TOWN OF ST. IGNATIUS

Montana Public Water Supply ID number 001740

2023 Water Quality Report

In compliance with the EPA's Safe Drinking Water Act and in an effort to keep you informed about the quality of water and services we provide to you each day, we're pleased to provide you with our Annual Water Quality Report. This report is a snapshot of the quality of water we provided you last year. It includes details regarding the source of your water, what your water contains and how it compares to EPA and the State of Montana standards.

Our drinking water comes from three wells which are 50 feet deep. In order to maintain its purity, we treat our water with a small amount of chlorine. We have 283 service connections and added no new connections last year.

We want you, our valued customers, to be informed about your water utility. If you want to learn more, please attend any of our regularly scheduled meetings held on the first Tuesday of each month at 6:00 p.m. at Town Hall.

We are pleased to report that our drinking water is safe and meets all federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Scott Morton at (406) 552-3870. Scott is our certified operator with over 11 years of experience. He attends periodic training sessions to meet continuing education requirements. The most recent training he received was in February of last year.

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

Contaminants that may be present in water include:

1) Microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
2) Inorganic contaminants, such as salts and metals which can be naturally occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining and farming.
3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
4) Volatile organic chemicals, which are byproducts of industrial processes, petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
5) 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, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. We take all of our water samples to Montana Environmental Laboratory in Kalispell (406-755-2131). They are a private laboratory that is certified by the State of Montana and the EPA to analyze drinking water.

Our sampling frequency complies with EPA and state drinking water regulations. The following tests were performed to identify possible contaminants in our system during the period of January 1 to December 31, 2023:

- 12 coliform bacteria tests – all were coliform free.
- One nitrate plus nitrite test on each of our three wells – results were within EPA guidelines.
- 10 tests on the water from our customers' homes to determine the possible presence of lead and copper leaching out of the faucets and fixtures – results were within EPA guidelines.
- Tests to determine the possible presence of 10 disinfection byproducts – none were detected.

The following table lists the contaminants detected during recent testing. Some of the data in this table may be more than one year old, since certain chemical contaminants are monitored less than once per year.

Regulated Contaminants

CONTAMINANT	VIOLATION Y/N	SAMPLE DATE	HIGHEST LEVEL DETECTED	UNIT MEASURE-MENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Barium EP502 EP503 EP504	N	12-7-20	0.12 0.11 0.12	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	N	2023	1 (1 - 1)	ppm	MRDLG 4	MRDL 4	Water additive used to control microbes
Copper	N	9-14-23	90th % is 0.04	ppm	1.3	AL= 1.3	Corrosion of Household plumbing systems: Erosion of natural deposits: Leaching from wood preservatives
Fluoride EP502 EP503 EP504	N	12-7-20	0.03 0.03 0.03	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth: Discharge from fertilizer and aluminum factories
Lead	N	9-17-23	90th % is 1	ppb	0	AL= 15	Corrosion of Household plumbing: Erosion of natural deposits
Nitrate + Nitrite EP502 EP503 EP504	N	12-5-23	0.65 0.65 0.65	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Uranium. EP502 EP503 EP504	N	8-27-19	0.4 0.3 0.4	ppb	0	30	Erosion of natural deposits

DEFINITIONS:

MCL - Maximum Contaminant Level - The "Maximum Allowed" 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.

MCLG - Maximum Contaminant Level Goal - The "goal" is the level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL - *Maximum Residual Disinfectant Level* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG - *Maximum Residual Disinfectant Level Goal*-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.

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

PPB - Parts per billion or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

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

pCi/L - Pico Curies per Liter - a very small unit of measurement of radioactivity.

EP - Entry Point - The point at which our water enters the distribution system.

What does this table tell us?

As you can see our system had no MCL violations. MCL's are set at very stringent levels. To understand the possible health effects of exceeding the MCL, a person would have to drink two liters of water every day at the MCL for a lifetime to have a one in a million chance of having any adverse health effects. Although 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.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We are required to test five samples for lead and copper every third year during the summer months. During 2022 we did not monitor for lead and copper and therefore cannot be sure of the quality of our drinking water during that time. We received a failure to monitor violation letter from the Montana Department of Environmental Quality in November.

Lead in drinking water comes primarily from materials and components of the service lines and home plumbing systems. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. Our water system is responsible for providing high quality drinking water, but we cannot control the variety of materials used in private home plumbing systems. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by a certified laboratory like the one we send our samples to (Montana Environmental Laboratory, 406-755-2131). When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap until the water temperature has stabilized (usually for 30 seconds to 2 minutes) before you use the water for drinking or cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure to lead is available from the Safe Drinking Water Hotline 1-800-426-4791, or online at www.epa.gov/safewater/lead.

All sources of drinking water are subject to potential contamination by contaminants that are naturally occurring or manmade. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791, or online at www.epa.gov/safewater

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, or online at www.epa.gov/safewater.

In November of 2000, the Montana Department of Environmental Quality conducted a source water assessment of our system. This report provides additional information on the potential vulnerability of our wells to contamination. This report is available for review at City Hall. It is also available online at https://deq.mt.gov/water/programs/dw#accordion1-collapse2. The report can be summarized in the following table:

Significant Potential Contaminant Sources

Source	Contaminant	Hazard / Origin of Contaminant	Hazard Rating	Barriers	Susceptibility	Management needed to reduce potential impacts
Sanitary Sewer Main	Sewage, Nitrate, Nitrite, Pathogens	Leaks	High	Clay rich soils	High	Monitor integrity of sewer lines
Septic Systems	Sewage, Nitrate, Nitrite, Pathogens	Leaks	High	Clay rich soils	High	Connection to centralized sewer
Gravel Pit	Various	Direct conduit to shallow ground water	Low	None	Low	Monitor use of chemicals near the gravel pit
Agricultural Land Use	Pesticides and herbicides, Nitrates	Non-point source, concentration	Moderate	Clay rich soils	Moderate	Educate community with BMP's for agriculture
Storm water / Urban Land Use	Various	Small spills	Moderate	Clay rich soils	Moderate	Develop storm water management plan
Mission Valley Power	Various	Small spills	High	Clay rich soils	High	Meet with utility to monitor chemicals used on site and develop BMPs for them

Our water system is committed to providing our customers with safe, pure water and we are pleased that our water meets or exceeds all established state and federal standards. Thank you for reviewing this report.

Prepared by Montana Environmental Lab, LLC 3/24

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Montana Public Water Supply ID number 001740

2023 Water Quality Report

In compliance with the EPA's Safe Drinking Water Act and in an effort to keep you informed about the quality of water and services we provide to you each day, we're pleased to provide you with our Annual Water Quality Report. Our drinking water comes from three wells which are 40 to 81 feet deep. The source water assessment report for your water system provides additional information on your source water's susceptibility to contamination. To access this report please go to: https://deq.mt.gov/water/Programs/dw-sourcewater. In order to maintain its purity, we treat our water with a small amount of chlorine. We are pleased to report that our drinking water is safe and meets all federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Certified Water Operator Scott Morton at 745-3791. Our sampling frequency complies with EPA and state drinking water regulations.

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. We are responsible for providing high-quality drinking water, but we 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 are available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

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Constituent	Violation Y or N	Sample Date	Highest Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Barium	N	12-7-20	0.12 (0.11-0.12)	ppm	2	2	Drilling waste discharge, metal refinery discharge, erosion of natural deposits
Chlorine	N	2023	1 (0.93-1.05)	ppm	4 (MRDLG)	4 (MRDL)	Water additive used to control microbes
Copper	N	9-14-23	90th % is 0.04	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; naturally occurring; wood preservative leaching
Fluoride	N	12-7-20	0.03	ppm	4	4	Erosion of natural deposits; Discharge from fertilizer & aluminum factories
Lead	N	9-17-23	90th % is 1	ppb	0	AL=15	Corrosion of household plumbing; erosion of natural deposits
Nitrate	N	11-8-22	0.63 (0.55-0.63)	ppm	10	10	Fertilizer use runoff, septic tank leaching, sewage, erosion of natural deposits
Uranium	N	8-27-19	0.4	Ppb	0	30	Erosion of natural deposits

Definitions:

MCLG. Maximum Contaminant Level Goal. The level of a drinking water contaminant below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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ppm. Parts per million. One part per million corresponds to one minute in two years or a single penny in $10,000.

AL. Action Level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements.