## Annual Drinking Water Quality Report

City of Choteau PWSID #MT0000175 100 1<sup>st</sup> Street NW PO Box 619 Choteau, MT 59422-0619 406-466-2510

We're very pleased to provide you with the annual Water Quality 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. The water sources for the City of Choteau are a spring at the Main Pump House, springs at the Richem Pump House, and Upper and Lower Richem Springs. Our water has been classified by the State of Montana as ground water not under the direct influence of surface water. The Richem Pump House is the point of distribution, where it is chlorinated and distributed to the residences and businesses on the City's water system.

A source water delineation and assessment report was completed in March 2017. The report provides information on possible contamination sources, such as highways, railways, underground storage tanks and septic systems and rates the susceptibility of the City's water sources to these possible contaminants. The report is available for review at the City Office.

This report will not be mailed, but if you have any questions about this report or concerning your water, a copy of the report can be made upon request by contacting Finance Officer Tom Frownfelder or Public Works Director Colin Lightner at (406)466-2510. We want our customers to be informed about their water utility. If you want to learn more, please call us for a personal tour of the City's water system or you may attend any of our regularly scheduled City Council meetings, which are held on the first and third Tuesday of each month at 5:30 p.m. at City Hall.

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

The City of Choteau routinely monitors for constituents in your drinking water according to Federal and State laws. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator that the drinking has or has not met health standards. Our system will not conduct monitoring for Barium, Cadmium, Chromium, Fluoride, Mercury and Selenium because we have been granted a reduced monitoring waiver by the DEQ. This waiver is based on the analytical results for these chemicals. This waiver is a 9-year cycle from 2020-2028.

The following table shows the results of any detects in our monitoring for the period of **January 1**<sup>st</sup> **to December 31**<sup>st</sup>, **2023.** For constituents that are not monitored yearly, we have reviewed our records back to the last time the constituent was monitored.

Parameter	Date	90th % value	Units	Action Level	#Sites Over AL	Source of Contamination
Lead	09/11/2023	1	ppb	15	0	Household plumbing
Copper	09/11/2023	0.08	ppm	1.3	0	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) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - 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 - 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 (MRDL)-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.

Maximum Residual Detection Limit 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.

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.

TEST RESULTS										
Contaminant	Violation Y/N	Sample Date	Range	Highest Level Detected	Unit of Measurement	MCL G	MCL	Likely Source of Contamination		
Inorganic Contaminants										
Nitrate + Nitrite as N	N	01/11/23	0.24	0.24- 0.24	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Barium	N	01/04/21	0.1	0.1-0.1	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.		
Chlorine	N	2023	0.05- 0.5	0.5	ppm	MRD LG=4	MRDL =	Water additive used to control microbes		
Fluoride	N	01/04/21	0.3- 0.3	0.3	ppm	4	4	Water additive which promotes strong teeth, erosion of natural deposits.		
Volatile Organic Contaminants										

TTHMs (total trihalomethanes	N	08/15/23	2.9	2.9-2.9	ppb	0	80	By-product of drinking water chlorination		
HAA5 (Haloacetic acids)	N	08/15/23	1.7	1.7-1.7	ppb	0	60	Discharge from petroleum factories and By-product of drinking water chlorination		
Radioactive Contaminants										
Gross Alpha	N	11/02/21		0.6	pCi/L	0	15	Erosion of natural deposits		
Combined Radium	N	11/02/21		0.4	pCi/L	0	5	Erosion of natural deposits.		
Microbial Contaminants										
	Violatio n Y/N	Date		# Months Positive MCLG		MCL		Likely Source of Contamination		
Total Coliform	N	Monthly	1-11-01-23 1-11-07-23		0	Present/ Absent		Soil Runoff		

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

**Total Coliform:** Total Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Our system had 2 positive total coliform bacteria in the month of November. We were required to take 4 (four) follow-up samples. The follow up sample results were 1 positive repeat sample. There was an Investigation which found a plugged chlorine pump in the distribution system. The issue was fixed and there have been no further issues.

**Asbestos:** The City of Choteau analyzed for Asbestos in water collected on 2/29/12. The results were <0.20 MFL's. This is below the allowable limits.

**TTHMs [Total Trihalomethanes]**: Some people who drink water that contains trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**Haloacetic Acids:** Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Fluoride:** Some people who drink water that contains fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

**Barium:** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

**Chlorine**: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

**Copper:** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some

people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Lead:** Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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. The City of Choteau 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 the lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

**Alpha Emitters**: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Combined Radium:** Some people who drink water containing radium 226 and 228 in excess of the MCL over many years may have an increased risk of getting cancer.

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.

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.

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.

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).

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.

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