

Quality on Tap...Our Commitment, Our Profession

Brandon Fire District No.1

2024

Water Quality Report



58 Franklin Street
Brandon, Vermont 05733

1-802-247-3311
rcounter@brandonfiredistrict.org

Quality and service for 167 years.

Brandon Fire District No.1 Water Quality Report – 2024

Public Water System Name

Brandon Fire District No.1
Brandon, Vt. 05733
WSID# 5211
Date: May 14, 2024

This report is a snapshot of the quality of the water that we provided in 2023. Included are the details about where your water comes from, what it contains, and how it compares to U.S.

Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. This report is designed to inform you about the quality of water and the services we deliver to you every day.

To learn more, please attend any of our regularly scheduled meetings on the first Thursday of the month at 6:30pm at 61 Franklin Street. Questions about this report can be directed to Raymond Counter at 247-3311 or by email to:
rcounter@brandonfiredistrict.org

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 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 cryptosporidium and other microbiological 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 Safe Drinking Water Hotline.

Water Source Information

Our water sources are:
Vermont Source Type: **Gravel Well**
EPA Source Type: **Groundwater, non-purchased**
Source Name: **Well 1**
Source Name: **Well 2**
Source Name: **Well 3**

Source Protection Plan

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 water system and identifies potential and actual sources of contamination. A copy of the source protection plan is available on our website. Please contact us if you have any questions about the plan.

Drinking Water 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 land's surface 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.

To ensure that your water is safe to drink, we test it regularly according to regulations established by the US EPA and the State of Vermont. These regulations limit the amount of various contaminants.

- ✧ **Microbial contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ✧ **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- ✧ **Pesticides and herbicides** may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- ✧ **Organic contaminants** are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water runoff and septic systems.
- ✧ **Radioactive contaminants**, which can be naturally occurring or the result of mining activity.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the past year. It also includes the date and results of any contaminants that we detected within the past 5 years if tested less than once a year. The presence of these contaminants in the water does not necessarily show that the water poses a health risk.

Terms and abbreviations: In this table, you may find terms and abbreviations you might not be familiar with. To help you understand these terms, we have provided the following definitions:

- ◆ **Action Level:** The concentration of a contaminant which, if exceeded, triggers

treatment or other requirements which a water system must follow.

- ◆ **Level 1 Assessment:** A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible), why total coliform bacteria have been found in our water system.
- ◆ **Level 2 Assessment:** A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
- ◆ **Locational Running Annual Average:** The average of sample analytical results for samples taken at a particular monitoring location during four consecutive calendar quarters.
- ◆ **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment.
- ◆ **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- ◆ **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. Addition of a disinfectant may help control microbial contaminants.
- ◆ **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of disinfectants in controlling microbial contaminants.
- ◆ **Nephelometric Turbidity Unit (NTU):** NTU is a measure of the clarity of water Turbidity in excess of 5 NTU is just noticeable to the average person.
- ◆ **Parts per million (ppm) or Milligrams per liter (mg/l):** (one penny in ten thousand dollars)

- ◆ **Parts per billion (ppb) or Micrograms per liter (µg/l):** (one penny in ten million dollars)
- ◆ **Parts per trillion (ppt) or Nanograms per liter (ng/l)** (one penny in ten billion dollars)
- ◆ **Picocuries per liter (pCi/L):** A measure of radioactivity in water.
- ◆ **Running Annual Average:** The average of 4 consecutive quarters (when on quarterly monitoring); values in table represents the highest RAA for the year.
- ◆ **Treatment Technique (TT):** A process aimed to reduce the level of a contaminant in drinking water.
- ◆ **90th Percentile:** Ninety percent of the samples are below the action level. (Nine of ten sites sampled were at or below this level).
- ◆ **Per- and polyfluoroalkyl substances (PFAS):** PFAS are a group of human-made chemicals that have been in use since the 1940s. PFAS has been found in a wide variety of consumer products and as an ingredient in firefighting foam. PFAS manufacturing and processing facilities, airports, and military installations are some of the contributors of PFAS releases into the air, soil and water. Vermont currently regulates 5 PFAS and this list includes:
(PFNA): Perfluorononanoic Acid
(PFOA): Perfluorooctanoic Acid
(PFOS): Perfluorooctane Sulfonic Acid
(PFHpA): Perfluoroheptanoic Acid
(PFHxS): Perfluorohexane Sulfonic Acid

Detected Contaminants

Chemical Contaminants	Nitrate	Iron
Collection Date	09/25/2023	03/16/2022
Highest Value	1.9	0.43
Range	0.26-1.9	0.0-0.43
Unit	ppm	Ppm
MCL	10.000	N/A
MCLG	10.000	N/A
Typical Source	fertilizer use; leaching from septic, erosion of deposits	

PFAS Contaminants

Typical Source	A large group of human-made chemicals used widely in manufacturing and consumer products
MCL	20 (individual or sum of the 5 regulated PFAS compounds)
Units	All units in parts per trillion (ppt)

Collection Date	11/20/2019	12/16/2020	07/19/2023
PFHpA	-	-	-
PFNA	-	-	-
PFHxS	-	-	-
PFOA	-	-	-
PFOS	-	-	-
Sum of 5 regulated PFAS compounds	-	-	-

*Additional PFAS, not regulated by the Vermont Water Supply Rule, may also have been detected in the past five years. Please contact us if you would like more information on other unregulated PFAS that may be in your drinking water.

Lead and Copper	Copper	Lead
Collection Date	9/19/2023 – 9/23/2023	9/19/2023 – 9/23/2023
90 th Percentile	.33	2.2
Range	0.04-0.48	0-3.3
Unit	ppm	Ppb
Action Level	1.3	15
Sites Over Action Level	0	0
Typical Source	Corrosion of household plumbing systems; erosion of natural deposits	Corrosion of household plumbing systems; erosion of natural deposits

*The lead and copper AL (Action Level) exceedance is based on the 90th percentile concentration, not the highest detected result.

** Complete lead tap sampling data (i.e. each individual sample result) are available for review. Please contact us if you would like to receive this data.

Violations That Occurred During The Year

Type	NONE
Category	
Analyte	
Compliance Period	

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 microbiological contaminants are available from EPA's Safe Drinking Water Hotline (1-800-426-4791). 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 Safe Drinking Water 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. BRANDON FIRE DISTRICT 1 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>.

Uncorrected Significant Deficiencies: *The system is required to inform the public of any significant deficiencies identified during a sanitary survey conducted by the Drinking Water and Groundwater Protection Division that have not yet been corrected. For more information, please refer to the schedule for compliance in the system's Operating Permit.*

Date Identified	Deficiency	Facility
03/20/2018	Operations & Maintenance(O&M) Manual Needed	
10/29/2020	Inadequate Water Pressure (Under Normal, Peak or Maximum Flow Conditions	Distribution System

A draft operations and maintenance manual was submitted. A project for correction of inadequate pressure was completed on .

Public Notice - Permit to Operate Issued: The Water System is required to notify all users of the following compliance schedule contained in the Permit to Operate issued by the State of Vermont Agency of Natural Resources:

1. **On or before January 31, 2021**, the Permittee shall submit an electronic copy of an O&M Manual for review and approval by the Secretary.
(Review of draft was completed with comments on additional or missing information, updated plan submitted in the fall of 2023)

Additional information:

As required by the Lead and Copper Rule Revision, we are preparing a service line inventory. The purpose of the inventory is to determine if any of our service lines contain lead, galvanized pipe requiring removal, or unknown materials. We are in the final stages of the inventory. Please contact us if you have received a notice requesting inspection or would like access to this inventory.

If you would like further information about your water utility, please call the Fire District office at **247-3311**, visit our website at <https://www.brandonfiredistrict.org> or email us at rcounter@brandonfiredistrict.org

Distribution information

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.

