



EXPLANATION SHEET LITTLE & BIG SUCKER SAMPLERS

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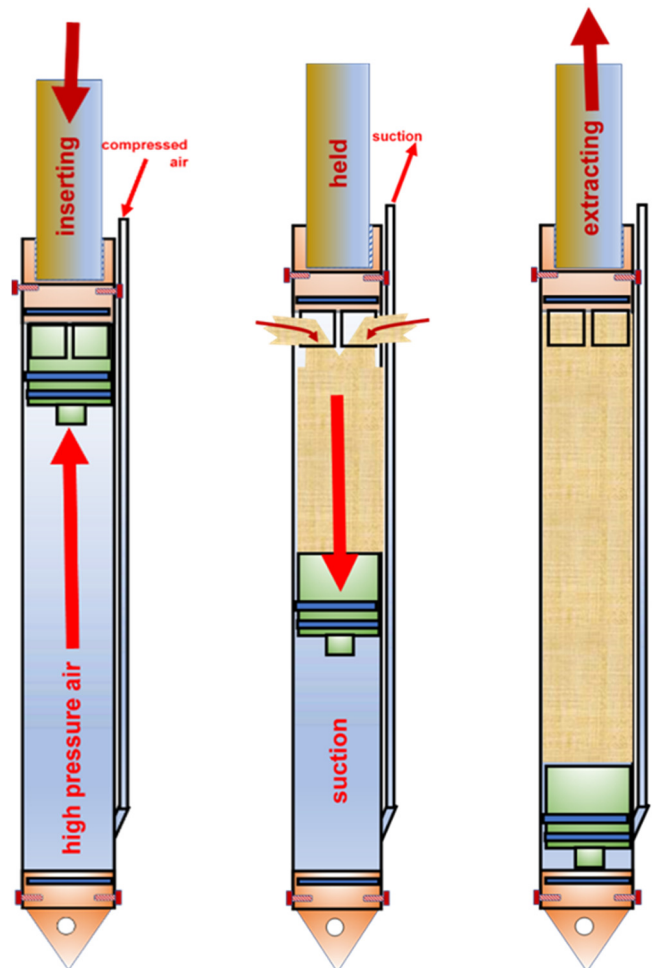
Our Little Sucker and Big Sucker Samplers were originally designed to reliably take disturbed but un-mixed samples of very soft tailings materials. They are well suited also for sampling of very soft and extremely loose natural soils.

The principles are simple, as shown in the adjacent Little Sucker cartoon. In brief:

- The sampler is in effect an “upside down” piston sampler.
- The piston is held up by compressed air (or nitrogen) during sampler insertion; the piston closes the top-end sampling ports.
- The piston is then sucked down by suction below, and pushed down by the surrounding sediment/liquid pressure. Sample is sucked in during this period.
- The sampler is retracted and the sample is ejected into a sampler bottle at the surface. Photos below show that part of the process.

To date, in materials suited to sampling by this method, we have routinely achieved 100% sample recovery.

Samples taken this way can be subjected to assay, chemical tests or various geomechanical classification tests such as particle size, PI, moisture content, etc.



Note that the “Big Sucker” is simply a two storey version that can take two samples at the same time, 1m apart vertically.