

Sampling Guide HybridSS

STEP 1 – Check all the Items of the sampling kit. Keep the toolbox far from any contamination source.

- Toolbox
- Zip lock bags
- HybridSS tubes (one per sampling point)
- Check valves system (one per project)
- 500mL syringe (one per project)
- Chain of custody
- Silicone tubing for sampling connections
- Finger Counter

*** VSOL Group does not provide sampling pumps and/or PTFE tubing.**



STEP 2- Perform all of sampling procedures such as the leak test and/or dead volume purging. All these procedures should have their requirements defined in the data quality objectives of the project.

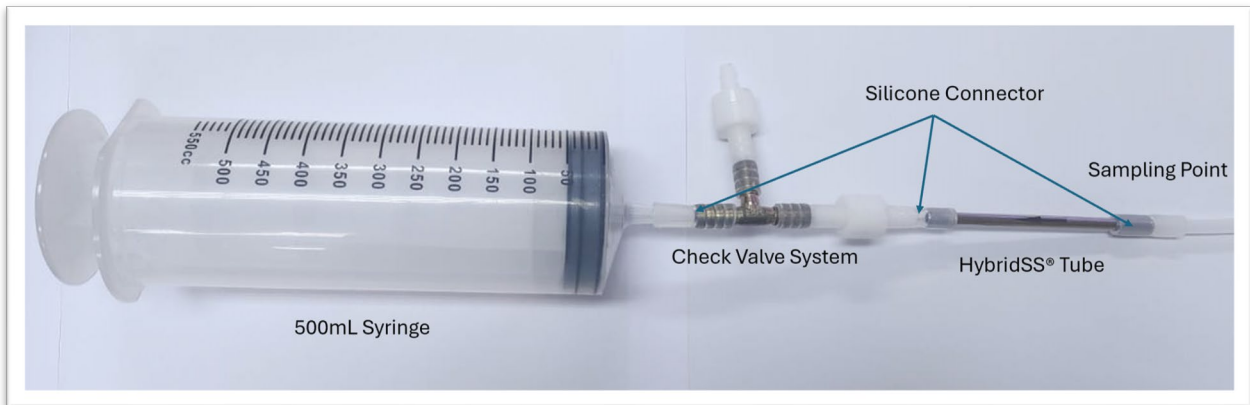
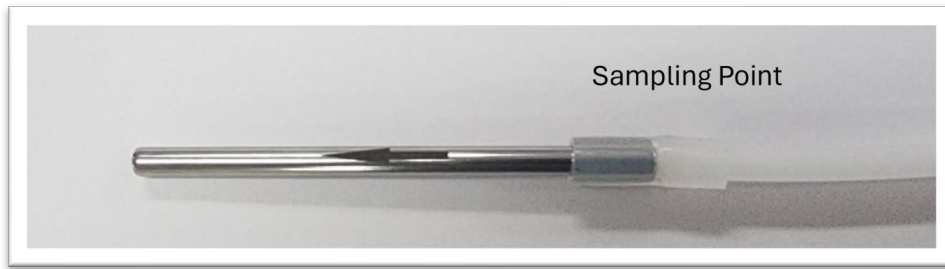
STEP 3 – Remove the sample inlet cap of the tube. The arrow laser printed on the tube indicates the sample flow direction.



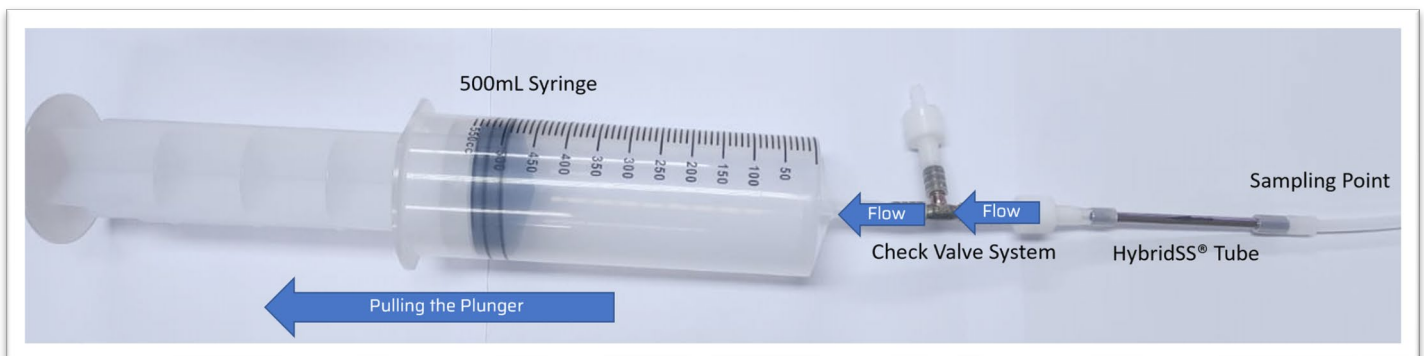
STEP 4 – Connect the tube to the sampling point with a small silicone tubing. The tube must be brought as close as possible to the inlet of the vapor well, reducing contact between the sample and the silicone as much as possible.



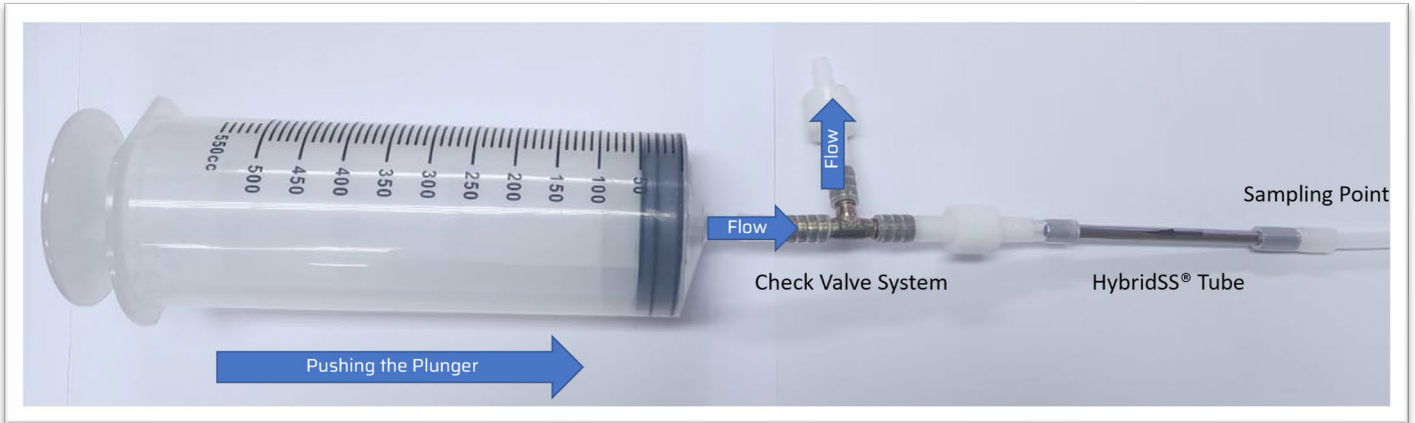
STEP 5 – Remove the tube back cap and connect the syringe or the sampling pump.



STEP 6 – Pull back the syringe plunger or turn on the sampling pump. If the syringe is used, the sampling rate should be slow, avoiding any vacuum formation. Filling a 500mL syringe should take at least 30 seconds. If a sampling pump is used it must be calibrated in the field with a flowmeter and a calibration tube.



STEP 7 – The syringe has a check valve system which prevents the return of air already passed through the tube. There are two check valves, one for air release and the other for pulling air through the tube. Thus, in order to sample a new 500mL volume, it is not necessary to disconnect the syringe, just push its plunger to empty and draw a new aliquot of 500mL.



STEP 8 – It is recommended to sample 4L or 8 (eight) 500mL syringes to reach a soil gas quantitation limit of 25ug/m³. Discuss your project objectives with the laboratory to determine the total sample volume.

STEP 9 – After sampling, the tube is disconnected, and the caps are replaced.



STEP 10 – Then the tubes are individually packed in zip lock bags and the sample ID should be recorded on the bag label. Then the tubes are placed in another zip lock bag for batch isolation if necessary.



STEP 11 – The chain of custody must be completed by documenting the tube number and the sample ID according to the fields already present on the HybridSS's chain of custody.

STEP 12 – The samples are packed inside the container. The holding time of the samples is 30 days at 25°C.

