



VERMONT DEPARTMENT OF HEALTH LABORATORY

Division of Health Surveillance
195 COLCHESTER AVENUE
BURLINGTON, VERMONT 05402-1125
863-7335 800-660-9997



LAB NO. U02-420
DATE RECEIVED:

WATER SAMPLE COLLECTION INFORMATION

PORT TO BE SENT TO
5096 JERICHO-UNDERHILL WATER
MARC MAHEUX
32 POKER HILL RD
PO BX 236
UNDERHILL, VT 05489

2002 APR -5 A 11:22

Table with 5 columns: DATE OF COLLECTION (4/5/02), HOUR AND MINUTE OF COLLECTION (10:00 AM), SAMPLE TAKEN IN TOWN OF (Underhill), NAME OF PERSON TAKING SAMPLE (Marc Maheux), DAY PHONE NO. (802 899-2660)

SMITTERS REMARKS

LABORATORY REMARKS
Kit for VOC - Public Water Supplies --
EPA Method 524.2

NOTE: ONLY ORIGINAL WATER SAMPLE COLLECTION INFORMATION FORM CAN BE SUBMITTED WITH SAMPLE. INCOMPLETE INFORMATION ON THIS REQUEST FORM MAY RESULT IN THE EXAMINATION BEING DELAYED OR THE SPECIMEN BEING REJECTED.

K#: 9520473
OA
O#: 71767 040302 (W)
C#: 4330/72659

SECTION BELOW FOR REGULATED PUBLIC WATER SYSTEM USE ONLY

Table with 3 columns: ID (5096), WATER SYSTEM NAME (JERICHO-UNDERHILL WATER), SAMPLE LOCATION (52 River Rd)

AMPLER TITLE: (CHECK ONE)
[X] OPERATOR [] HEALTH DEPT. [] HEALTH OFFICER [] STATE AGENCY [] OTHER

PURPOSE OF SAMPLE: (CHECK ONE)
[] TOTAL COLIFORM SAMPLE [] ROUTINE [] REPEAT [] REPLACEMENT [] OTHER

ADDITIONAL OTHER SAMPLES: (CHECK ONE)
[] COMPLIANCE MONITORING [] REPEAT [] OTHER

TYPE OF SAMPLE: (CHECK ONE)
[] SOURCE [] DISTRIBUTION [X] OTHER Entrance to Distribution

CHLORINE RESIDUAL: mg/l FREE Cl2 mg/l TOTAL Cl2
NOT: [] CHLORINATED [X] MEASURED

AMPLE NOT ANALYZED BECAUSE:
[] NO COLLECTION DATE [] INSUFFICIENT SAMPLE [] BROKEN IN TRANSIT [] IMPROPER SAMPLE CONTAINER [] KIT EXPIRED [] WE WERE UNABLE TO COMPLETE TESTING OF THIS SAMPLE
[] TOO OLD TO TEST

5096 JERICHO-UNDERHILL WATER
MARC MAHEUX
32 POKER HILL RD

FOR LABORATORY USE ONLY
PRESERVATIVE: [] SODIUM SULFITE [X] COOL < 4°C [] NH4CL

VERMONT DEPARTMENT OF HEALTH LABORATORY
195 COLCHESTER AVENUE, P.O. BOX 1125
BURLINGTON, VT 05402-1125
(800) 660-9997 OR (802) 863-7336

ANALYSIS OF WATER FOR VOLATILE ORGANIC COMPOUNDS
VDH KIT OA

LABORATORY RESULTS OF ANALYSIS

LABORATORY NUMBER: V02-420

LABORATORY RESULTS: The laboratory test for volatile organic chemicals by E.P.A. Method 524.2, GC/MS has not detected the presence of any of the compounds listed on the attached sheet of this report.

LABORATORY NOTE: Detected is defined as greater than the method quantification limit.

Date Reported APR 10 2002

Reviewed by MJS

Please see other page for collection information.

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VOLATILE ORGANIC COMPOUNDS TESTED
IN VDH KIT OA
Report Supplement

The EPA Method 524.2 (GC/MS) analysis performed on the water samples for volatile organic compounds includes testing for the following compounds. The Method Quantification Limit for all compounds listed is 0.5 ug/l - micrograms/liter (ppb - parts per billion) unless specifically noted.

COMPOUND

Methyl tert-butyl ether
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
Dibromomethane
m-Dichlorobenzene
o-Dichlorobenzene
p-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene
cis-1,2-Dichloroethene
1,2-Dichloropropane

COMPOUND

2,2-Dichloropropane
1,3-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Fluorotrichloromethane
Hexachlorobutadiene
Isopropylbenzene
p-Isopropyltoluene
Methylene chloride
Naphthalene
n-Propylbenzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl chloride
m+p-Xylene
o-Xylene

EPA Method 524.2 (GC/MS)

CHEM 307 AUG 1993

VOCs

Call the Toxicology and Risk Assessment program of the Vermont Department of Health (863-7220 or 1-800-439-8550) if Volatile Organic Compounds (VOCs) are found in your drinking water. This program can give you information about possible health risks of specific compounds and how to treat your water.

HEALTH EFFECTS

The term Volatile Organic Compound refers to a variety of chemical compounds that contain carbon and evaporate at relatively low temperatures.

Drinking water that contains VOCs can increase your risk for a variety of health problems. Some VOCs have been proven to cause cancer after prolonged exposure, while others are considered possible cancer risks. VOCs can also cause other health problems.

SOURCES

VOCs do not occur naturally in drinking water. Hundreds of VOCs have been produced for use in a variety of products, including gasoline, dry cleaning solvents, and degreasing agents. When these products are improperly stored or disposed of, or when a spill occurs, VOCs can contaminate ground water and drinking water supplies.

Although many VOCs found in drinking water are due to contamination, others may be formed when drinking water is treated with chlorine. The chlorine reacts with organic materials found in water and forms certain VOCs known as chlorination by-products. The

Water Supply Division of the Vermont Department of Environmental Conservation regulates VOCs in public water systems.

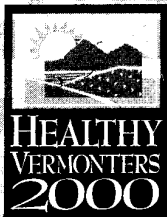
TREATMENT

Reducing the amount of chlorine added to your water, or using an activated carbon filter, can sometimes reduce VOCs formed during chlorination.

If the VOCs are not caused by chlorination, it's important to find the source. Additional testing may be needed to determine the level of contamination. Following are two ways to remove VOCs from drinking water:

Activated Carbon/Charcoal — In this method, water passes through an activated carbon filter. The VOCs bond to active sites in the carbon passages and are removed from the water. Over time, the active sites fill up and the filter is no longer effective. If the filter continues to be used at this point, the VOCs may be released back into the filtered water. It's also important to follow the maintenance schedule recommended by the manufacturer because disease-causing bacteria can build up in the carbon of poorly maintained filters.

Reverse Osmosis — In this type of treatment, a thin membrane allows pressurized water to pass through while holding back any pollutants to be drained off. This process uses three to 10 gallons of untreated water to make one gallon of drinking water. Reverse osmosis can remove many VOCs but not all chlorination by-products. Chlorine can damage some reverse osmosis membranes, so pretreatment may be needed.



VERMONT DEPARTMENT
OF HEALTH