

<b>VOLATILE ORGANIC COMPOUNDS (SOLVENT VOCs)</b>	
<b>Test Description</b>	Determination of purgeable organic compounds in drinking water.
<b>Test Use</b>	Useful for evaluating finished drinking water.
<b>Test Department</b>	Organic Chemistry: Phone 860-920-6581/6666 Fax 860-920-6703
<b>Methodology</b>	EPA Method 524.2: Liquid-Solid Extraction with Capillary Column GC/MS.
<b>Availability</b>	Year-round
<b>Sample Requirements</b>	Three (3) 40-mL samples Two (2) Field Blanks per sampling trip
<b>Container type /Preservative</b>	40-mL clear vials with caps equipped with PTFE-lined septa. 0.10 mL 1:1 Hydrochloric Acid preservative to achieve pH $\leq 2$
<b>Collection Instructions (Note 1)</b>	For taps, remove aerators and let water run 4-5 minutes. For outdoor locations, sampling location should be in accordance with a preapproved quality assurance project plan. Make sure no air bubbles are present in sample vial.
<b>Sample Holding Time &amp; Transport</b>	Samples are iced or refrigerated and kept at $4^{\circ}\pm 2^{\circ}\text{C}$ from time of collection until analysis. Samples must be analyzed within 14 days of collection.
<b>Unacceptable Conditions</b>	Incomplete requisition form. Insufficient sample volume. Samples received beyond the 14-day holding time. Improper collection/container Samples with air bubbles larger than a pea cannot be analyzed. These samples will be rejected and the collector will be notified.
<b>Requisition Form</b>	Use the Organics/Radiation Water Examination request form.
<b>Required Information</b>	Fill out entire requisition form.
<b>Limitations</b>	
<b>Additional Comments</b>	See <a href="#">Table 1</a> , <a href="#">Table 2</a> , and <a href="#">Table 3</a> for compounds which the CT PHL can determine with this method.

Note 1: See *New England States Environmental Sampling Guide*, latest edition.

<https://www.epa.gov/sites/production/files/2015-06/documents/NE-States-Sample-Collection-Manual.pdf>

Table 1. 59 Target Compounds

Benzene	1,3-Dichloropropane
Bromobenzene	2,2-Dichloropropane
Bromochloromethane	1,1-Dichloropropene
Bromodichloromethane	Cis-1,3-Dichloropropene
Bromoform	Trans-1,3-Dichloropropene
Bromomethane	Ethylbenzene
n-Butylbenzene	Hexachlorobutadiene
Sec-Butylbenzene	Isopropylbenzene
Tert-Butylbenzene	4-Isopropyltoluene
Carbon tetrachloride	Methylene chloride
Chlorobenzene	n-Propylbenzene
Chloroethane	Styrene
Chloroform	1,1,1,2-Tetrachloroethane
Chloromethane	1,1,2,2-Tetrachloroethane
2-Chlorotoluene	Tetrachloroethene
4-Chlorotoluene	Toluene
Dibromochloromethane	1,2,3-Trichlorobenzene
1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene
1,2-Dibromoethane	1,1,1-Trichloroethane
Dibromomethane	1,1,2-Trichloroethane
1,2-Dichlorobenzene	Trichloroethene
1,3 -Dichlorobenzene	Trichlorofluoromethane
1,4-Dichlorobenzene	1,2,3-Trichloropropane
Dichlorodifluoromethane	1,2,4-Trimethylbenzene
1,1-Dichloroethane	1,3,5-Trimethylbenzene
1,2 Dichloroethane	Vinyl Chloride
1,1-Dichloroethene	o-Xylene
Cis-1,2-Dichloroethene	m,p-Xylenes
Trans-1,2-Dichloroethene	Naphthalene
1,2-Dichloropropane	

Table 2. Six Compound Additions

Acetone	Tetrahydrofuran
Carbon disulfide	Methyl Ethyl Ketone
Diethyl ether	Methyl Isobutyl Ketone

Table 3. Oxygenate Gasoline Additives

t-Butyl Alcohol
iso-Propyl Ether
t-Butyl Ethyl Ether
t-Amyl Methyl Ether
Methyl t-Butyl Ether