

**MEADOWLAND HOA**  
**Montana Public Water Supply ID number 01670**  
*2022 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 two wells which are located on the north side of Cheviot Loop. One well is 158 feet deep and the other is 217 feet deep. We have 43 service connections and added no new connections last year. In a continuing effort to maintain and improve our system, we cleaned the storage tank, repaired the liner, and replaced the tank cover in September. A SCADA automatic control panel and variable frequency drives were also installed. In October the pump for one well failed and was replaced with another 3 HP pump.

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 Lorri Passwater at (406) 260-8227. Lorri is our certified operator with four years of experience. She attends periodic training sessions to meet continuing education requirements. The most recent training she received was in December, and the topic was the revised lead and copper rule.

**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 routinely monitor for contaminants in your drinking water according to Federal and State laws. 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, 2022:

- 18 coliform bacteria tests.
- Four nitrate plus nitrite tests – results were within EPA guidelines.
- Tests to determine the possible presence of eleven inorganic contaminants – results were within EPA standards.
- Tests to determine the possible presence of 18 herbicides and pesticides – none were detected.
- One test to determine the possible presence of cyanide to renew a statewide monitoring waiver – none was detected.

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
Total Coliform Bacteria	N	8-3-22 8-8-22	Two Positive Samples in One Month	Positive Sample	0	0	Naturally occurring in the environment
Barium	N	5-11-22	0.21	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	N	5-11-22	1	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N	6-14-21	90th % is 0.19	ppm	1.3	AL= 1.3	Corrosion of Household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride	N	5-11-22	0.12	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead	N	6-14-21	90th % is 2	ppb	0	AL= 15	Corrosion of Household plumbing; Erosion of natural deposits
Nitrate + Nitrite	N	10-12-22	8.38 (5.46 – 8.38)	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	N	5-11-22	2	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

**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 a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**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.

**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.

Our testing uncovered the presence of coliform bacteria during August of last year. Coliforms are bacteria that are naturally occurring in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. When coliform bacteria are found, special follow up tests are conducted to determine if harmful bacteria are present. In our case one repeat sample contained coliform bacteria.

We found coliforms indicating the need to look for potential problems in our water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and correct any problems that were found during these assessments. We conducted a level one assessment of our system. We found that the underground tank drain had cracked and allowed roots to grow in the tank. The roots were removed from the tank and the drain line was replaced. A hydrant had been replaced and may also have also allowed contamination into the system. After the repairs were made we chlorinated the system, and in September our sample was coliform free.

Our wells are high in nitrate. We test quarterly for this contaminant. The highest level detected during routine testing in 2022 was 8.38 ppm. The MCL (maximum allowable) is 10 ppm. While we did not exceed the maximum allowable for this contaminant, and our levels have not gone up for several years, eventually we will need to reduce the nitrate levels in our water. We will be hiring an engineer to evaluate our system and decide on the best course of action. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

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](http://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](http://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](http://www.epa.gov/safewater/lead).

In June of 2021 we did five 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, however we failed to provide results of lead tap water monitoring to our consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results. We received a failure to provide consumer notice violation from the Montana Department of Environmental Quality on December 30<sup>th</sup> 2021. We achieved compliance on January 11<sup>th</sup>, 2022.

In May 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 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	Hazard Rating	Barriers	Susceptibility	Management
<b>Residential Septic Systems</b>	Nitrate and microbial contaminants	Infiltrations of untreated sewage.	Moderate	Thick unsaturated zone and deep intake.  Well #1 cement grout annular seal.	Low	Inspect for proper operation.
<b>Lawn and Garden Maintenance</b>	Chemical fertilizers, herbicides and pesticides.	Chemical leaching into ground water	Moderate	Thick unsaturated zone and deep intake.  Well #1 cement grout annular seal.	Low	Apply at proper rates and restrict all application in control zones of wells.

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 2/23