BESST CrustBuster SimulProbe®

Simultaneous soil core and ground water sampling

BESST's SimulProbe is used in exploratory borehole drilling for environmental, water resource, agricultural, nuclear or mining industries, to collect a simultaneous soil core and ground water sample. The probe is driven into the ground by a hammer. The core is collected inside the core-barrel chamber within the lower half of the probe. The probe is lifted 4 inches, opening a hidden compartment that channels the ground water into a water canister through Teflon straws located in the grooved edges running along the length of the core-barrel. The water canister is closed by back pressurization, and prevents the escape of VOC's while the probe is removed from the exploratory borehole. At the

surface the soil core and groundwater sample can be easily removed from the SimulProbe for shipment to a laboratory.

Benefits to using the SimulProbe Include:

- Representative sampling. Soil core and water sample are taken at the same place. (Can also be used for simultaneous soil core and soil vapor.)
- Time savings. Quick setup and mobilization.
- VOC measurement. Back pressurization keeps VOC's in groundwater sample and provides higher accuracy laboratory results.



Figure 1 - Probe prepared for sampling in the field.

Features:

- Length: 4.5 feet
- Maximum outside diameter: 4 inches
- Core dimension: length 19.6in, diameter 2.38in
- Water canister volume: ½ US Gallon (additional water canisters can be stacked for a larger volume).
- Pressurization: Nitrogen gas or air compressor
- Top connection: NW (custom options available upon request)
- Rig compatibility: Hollow Stem Auger, Mud and Air Rotary, Casing Hammer,
 Dual Wall Percussion, Sonic
- Durability: 10000 lbf strike







