

Soil Vapour Sampling Instructions

1. AGAT Laboratories provides sampling pump kits which include
 - Aircheck sampling pump and charger
 - Single tube flow connector from pump to TD tube
 - Dual outlet flow connectors can be requested in advance for duplicate sampling.
2. Pumps are shipped pre-charged but a charger is included for longer pump rental times. Charging can be done prior to sampling. The LED indicator on the charger will turn from red to green indicating a full charge.
3. Unless otherwise specified prior to sampling events, the sampling pumps are pre-calibrated by the lab at 100 ml/min with tubing and a thermal desorption (TD) tube attached.
4. Do not adjust the flow rate settings in the field unless a flow calibrator is available to set the flow rates. It is not recommended to exceed 200 ml/min.
5. Please do not write on the tubes or apply stickers or labels to the tubes. Each tube is etched with a unique serial number which can be used for identification instead.
6. TD tubes will be packaged with brass end caps and Teflon ferrules attached or will be packaged in a plastic TD tube holder. This is done to prevent exposure to air during transportation. The 2-piece brass end caps can be separated from the tubes by

loosening: Turn one piece of the brass cap counter-clockwise while holding the other, then pull off the end of the tube. Do not completely separate the 2 brass pieces or the white Teflon ferrule may fall out.

7. Attach the TD tube to the pump tubing so that the arrow on the TD tube points towards the pump and the grooved end points away from the pump. See Image 1.



Image 1

8. Turn the pump on using the ON/OFF switch located on the front panel. See Image 2. Although the sampling pump will count the sampling time in minutes, it is recommended to note the sampling start time.



Image 2

9. Do not expose the sampling pump to water. Water may cause the battery pack to short out. When the fuse in the battery pack blows, the pump will cease to operate.

10. A Soil Vapour Analysis Sampling Form is included with each TD tube order. Under the Tube ID heading, record the TD tube serial number. Fill in the sampling time column for each sample. If a field calibration is performed, the flow rate data must also be filled in so the lab can calculate the sample volume.

| Soil Vapour Duplicate Sampling Instructions

1. Install TD Tubes

- Set up the TD tubes as shown in the diagram, ensuring that a Y-splitter is connecting both the inlet and outlet sides of the TD tubes.

2. Positioning the Y-Splitters

- Place the reusable Y-splitter on the outlet side of the TD tube.
- Place a new non-reusable Y-splitter on the inlet side of the TD tube.

3. Maintain Flow Rate

- Ensure the flow rate on the soil vapor pump remains consistent with the flow rate used for individual TD tube sampling.

4. Adjust Sampling Time

- For duplicate samples, double the sampling time to ensure an adequate sample volume is collected.

5. Remove TD Tubes

- After sampling, carefully remove the TD tubes and prepare them appropriately for sample delivery.

6. Dispose of Inlet Y-Splitter

- Safely dispose of the non-reusable inlet Y-splitter.

7. Return Outlet Y-Splitter

- Return the reusable outlet Y-splitter for future use.



Image 3