

VOLATILE ORGANIC CHEMICALS

PURPOSE

Volatile organic chemicals (VOC's) readily volatilize, or travel from the water to the air. Most of them are industrial chemicals and solvents, and the list includes trichloroethylene, carbon tetrachloride, vinyl chloride, 1,2-dichloroethane, benzene, para-dichlorobenzene, 1,1 dichloroethylene, and 1,1,1 trichloroethane. The health problems associated with toxic exposures to VOC's include liver and kidney effects and increased risk of cancer.

SAMPLE COLLECTION

Water samples taken for VOC testing must be collected and handled carefully in order to ensure that chemicals present in the water do not evaporate during transit to the laboratory; it is very important that air bubbles are not present in the sample container.

1. Select a tap as close to the well as possible. When you have found a suitable faucet, open it and allow water to flow for 15 minutes before collecting a sample.
2. Carefully fill the three 40-ml glass sample vials provided to the rim. Caution, the vials contain a small amount of hydrochloric acid as a preservative.
If the sample contains chlorine, contact the laboratory for further information.
Note: A "travel blank" may be included in the collection kit. Do not tamper with this vial; it is included as a control to assure that other sources of contamination do not affect your results.
3. Immediately replace the cap on the vials. Invert the vials and examine for air bubbles; it is very important that no air bubbles are trapped in the container. If necessary remove cap and add more sample to eliminate all air.
4. Label the sample with well identification, description of sample point, date and time of collection, and name of sample collector.
5. Complete the laboratory form including mailing address, name of sample collector, well number, description of sample point, date and time of collection, and test ordered (i.e., "VOC's").

CARE OF SAMPLE

Samples that cannot be delivered to Monterey Bay Analytical Services within one hour after collection should be refrigerated (e.g., iced cooler).

INTERPRETATION OF RESULTS

Your laboratory result will be accompanied by the Maximum Contaminant Level (MCL) for each chemical tested. This is a number established by Federal and State drinking water standards; levels above the MCL have been associated with adverse health effects. One should be able to drink water for a lifetime without ill effects from VOC's if the levels are below the MCL. If you have any questions regarding laboratory results please call.