Simply The Best…

OUR GOAL is to provide you with a safe and dependable supply of drinking water. This is a snapshot of the quality of water that we provided for January 1 through December 31, 2017. It also includes the date and results of any contaminants that we detected within the past five years tested less than once a year. Any contaminants detected within the past five years are listed along with the date of detection and concentration. This report is designed to inform you about the quality water and services we deliver to you every day.

SOURCES OF DRINKING WATER AND CONTAMINANTS

The sources of drinking water (both tap water and bottled water) include surface water (streams, lakes) and ground water (wells, springs). As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals. It also picks up substances resulting from the presence of animals and human activity. Some "contaminants" may be harmful. Others, such as iron and sulfur, are not harmful. Public water systems treat water to remove contaminants, if any are present. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.

In order to ensure that your water is safe to drink, we test it regularly according to regulations established by the U.S. Environmental Protection Agency and the State of Vermont. These regulations limit the amount of these various contaminants:

Microbial organisms (viruses and bacteria) may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic chemicals (salts and metals) can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, or farming.

Synthetic Organic chemicals (pesticides and herbicides) may come from agriculture, urban stormwater runoff, residential uses, and careless disposal of household chemicals.

Volatile Organic chemicals (gasoline and solvents) may come from gas stations, urban stormwater runoff, septic systems, industrial process, and careless disposal of household chemicals.

Naturally occurring radioactivity

HEALTH INFORMATION REGARDING DRINKING WATER

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbialogical contaminants are available from EPA's Safe Drinking Water Hotline (1-800-426-4791).

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some Contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the hotline.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. St. Albans Water Dept. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

- Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, and diarrhea and associated headaches.
- Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. In animal studies, some haloacetic acids have been associated with reproductive or developmental effects.

Contaminant	Date	Lowest % Removal Achieved	Range	% Removal Required	Violation YES Or NO	Typical Source
Total Organic Carbon	Monthly	46.00	46.00-71.07	35-45	NO	Naturally present in the environment
DISINFECTION RESIDUAL	**RANGE**	**RAA**	**UNIT**	**MRDL**	**MRDLG**	**TYPICAL SOURCE**
CHLORINE	0.34-1.60	0.891	Mg/l	4.0	4.0	Water additive to control microbes
CHEMICAL CONTAMINANTS	**Level Detected/Uni**	**MCL**	**MCLG**	**Sample Date**	**Violation Yes or No**	**Likely source of detected contaminant**
ALKALINITY TOTAL	50mg/l	1000	1000	6/5/17	No	
MANGANESE	0.021MG/L	.05	.05	4/8/15	No	
NITRATE (AS N)	0.44ppm	10	10	1/18/2017	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TURBIDITY	0.049	0.3		yearly average	No	Soil Runoff
FLUORIDE	0.8 mg/l	4.0	4.0	4/20/17	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
DISINFECTION BYPRODUCTS	Monitoring Period	LRAA	RANGE	MCL	MCLG	TYPICAL SOURCE
TOTAL HALOACETIC ACIDS (HAA5)	2017	32 ppb	14.2—43.2	60	0	BY-PRODUCT OF DRINKING WATER DISINFECTION
TOTAL TRIHALOMETHANES (TTHM)	2017	41 ppb	14.7-62.2	80	0	BY-PRODUCT OF DRINKING WATER CHLORINATION
RADIONUCLIDES	Collection Date	Highest Value	RANGE	MCL	MCLG	TYPICAL SOURCE
RADIUM COMBINED (226, 228)	02/28/2014	0.522 pC/l	0.239-0.522	5	0	EROSION OF NATURAL DEPOSITS
RADIUM 228	02/28/14	0.16 pC/l	0.118-0.16	5	0	EROSION OF NATURAL DEPOSITS
RADIUM 226	02/28/14	0.362 pC/l	0.121-0.362	5	0	EROSION OF NATURAL DEPOSITS
GROSS ALPHA	02/28/14	0.666 pC/l	0.474-0.666	15	0	EROSION OF NATURAL DEPOSITS

Contaminant Detected	RANGE	90th Percentile	95th Percentile	Sampling Date	AL	SITES OVER	Likely source of detected contaminant
Copper	**.036ppm-.32ppm**	**0.29**	**0.29**	**2013-2015**	**1.3**	**0**	**Corrosion of household plumbing systems; erosion of natural deposits.**
Lead	**0-36 ppb**	**1**	**6**	**2013-2015**	**15**	**1**	**Corrosion of household plumbing systems; erosion of natural deposits.**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were found in the 2017				

WATER QUALITY DATA

The adjacent tables list all the drinking water contaminants that we detected during the 2017 calendar year. It also includes the date and results of any contaminants that we detected within the past six years tested less than once per year. The presence of these contaminants in the water does not necessarily show that the water poses a health risk.

TERMS AND ABBREVIATIONS

In these tables you may find terms you might not be familiar with. To help you better understand these terms, we have provided the following definitions:

- ***Maximum Contamination Level Goal (MCLG):*** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- ***Maximum Contamination Level (MCL):*** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment.
- ***Maximum Residual Disinfectant Level Goal (MRDLG):*** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of disinfectants in controlling microbial contaminants.
- ***Maximum Residual Disinfectant Level (MRDL):*** The highest level of a disinfectant allowed in drinking water. Addition of a disinfectant may help control microbial contaminants.
- ***Action Level:*** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- ***90th Percentile:*** 90% of the samples are below the action level. (Nine of ten sites sampled were at or below this level).
- ***Treatment Technique (TT):*** A process aimed to reduce the level of a contaminant in drinking water.
- ***Parts per million (ppm) or Milligrams per liter (mg/l):*** (one penny in ten thousand dollars)
- ***Parts per billion (ppb) or Micrograms per liter (mg/l):*** (one penny in ten million dollars)
- ***Picocuries per liter (pCi/L):*** a measure of radioactivity in water.
- ***N/A:*** Not applicable.

PFOA & PFOS

As a precautionary measure we tested for PFOA and PFOS in the water from the Maquam and Fairfax water plants on 1/18/17. The test results came back clean.

NO VIOLATIONS OCCURRED DURING THE YEAR 2017

FOR MORE INFORMATION

We want you to be informed about the quality of your water. If you have any questions, please contact the person(s) listed below. Also, you are invited to attend any City Council meeting on the second Monday of each month at 6:30 p.m. in City Hall.

Allen Robtoy, Director of Public Works –
(802)-524-1500,Ext -267

WATER SOURCE

The St. Albans Water System is unique among water systems in Vermont. Operating two water treatment plants, the City provides an average of up to 2.5 million gallons per day to approximately 3,400 residential, 500 business and 20 industrial customers. The sources of the City's supply include:

Source Name	Source Water Type
Lake Champlain- 20	Surface Water
Fairfax Reservoir	Surface Water
Lake Champlain-18	Surface Water

The State of Vermont Water Supply Rule requires Public Community Water Systems to develop a Source Protection Plan. This plan delineates a source protection area for our system and identifies potential and actual sources of contamination. Please contact us if you are interested in reviewing the plan.
The City owns the acres within the primary watershed and owns land within the secondary watershed. However, Lake Champlain is a State water supply, with the lands lying under water falling under the jurisdiction of the U.S. Army Corps of Engineers and State of Vermont, Agency of Natural Resources.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place and distributing copies by hand or mail

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ST. ALBANS, VT
PERMIT NO. 26

City of St. Albans
PO Box 867
St. Albans, VT 05478

City of St. Albans Water Department

2017

WATER QUALITY REPORT

WSID #5130