

Point Source Sampling

Point source sampling can be used to profile an open borehole or screened well, to collect samples from distinct levels or points of inflow. There is negligible disturbance as can be caused by pumping and purging. Mixing of the sample with water from different levels in the well is minimized.

Purging and disposal of purged water can be avoided, because sampling directly from a specific depth collects the water that has just flowed into the well at that depth.

Solinst also manufactures the Model 425 Discrete Interval Sampler which is pressurized before lowering into the well to prevent water from entering the sampler until the sampling zone has been reached.

The Model 425T Transportable DIS is similar, but uses special shut-off valves to retain the volatiles in a zero headspace sampler, in down-hole condition, during transport to the laboratory. Discrete Interval Samplers are described on Data Sheet 425.

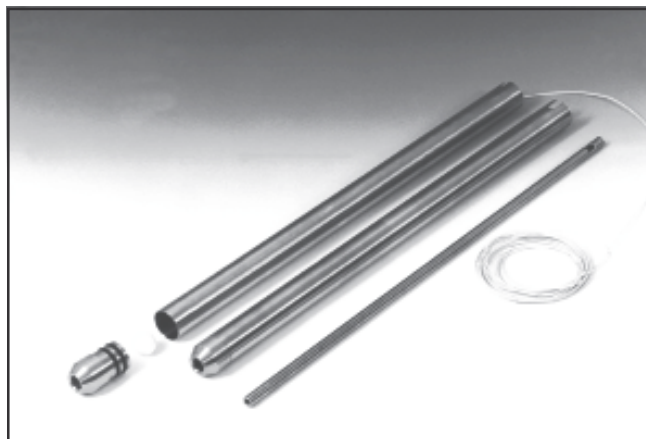
Model 429

Point Source Bailer

The Solinst Point Source Bailer has dual ball valves, top and bottom. This prevents a sample collected at a discrete depth from mixing with water from other depths during retrieval.

The Point Source Bailer is a simple and cost effective device for aquifer profiling. It needs no costly or hard to transport ancillary equipment, making it ideal for point source sampling in hard to access locations.

The miniature 0.5" (12.7 mm) diameter model is ideal for use in narrow tubes and direct push devices.



Method of Operation

The bailer is lowered slowly to the desired sample depth on a support line. As the bailer is being lowered, both ball valves open, allowing water to flow through the sampler.

On reaching the sampling depth, the bailer is raised using the support cable and optional winding reel. The weight of water and upward movement of the bailer keep both ball valves closed. The top ball valve prevents the sample in the bailer from mixing with water at higher levels in the borehole.

Once at the surface, the bailer is emptied by opening the top vent, and allowing the water to drain slowly through the sample release device into the sample container.

The Point-Source Bailer can then be decontaminated before taking the next sample.

Specifications

The Solinst Point Source Bailer is constructed of stainless steel with Teflon® ball valves and Viton® o-rings. The sampler comes complete with a stainless steel sample release device to avoid loss of volatiles during transfer to the sample vial.

The standard support line is stainless steel. Teflon® coated steel support line is also available. If desired, a Solinst storage and winding reel is available on which to store the cable.

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Bailer Capacity			
Per 2 Foot Length			
O.D. Inch	Capacity OZ	O.D. mm	Capacity ml
0.5	1.7	12.7	50
1.0	6.5	25.4	190
1.5	16	38.1	430
2.0	29	50.8	860

Point Source Bailers come in 2ft. (610 mm) length as standard or an optional 4 ft. (1220 mm) length