



Guidelines for Sediment Pore Water Sampling Using the AGI Universal Sampler

Expected concentration of Primary Contaminant (ppb)*	Residence time in well (Hr.)
20 to 5000	0.5 (30 min.)
10 to 3500	1
5 to 2000	2
3 to 1000	4

* Values based on detection limits and upper range of majority of standard VOCs/ SVOCs (water temp ~10°C, flow <10m/ day, depth <35 feet below water surface)
(Compound specific reporting ranges based on different aquifer conditions are available upon request)

Cautions:

- Always wear clean protective gloves when handling AGI Universal Samplers
- Secure deployment string to well cap/ casing prior to lowering into well
- Lower sampler into well gently, minimizing water disturbance
- Wipe sampler dry and remove string before returning to sample vial.

Validated Sampling Range:

Temp. 9 to 26°C, Depth < 35 feet, Flow <10m/day, concentrations from 5ug/L to 1420ug/L

Installation

1. Using rod, push sampler into sediment to the desired depth. A premeasured pole with samplers secured at different heights may be used for vertical profiling. Clean rod if to be re-used.
2. Record the sampler number(s), location, and time installed on the Installation Retrieval Log. Also, record serial numbers of trip blank(s). Do not open trip blanks.
3. Record depth of sampler in sediment, height of water surface above sampler, and water temperature
4. Measure in-situ pore-water volume, obtain sample of sediment for measurement, or note sediment material (see chart below for default materials and related pore water volumes)

Sediment Texture	Pore Water Volume (cc/cc)
Clay	0.459
Clay Loam	0.442
Loam	0.399
Silt	0.489
Silt Loam	0.439
Silty Clay	0.481
Silty Clay Loam	0.482
Sand	0.375
Sandy Clay	0.385
Sandy Clay Loam	0.384
Sandy Loam	0.387
Loamy Sand	0.39

Retrieval

1. Retrieve sampler from sediment after the recommended exposure time.
2. Cut and remove sampler(s) from the string (if used).
3. Dry sampler with clean paper towel, squeeze dry or remove insertion pocket, and place sampler in correct jar. (Serial number on jar must match serial number on sampler.)
4. Record the time of retrieval on installation log. Also note any odors, free product, etc.
5. Properly dispose of paper towels and string.
6. Return sampler to box and ship back to AGI. Email completed electronic installation log back to AGI.

Examples of Sediment Installation Tools and Techniques

