

Annual Drinking Water Quality Report

City of Fort Benton

PWSID#MT0000216

PO Box 8

Fort Benton, MT 59442

We're very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is ground water from an infiltration gallery in the Missouri River. At the present time we serve 1500 people. We have completed a source water protection plan that provides more information such as potential sources of contamination to our drinking water supply. This plan can be found online at <https://deq.mt.gov/water/Programs/dw-sourcewater>.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present include:

Microbial contaminants, such as viruses and bacteria that 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 storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

We're pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water, please contact **Carlos Rodriguez**. He is a certified operator, and can be reached at **(406)621-0497**. You may also attend our meetings. They are held on **the first and third Monday of each month at City Hall at 6:30 pm**.

The City of Fort Benton routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of any detects in our monitoring for the period of **January 1st to December 31st, 2022**. For constituents that are not monitored yearly, we have reviewed our records back the last five years.

We have monitored for lead and copper, and almost all of our samples have been in compliance with the Lead and Copper Rule. Eight copper and one lead value exceeded the Action Level. 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. Fort Benton 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 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>.

Parameter	Date	90th % value	Units	Action level	Source of Contamination
Lead	2021	1	ppb	15	Household plumbing
Copper	2021	.91	ppm	1.3	Household plumbing

In the tables above and below you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2000 years or a single penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Action Level - the concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - (mandatory language) The "Maximum Allowed" (MCL) is 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 technology.

Maximum Contaminant Level Goal - (mandatory language) The "Goal"(MCLG) is 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 residual disinfectant level or MRDL - The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

Maximum residual disinfectant level goal or 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 the use of disinfectants to control microbial contaminants.

Picocuries per liter (pCi/L)-picocuries per liter is a measure of the radioactivity in water.

Secondary Maximum Contaminant Level (SMCL) - SMCLs are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.

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 the Safe Drinking Water Hotline (800-426-4791).

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

TEST RESULTS

Contaminant	Violation Y/N	Sample Date	Highest Level Detected	Range of Levels	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
Nitrate + Nitrite as N	N	2022	.30	NA	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	N	2021	0.8	NA	ppm	4	4	Erosion of natural deposits
Arsenic	N	2021	4	NA	ppb	0	10	Erosion of natural deposits
Selenium	N	2021	0		ppb	50	50	Erosion of natural deposits
Radioactive Contaminants								
Gross alpha excluding radon and uranium	N	11/6/13	5.6	NA	pCi/L	0	15	Erosion of natural deposits
Uranium	N	11/6/13	7	NA	ppb	0	30	Erosion of natural deposits
Disinfection By-products								
Total Trihalomethanes (TTHMs)	N	2022	21	NA	ppb	NA	80	By-product of drinking water chlorination
Haloacetic Acids (HAAs)	N	2022	272	NA	ppb	NA	60	By-product of drinking water chlorination
Chlorine	N	2022	0.6	0.4-0.8	ppm	MRDLG =4	MRDL =4	Water additive used to control microbes

Secondary Contaminants

Secondary Contaminant	Collection Year	Highest Level Detected	Range of Levels	SMCL	Units	Likely Source of Contamination and/or Reason for Monitoring
Manganese	2022	697	697 - 697	50	ppb	Natural sources as well as discharges from industrial uses
pH	2022	7.6	7.6 - 7.6	6.5-8.5	Standard Unit	Runoff and leaching from natural deposits; seawater influence
TDS	2022	1450	1430 - 1450	500	ppm	Erosion of natural deposits

Manganese: Drinking Water may naturally have manganese and, when concentrations are greater than 50 ppb, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ppb and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ppb, primarily due to concerns about possible neurological effects. Children younger than one year old should not be given water with manganese concentrations over 300 ppb, nor should formula for infants be made with that water for more than a total of 10 days throughout the year.

Our system had 1 sample above the MCL in 2022 that did not result in a formal violation.

The City of Fort Benton's Water Department has successfully resolved the issue of high HAA5 levels in its water supply. After failing a water sample due to high HAA5, as shown in the 2022 Water Quality Report, the department conducted a thorough investigation and discovered that the compromised sample was due to external contamination and not within the water system. The issue was caused by a tainted sample from a leaking vacuum break that had algae growing on it.

To address the problem, the department immediately fixed the leak and took five additional water samples in the last 5 months to ensure that the HAA5 levels were within acceptable limits. All five samples were found to be well below the allowable limits, indicating that the problem had been resolved.

We take the safety and quality of our water very seriously, and we are pleased to report that the issue has been resolved. We want to reassure our customers that the water they are receiving is safe and meets all regulatory standards.

HAA5 is a disinfection byproduct that can form when chlorine is used to treat drinking water. While HAA5 is not considered harmful at low levels, prolonged exposure to high levels of HAA5 can increase the risk of certain types of cancer.

The City of Fort Benton's Water Department will continue to monitor its water supply regularly to ensure that it meets all safety and quality standards. Customers with any concerns or questions about their water supply can contact the Water Department at (406)621-0497 or City Hall at (406)622-5494.

In conclusion, the City of Fort Benton's Water Department took prompt and effective action to resolve the issue with high HAA5 levels in its water supply. Customers can be assured that the water they are receiving is safe and meets all regulatory standards. The compromised sample was due to external contamination and not within the water system, and the department will continue to monitor the water supply to ensure its safety.

We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

The report **will not be mailed** to our individual water customers. Copies of this report are available upon request at the City Hall, 1204 Front Street and the City Of Fort Benton Website