NOTE: Pushing with extension of the same diameter will make the sampling process more efficient by:
- Eliminating void that creates wear and tear on tooling.
- Decreasing loss during borehole collapse/cave-in.
- Reducing loss of energy due to flex or bowing of rod.

**2 3/8” Single Tube Sampler**
- 5618.193* G3 2 3/8” x 4’ DP Extension
- 5684.14 G3 2 3/8” PS Drive Tip Section
- 5684.12 G3 2 3/8” PS External Drive Tip
- 18171 1 1/2” Basket Retainer (white - soft)
- 5618.192* G3 Adapter 2 3/8” to 1 1/4” Thread
- 5005.74 1 1/4” x 4’ DP Extension
- 5005.86” 1 1/4” Drive Head Adapter
- 5005.80” 1 1/4” Pull Cap
- 5006.425* 1 1/4” x 4’ PVC Liner
- 418.085 1 1/2” Core Catcher Cap
- 418.08” 1 1/2” Plastic End Cap
- 1 1/2” Plastic End Cap
- 1 1/2” Core Catcher Cap
- 1 1/2” Drive Head Adapter
- 1 1/2” x 4’ DP Extension

* Minimum required for a single 1 1/2” x 4’ liner sample.

**2 3/4” Single Tube Sampler**
- 5010.04” 2 3/4” x 4’ DP Extension
- 5010.11” 2 3/4” External Drive Tip - w/Liner
- 5010.13” 2 3/4” External Drive Tip - Core Catcher
- 5010.12” 2 3/4” External Drive Tip - Clay w/Liner
- 5010.41” Adapter 2 3/4” to 1 1/4” Thread
- 5005.74 1 1/4” x 4’ DP Extension
- 5005.80” 1 1/4” Drive Head Adapter
- 5005.80” 1 1/4” Pull Cap
- 5010.48” 2” x 4’ PVC Liner
- 418.105 2” Core Catcher Cap
- 418.10” 2” Plastic End Cap
- 1 1/4” x 4’ DP Extension

* Minimum required for a single 2” x 4’ liner sample.

**Accessories**
- 5004.59 Stainless Steel 100 Mesh Screen for Expendable Drive Tip Holder
- 5008.27 1 5/8” Fishing Tool, 1 5/8” Thread
- 52263 1 5/8” Fishing Tool, 1 4” Thread