

SAMPLE COLLECTION, PRESEVERATION, AND HANDLING INSTRUCTIONS FOR COLLECTING VOLATILE ORGANIC COMPOUND SAMPLES (BTEX, THMS, VOCS)

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE COLLECTION OF SAMPLE. IF YOU HAVE ANY QUESTIONS REGARDING THESE INSTRUCTIONS PLEASE CALL THE STATE PUBLIC HEALTH LABORATORY AT 573-751-3334 AND ASK FOR THE CHEMISTRY UNIT.

NOTE: Sample vials contain ascorbic and maleic acids when shipped for sample collection.

- 1) Collect and ship samples early in the week to avoid samples being unrefrigerated over weekend. VOC samples have a 14-day holding time.
- 2) Freeze refrigerant pillows before sampling so that the samples will stay cold (< 4° C) during shipment.
- 3) Fill all five/four empty sample vials from the same water source. Write matching identifying information on the vials and on the sample information sheet. Include collection date/time on the information sheet.
- 4) Avoid filling the sample vials near a running motor or any type of exhaust system because discharged fumes and vapors may contaminate the samples. Avoid exposing the vials to gasoline or other organic vapors before and after sampling (don't store VOC kit in automobile trunk for a long time).
- 5) When sampling from a cold water tap, remove the aerator, open the tap and allow the system to flush until the water temperature has stabilized (approximately 3 to 5 minutes). Fill sample bottles to overflowing, but take care not to flush out the rapidly dissolving solid preservatives. No air bubbles should pass through the sample as the bottle is filled, or be trapped in the sample when the bottle is sealed. If air bubbles exist in vial, open vial and carefully add more water. IF sampling from an open body of water, fill a beaker with water collected from a representative area. Use this bulk sample to generate individual samples and Field Duplicates as needed.
- 6) If samples foams vigorously when added to a sample vial containing maleic and ascorbic acids, discard the sample. Collect another sample for that location, but do NOT add the method preservatives. Document these samples as "not acidified." Unpreserved samples must be analyzed within 24 hours of collection.
- 7) Package sample vials and field blanks as received to avoid breakage. Be sure to include the frozen cold packs or ice in Styrofoam container to keep samples cool. **Note: VOC samples received at the laboratory not chilled will be unacceptable and will not be analyzed!**

WARNING: ASCORBIC AND MALEIC ACIDS ARE IRRITANTS. PROTECT EYES. WEAR GLOVES. DO NOT BREATHE ACID VAPORS.