

CITY OF THOMPSON FALLS

Montana Public Water Supply ID number 00305

2022 Water Quality Report

In a continuing 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 water comes from Ashley Creek Spring (EP502) and two wells that are ported together (EP504). The wells are 170 feet deep. To ensure its purity, we disinfect our water with a small amount of chlorine. We have 738 service connections and added 20 new connections last year. In a continuing effort to maintain and improve our water system, we replaced 11 blocks of undersized steel water main with new six inch PVC water main on the west side of Thompson Falls last year. We installed double containment containers for our chlorine tanks and rebuilt and checked all vacuum breakers and check valves. A sanitary survey inspection of our water system was conducted in November. No significant deficiencies that may affect the quality of our drinking water were noted.

We want you, our valued customers, to be informed about your water utility. If you want to learn more, please attend any of our meetings held on the second Monday of each month at 6:00 p.m. at City 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 Neil Harnett at (406) 827-3557. Neil is our certified operator with 25 years of experience. He attends periodic training sessions to meet continuing education requirements. The most recent training he received was in May of last year and the topic was small water system operations.

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:

- 24 coliform bacteria tests – all were coliform free.
- Tests on both of our water sources to determine the possible presence of eleven inorganic contaminants – results were within EPA standards.
- 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 on our wells (EP504) to determine the possible presence of radiological contaminants – none were detected.
- Two sets of tests to determine the possible presence of 10 disinfection byproducts – results were within EPA standards.

The following table lists the contaminants detected during recent testing. Some of our data in the 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 MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Arsenic EP502	N	8-11-20	1	ppb	10	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium EP504	N	8-11-20	0.02	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	N	2022	0.7 (0.6-0.7)	ppm	MRDLG 4	MRDL 4	Water additive used to control microbes
Copper	N	8-4-22	90th % is 0.15	ppm	1.3	AL= 1.3	Corrosion of Household plumbing/ naturally occurring
Fluoride EP502 EP504	N	8-11-20	0.03 0.06	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Lead	N	8-4-22	90th % is 1	ppb	0	AL= 15	Corrosion of Household plumbing / naturally occurring
Nitrate + Nitrite EP502 EP504	N	11-10-22	0.04 0.26	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Trihalomethanes (TTHM)	N	8-9-22	1.4	ppb	0	80	By product of drinking water chlorination

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.

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 after two wells are ported together.

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 constituents that are naturally occurring or manmade. Those constituents 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.

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.

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 May of 2002, the Montana Department of Environmental Quality conducted a source water assessment of the Ashley Creek Watershed. This report provides additional information on the potential vulnerability of our water sources 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	Containment	Hazard	Hazard Rating	Barriers	Susceptibility
Anthropogenic (man-made) Sources	None	No realistic contamination by people other than logging high in the watershed	Low Hazard	<ul style="list-style-type: none"> •Upward vertical gradient near springs •Aquifer in the fractured bedrock is isolated from all human sources of contamination •Management of activities in watershed (cooperative agreement with USFS and surrounding landowners) •Land use planning 	Very Low Susceptibility
Natural Sources	Nitrate, nitrite, pathogens, metals, turbidity and anything that could come from the aquifer host rock	<ul style="list-style-type: none"> •Animal presence & activity above spring collection galleries •High or low water table conditions •Natural solution of metals and minerals into groundwater •Wildland fire and subsequent erosion and mobilization of solutes 	Low Hazard	<ul style="list-style-type: none"> •Limited access by people to the tank, lines, or springs •Active monitoring of facilities •Maintain vegetative cover around and uphill from galleries •Newly installed galleries at the springs •Newly installed piping system to deliver water •Newly installed water storage tank •Newly installed treatment system 	Very Low Susceptibility

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.