

TOWN OF STEVENSVILLE

Montana Public Water Supply ID number 00335

2017 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 water comes from five wells; Well 1 (EP503) and four wells (Well 5 Well 6 Well 7 and Well 8) that are ported together (EP507). Well 1 is 325 feet deep and the EP507 wells are 435, 435, 455, and 430 feet deep. Two wells (EP504 & EP505) were taken out of service in 2015. We also stopped using the water from Mill and Swap Creeks (EP502). To ensure its purity, we treat our water by adding a small amount of chlorine. To minimize corrosion of lead and copper in our customers water pipes, we further treat our water with ortho phosphate. We have 836 service connections and added 17 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 second and fourth Mondays of each month at 7:00 p.m. in City Hall at 206 Buck Street.

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 George Thomas at (406) 381-9620. George is our certified operator with 25 years of experience. He attends periodic training sessions to meet continuing education requirements. The most recent training course he attended was in October 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. The Stevensville Water Department routinely monitors for constituents 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, 2017:

- 25 coliform bacteria tests - all were coliform free.
- 2 Nitrate plus Nitrite tests - results were within EPA guidelines.
- Tests on EP507 to determine the possible presence of eleven inorganic contaminants - results were within EPA standards.
- Tests on EP507 to determine the possible presence of 61 organic contaminants - none were detected.
- Tests to determine the possible presence of 61 organic contaminants - none were detected.
- Tests on EP507 to determine the possible presence of 40 pesticides & herbicides - none were detected.
- Tests on EP507 to determine the possible presence of radiological contaminants - results were within EPA guidelines.
- Tests on the water from our distribution system to determine the possible presence of 10 disinfection byproducts - none were detected.

Due to the purity of our water, we have applied for and been issued a monitoring waiver for ten inorganic contaminants on Well 1 (EP503). This waiver allows our system to sample this well 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. This waiver covers the period from 2011 to 2019.

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 sample only once every nine years for this contaminant.

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 MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Alpha Emitters EP503	N	1-19-11	8.9 +/- 1.2	pCi/L	0	15	Erosion of natural deposits
Arsenic EP503 EP507	N	6-10-14 8-7-17	2 2	ppb	10	10	Erosion of natural deposits; Runoff from orchards, Runoff from glass and electronics production wastes
Barium EP503 EP507	N	6-10-14 8-7-17	0.06 0.08	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	N	6-4-15	90th % is 0.65	ppm	1.3	AL= 1.3	Corrosion of Household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride EP503 EP507	N	6-10-14 8-7-17	0.21 0.26	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Nitrate + Nitrite EP503 EP507	N	9-12-17 8-7-17	0.30 0.27	ppm	10	10	Naturally occurring at this level Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radium 226 EP503 EP507	N	1-19-11 8-7-17	0.4 0.3 +/- 0.1	pCi/L	0	5	Natural deposits
Radium 228 EP507	N	8-7-17	1.6 +/- 0.7	pCi/L	0	5	Natural deposits
Uranium EP507	N	8-7-17	2	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 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.

Due to the relative softness of our water, we do have some copper that leaches out of the pipes in our customers' houses. To help keep this to a minimum, we add a small amount of ortho phosphate to our water. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short period 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 Wilsons disease should consult their personal doctor.

In October of 2017 the Montana Department of Environmental Quality (MTDEQ) conducted a sanitary survey of our water system. They found two significant deficiencies. Significant deficiencies are problems that may potentially lead to contamination of our water. We needed to replace the seal on the storage tank hatch and well 1 needed backflow prevention for ground irrigation. We installed a pressure vacuum breaker on the irrigation line for the irrigation system and replaced the seal on the hatch, correcting these potential sources of contamination.

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 man made. 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 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 at City Hall. The full report is also available online at <http://svc.mt.gov/deq/dst/#/app/swp>. The report can be summarized in the following table:

Significant Potential Contaminant Sources

Facility Name	Potential Contaminants	Contaminant Origin	Hazard Rating	Barriers	Susceptibility
Gas Stations	VOC's	Leaking UST	High	1 (LUST)	High
Machine Shops	VOC's	Spill	Moderate	1	Moderate
Fertilizer Plant	Nitrogen	Spill	Moderate	1	Moderate
Dry Cleaners	VOC's	Spill	High	0	Very High
Class V Injection Wells	VOC's, SOC's, IOC's	Spill	Unknown	Unknown	Unknown
Cropped Agricultural Land	SOC's, Nitrate, pathogens	Spill, Runoff	High	0	Very High
Septic Systems	Nitrate, pathogens	Infiltration Recharge	Low	0	Moderate
Sanitary Sewers	Nitrate, pathogens	Leaking Sewer	High	0	Very High
Stormwater Drainage	SOC's, IOC's	Infiltration Recharge	None	0	None
Highways/Railroads/Pipelines	VOC's, SOC's, IOC's	Spill	High (RR)	0	Very High

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.