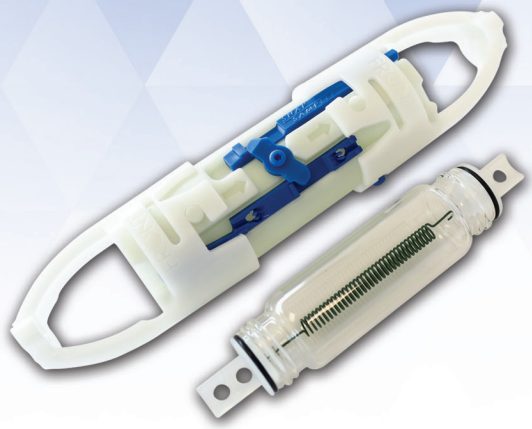
PASSIVE GROUNDWATER SAMPLING SYSTEM

SNAP SAMPLER®

The Proven Alternative to Purging



The Snap Sampler® System reduces sampling costs while providing high sample quality and accuracy

Passive groundwater sampling is a proven alternative to purging and sampling, and the best choice among passive samplers is QED's Snap Sampler® passive sampling system. Applicable to almost any site where purging and sampling are used, it's also the best alternative in low-yield wells, deep wells and very short water columns that can be challenging for pump systems. The Snap Sampler® passive sampling system (U.S. Patent 7,178,415) – winner of the NGWA's Equipment Design Award for safety, efficiency and ease of operation – can be used to sample for a wide range of target contaminants.

The Snap Sampler is a dedicated sampling system that uses unique sample bottles with "snap" sealing caps that are open at both ends. The bottles are loaded into individual Snap Sampler modules that can be stacked in series to match sampling requirements. Water within the well screen zone moves through the bottles and equilibrates with formation water moving through the well. To collect samples, a manual trigger line or pneumatic actuator releases the spring-loaded caps and captures samples under in-situ conditions. The Snap Sampler modules are retrieved from the well and the bottles removed for shipment to the laboratory. Preservative can be added right through the snap cap without opening the bottles. Modules are then redeployed with a new set of bottles and left in place until the next sampling event

Sample for Any Parameter
40 mL VOA vials and 125 and 350 mL HDPE bottles

High Sample Integrity
Samples are collected in-situ, no exposure to air or contaminants

US Department of Defense
Validated Technology

QED™

WWW.QEDENV.COM INFO@QEDENV.COM 800.624.2026 734.995.2547

FEATURES

- Faster sampling with no purging
- No limitations on analyte testing
- Enhanced sampling consistency
- Samples are collected inside the well
- No-pump, no-pour passive sampling

BENEFITS

- Sample more wells in less time
- Test for all VOCs, SVOCs, metals and more
- Quicker determination of data trends
- Minimizes VOC loss, oxidation and sample contamination
- No purge water waste

Passive sampling with the Snap Sampler system eliminates well purging labor and purge water management and disposal. There's no need for compressors, generators or control boxes, no engine exhaust, no handling of fuel or oil in the field, no set up or calibration of flow cell instruments. Samples can be collected by one person without the need for field vehicles carrying equipment and water tanks to the site.

Snap Sampler bottles are available in three sizes: glass 40 ml VOA vial size and HDPE 125 ml and 350 ml sizes. The 40 ml and 125 ml bottles fit in 2 inch (50 mm) and larger monitoring wells; 350 ml bottles can be used in 4 inch (100 mm) and larger wells. The 40 ml VOA vial can be used directly in standard laboratory auto sampler equipment—no special handling is required by the lab. The plastic bottles are ideal for larger volume collection or for metals or other analytes. Up to six modules can be connected in any combination at the desired sampling depth within the well screen interval. There's no depth limitation with the Snap Sampler system- samples have been collected at depths greater than 2,000 feet (600 m).

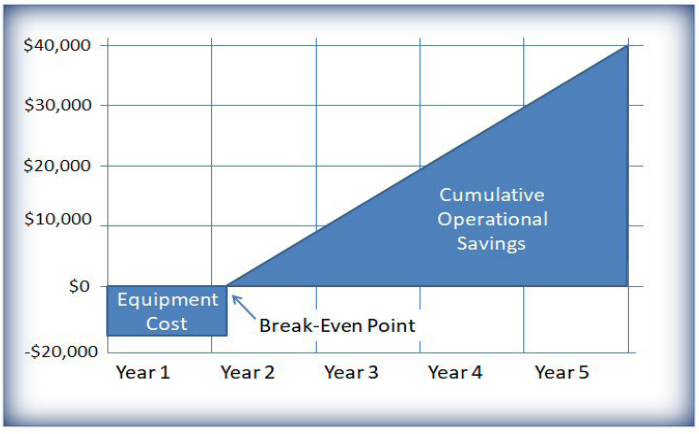
Materials

Snap Sampler modules, Twist-on connectors, Release pins, Blue screws, Pneumatic actuator assemblies	Acetal/Glass-filled Acetal
Bottles	Glass or HDPE
Snap caps	PFA
Bottle spring	302 Stainless Steel with PFA Coating
O-rings	FKM (Viton) or Buna-N (Nitrile)
Trigger tubing	HDPE
Manual trigger cable	302 Stainless with Nylon Coating

Dimensions

SNAP-40 for VOA Vials	1.7 in (4.3 cm) OD, 7.8 in (19.8 cm) Length
SNAP-125-350 for HDPE bottles	1.7 in OD (4.3 cm), 10.5 in (27.7 cm) Length w/ 125 ml bottle installed: 1.88 in (4.8 cm) OD w/ 350 ml bottle installed: 3.4 in (8.6 cm) OD
SNAP-PA, Pneumatic Actuator	1.74 in (4.4 cm) OD, 12.5 in (31.8 cm)
SNAP-WellCap2	Fits 2 in (50 mm) nominal PVC pipe, 4.3 in (10.9 cm) overall diameter; requires 1.5 in (3.8 cm) vertical clearance
SNAP-WellCap4	Fits 4 in (100 mm) nominal PVC pipe, 6.5 in (16.5 cm) overall diameter; requires 1.5 in (3.8 cm) vertical clearance

Savings Projection, 15 Wells, Quarterly Sampling



Initial investment in Snap Sampler equipment pays for itself quickly through:

- **reduced preparation and mobilization cost**
- **little to no equipment rental**
- **faster sampling**
- **no purge water handling or disposal**

In this cost comparison with traditional well purging, the crossover point is the "break-even" point on the initial investment. Cumulative savings over time greatly exceed the initial investment.