

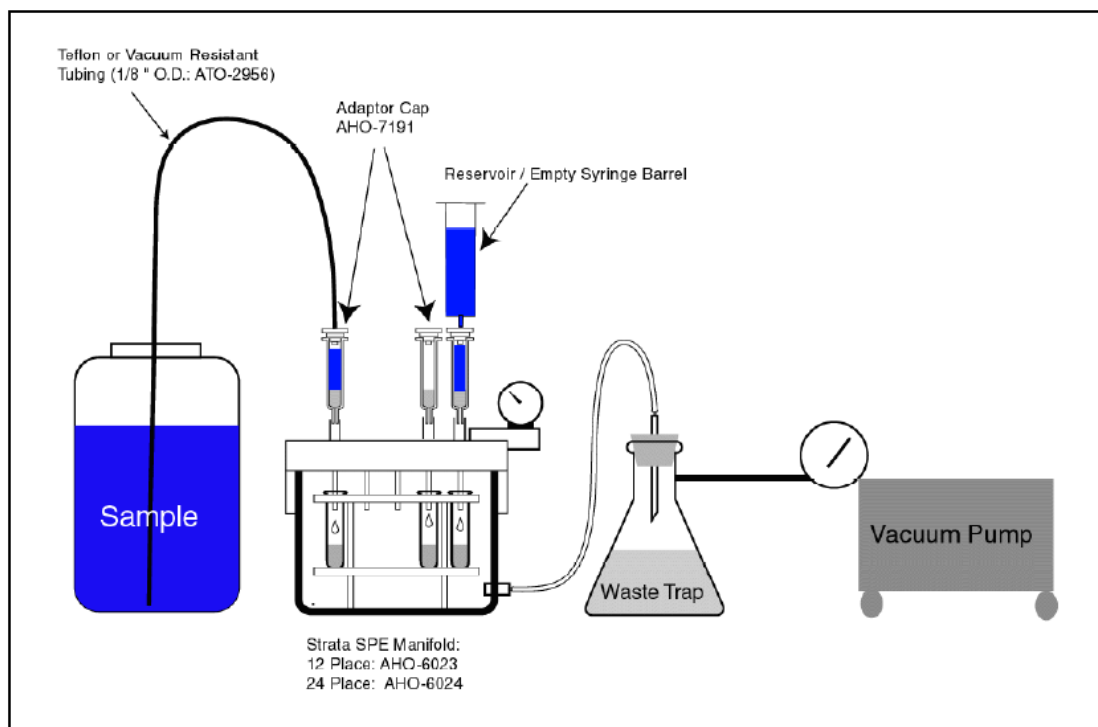


Processing Large Volume Samples with Strata SPE Cartridges

A major benefit of SPE is its ability to concentrate trace amounts of analyte from very dilute, large volume samples. Unfortunately these samples are often several times larger than the reservoir capacity of the SPE cartridge. Several strategies have proven most useful in dealing with these large volume samples.

1. Apply the sample to the cartridge in multiple aliquots.
2. Attach a separate, large-volume reservoir to the top of the SPE cartridge using an adaptor cap.
3. Connect the SPE cartridge directly to the sample reservoir using a piece of tubing. The applied vacuum creates a suction that draws the sample from the sample reservoir through the tubing, into the SPE cartridge and through the sorbent bed. Vacuum tight connection between the tubing and the SPE cartridge adaptor is critical.

Reminder: A cartridges' retention capacity is strictly related to the mass of sorbent packed into the cartridge and is unaffected by the so-called "reservoir" volume capacity of the cartridge. For example, a 500 mg / 3 ml tube has the exact same retention capacity as a 500 mg / 6 ml, or a 500 mg / 12 ml.



Key words: Large volume sample, 1L water sample, solid phase extraction (SPE)