Soil Gas Sampler (Dual Gauge, RAVEqc Quick-Connect Outlet Fitting)

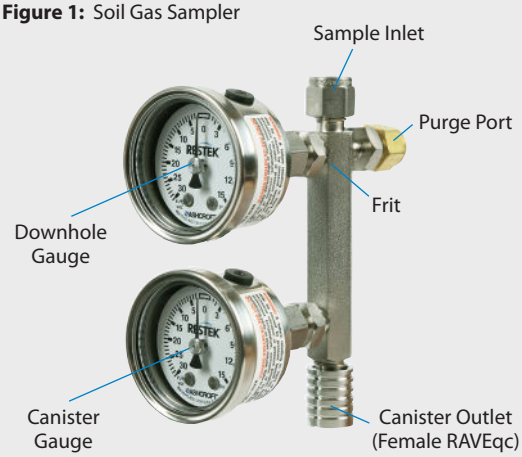
(cat.# 27255-27260)

Warning: When qualifying or cleaning this sampler, do not exceed 15 psig (the upper value of the gauge) as it can lead to irreversible damage.

Restek soil gas samplers are compatible with air sampling canisters and bottles, and they are available in several configurations. These instructions detail how to use soil gas samplers that have two gauges and a RAVEqc quick-connect outlet fitting. This configuration has the following components, as shown in Figure 1.

- Sample inlet: ¼" compression fitting for an incoming sample line.
- Frit: screw-in replaceable 2 µm frit (cat.# 26477 or 26478).
- Purge port: ¼" compression fitting for a vacuum source (used to purge the sampler and sample line).
- Canister outlet: female RAVEqc quick-connect fitting.
- Downhole gauge: gauge for measuring sample line obstructions (connects with a ¼" tube stub).
- Canister gauge: gauge for measuring canister vacuum/pressure during sampling (connects with a ¼" tube stub).

Figure 1: Soil Gas Sampler



Connecting to a Canister with a RAVE+ Diaphragm Valve (or Similar) and a Male RAVEqc Quick-Connect Fitting

NOTE: Before beginning, ensure that the canister diaphragm valve is closed to prevent premature sampling. Once the RAVEqc fittings are engaged, the quick-connect valve will open, and sampling will start automatically.

1. Connect the soil gas sampler to the air sampling canister via their respective female and male RAVEqc quick-connect fittings (Figure 2).
2. Connect the sample line to the sample inlet via the ¼" compression fitting on the top of the soil gas sampler as shown in Figure 3.
3. If purging the sampler and sample line is desired (optional), connect a vacuum source line to the ¼" compression fitting purge port on the side of the soil gas sampler (Figure 4). Then, turn on the vacuum and open the valve to vacuum to purge the system. When purging is complete, turn off the vacuum.
4. Open the canister diaphragm valve to begin sampling.

Connecting to a Canister with Only a Male RAVEqc Quick-Connect Fitting (No Diaphragm Valve) or to an Air Sampling Bottle

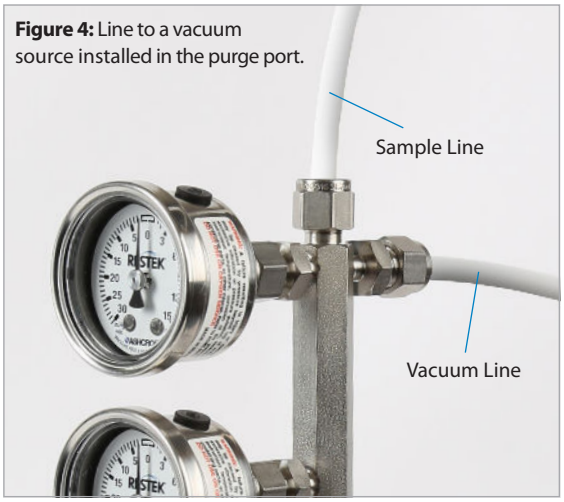
NOTE: Sampling with begin immediately after the RAVEqc quick-connect fittings are engaged.

1. Connect the sample line to the sample inlet via the ¼" compression fitting on the top of the soil gas sampler as shown in Figure 3.
2. Connect the soil gas sampler to the collection container (air sampling canister or bottle) via their respective female and male RAVEqc quick-connect fittings (Figure 2).

Figure 2: A soil gas sampler connected to an air sampling canister.

Figure 3: A sample line installed in the sample inlet of a soil gas sampler.

Figure 4: Line to a vacuum source installed in the purge port.



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Frit Replacement

1. Remove the nut from the sample inlet. Then, using a small flathead screwdriver, unscrew the frit and remove it from the soil gas sampler (Figure 5).
2. Screw in a new frit and replace the nut or cap on the sample inlet.

Figure 5: Open the sample inlet to replace the frit.

Cleaning

The soil gas sampler can be cleaned by repeated pressure cycles with humid air or nitrogen and evacuation under heat, similar to the process used for cleaning an air sampling canister. When cleaning, do not exceed 120 °C for stainless-steel parts, 80 °C for Siltek-coated parts, or 15 psig if gauges are attached.

Questions about this or any other Restek product?
Contact us or your local Restek representative (www.restek.com/contact-us).

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