

BESST Mini SimulProbe®

Simultaneous soil core and soil gas sampling

BESST's Mini SimulProbe is used in exploratory borehole drilling to collect a simultaneous soil core and soil gas sample. The probe is driven into the ground by a hammer. The soil is driven inside the core-barrel. The probe is lifted two inches, opening a hidden compartment that channels the soil gas into the probe through two Teflon straws located in the split half grooves that run along the edges of the core barrel. A vacuum pump is connected to a tube running from the probe to the surface. The vacuum pump is used to collect the gas directly from the soil. Once the gas sample has been collected using a Tedlar bag, Suma Canister or Soil Gas Syringe, the probe can be removed from the borehole and the soil core sample can be easily removed from the SimulProbe for shipment to a laboratory.

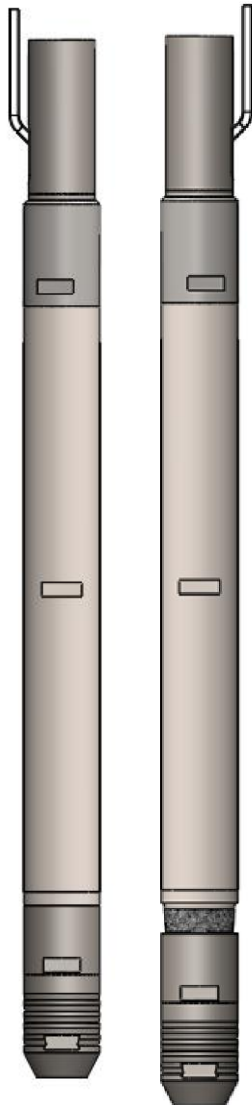


Figure 2 - Left: Mini SimulProbe in closed position. Right: Gas inlet open for collecting sample.

Benefits to using the SimulProbe:

- **Representative sampling:** Soil core and soil gas sample are taken at the same place.
- **VOC measurement:** The VOC's are directly collected from the ground which limits cross contamination of sample.
- **Time savings:** Quick setup and mobilization. System can be used with photoionization detector (PID) for on-site results.
- **In-Situ Head Space Test:** Enhances accuracy of on-site field measurements by directly sampling the soil-gas down-hole, rather than using unreliable ex-situ methods which damage sample integrity.

Features:

- **Length:** 2 feet
- **Maximum outside diameter:** 2 inches
- **Core dimension:** length 17.4in, diameter 1.18in
- **Top connection:** AW (custom options available upon request)
- **Rig compatibility:** Hollow Stem Auger, Air Rotary Casing Hammer, Dual Wall Percussion, Sonic



Figure 1 - Mini Probe deployed in hollow stem augur.