

CITY OF POLSON

Montana Public Water Supply ID number 00308
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 seven wells that range from 100 to 300 feet deep. We have six reservoirs with a combined capacity of over three million gallons to store our drinking water. In order to maintain its purity, we treat our water with a small amount of chlorine. We have 2,599 service connections and added 25 new connections last year.

In a continuing effort to maintain and improve our system, we finished well 8 last year. We also completed our 4th Avenue water line project. The main was upgraded from 1 ¼ inch pipe to 6 inch PVC. New connection points were created and two dead end lines rectified. We began to inventory our service lines in advance of changes to the rule regulating lead and copper. A sanitary survey inspection of our water system was conducted in August of last year. No significant deficiencies that may affect the quality of our drinking water were noted.

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 Ash Walker or Cole Davis at the City of Polson at (406) 883-8201. Cole Davis, Ash Walker, Brandon Parker, and Ben Eggers are our certified operators with 15, 27, 17 and 9 years of experience respectively. They attend periodic training sessions to meet continuing education requirements.

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:

- 72 coliform bacteria tests – all were coliform free.
- One nitrate plus nitrite test on each of our four entry points – results were within EPA guidelines.
- 20 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.
- One set of tests to determine the possible presence of 10 disinfection byproducts – results were within EPA standards.

Due to the purity of our water, we have applied for and been issued a monitoring waiver on two of our entry points (EP505 and EP506) for 10 inorganic contaminants: antimony, barium, beryllium, cadmium, chromium, fluoride, mercury, nickel, selenium, and thallium. This waiver allows our system to sample only once every nine years for these contaminants. Past sampling has shown that these contaminants are either not present in our water or occur in such small amounts that they do not warrant a health hazard and it has been determined that the likelihood of contamination is low. This waiver covers the period from 2020 to 2028.

The Montana Department of Environmental Quality requires that we test for asbestos in our drinking water. As our distribution system contains no asbestos cement pipe, we have applied for and been granted a monitoring waiver for asbestos. This waiver allows our system to not test for this contaminant. This waiver covers the period from 2020 to 2028.

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 EP505 EP506 EP507 EP508 | N | 8-12-20 | 0.25 0.14 0.22 0.21 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Chlorine | N | 2023 | 0.5 (0.5-0.5) | ppm | MRDLG 4 | MRDL 4 | Water additive used to control microbes |
| Copper | N | 9-17-23 | 90th % is 0.10 | ppm | 1.3 | AL= 1.3 | Corrosion of Household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| Fluoride EP505 EP506 EP507 EP508 | N | 8-12-20 | 0.14 0.41 0.11 0.11 | 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 2 | ppb | 0 | AL= 15 | Corrosion of Household plumbing; Erosion of natural deposits |
| Nickel EP506 | N | 8-12-20 | 0.002 | ppm | 0.1 | 1 | Erosion of natural deposits |
| Nitrate + Nitrite EP505 EP506 EP507 EP508 | N | 12-13-23 | 1.31 0.39 4.46 4.98 | ppm | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Total Trihalomethanes (TTHM) | N | 8-16-23 | 0.40 | ppb | 0 | 80 | Byproduct of drinking water chlorination |
| Uranium EP505 EP507 EP508 | N | 12-5-22 | 2.6 3.1 2.9 | 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.

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.

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.

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.

In June of 2002, 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 results of the susceptibility assessment indicate that the Polson PWS wells are generally well protected from contamination. The primary threats are considered to result from irrigation canals, septic systems, sewer mains, and spills from an accident on the highway and railroad lines. 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 |
|--|---|--|-----------------|---------------------------|----------------|--|
| Irrigation canal | Pathogens, Pesticides, Herbicides, Nitrates | Non-point source | Moderate | Clay rich confining layer | Moderate | Educate community of best management practices for agriculture |
| Septic Systems | Sewage, Nitrate, Nitrite, Pathogens | Nitrates and pathogens that are insufficiently treated in private septic systems | Moderate hazard | Clay rich confining layer | Moderate | Growth management, maintenance and replacement of old sewer systems, possible connection to centralized sewer system, advanced treatment systems |
| Sanitary sewer main | Nitrates, pathogens | Leakage of poorly installed or maintained systems | Moderate | Clay rich confining layer | Moderate | Monitoring |
| Agricultural chemical usage and storage | Pesticides, Herbicides, Nitrates | Non-point source | Low | Clay rich confining layer | Low | Educate community of best management practices for agriculture |

Our water system is committed to providing our customers with safe, clean 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