

# Annual Drinking Water Quality Report 2019

## Gore Hill County Water District

PWSID#MT0000232

PO Box 263

Great Falls, MT 59403

We're very pleased to provide you with this year's 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. Our water source is ground water from the Madison Formation, and both well houses draw from the same source. At the present time, we serve 500 people. We have completed a source water protection plan that provides more information such as potential sources of contamination to our drinking water supply. This plan can be found online at

[http://apps.msl.mt.gov/Geographic\\_Information/Data/SourceWaterProtectionProgram/](http://apps.msl.mt.gov/Geographic_Information/Data/SourceWaterProtectionProgram/)

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present include:

Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;

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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### Source Water Information:

Well 1 GWIC 33313

Type – GW

Location - 3429 Wells Fargo Dr, Great Falls, MT

Well 2 GWIC 33319

Type – GW

Location - 4503 62<sup>nd</sup> Ave SW, Great Falls, MT

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

If you have any questions about this report or concerning your water, please leave a message on the District answering machine by calling **(406) 761-6528** and a certified operator will return your call. Or, attend any of our regularly scheduled meetings. They are held on the **1<sup>st</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> Tuesdays** of each month at **7:00 pm** at the **District Office, 4503 62<sup>nd</sup> Ave SW**.

Gore Hill County Water District routinely monitors for constituents in your drinking water according to Federal and State laws. 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>, 2018**. For constituents that are not monitored yearly, we have reviewed our records for the last 5 years.

Gore Hill has been issued a waiver for certain inorganic contaminants. This waiver allows our water system to sample only once every 9 years for these regulated contaminants: barium, cadmium, chromium, fluoride, mercury, selenium. Past sampling for these contaminants has shown that they are not present in our water supply, or occur in such small amounts that they are not considered a health hazard. This waiver is in effect from 2011 through 2020.

We have monitored for lead and copper, and all of our samples have been in compliance with the Lead and Copper Rule. 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. Gore Hill County Water District 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 lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

| Parameter | Sample Date | Violation | 90 <sup>th</sup> % value | Action level | Source of Contamination |
|-----------|-------------|-----------|--------------------------|--------------|-------------------------|
| Copper    | 2017        | N         | 0.428                    | 1.3 ppm      | Corrosion of plumbing   |
| Lead      | 2017        | N         | 1                        | 15 ppb       | Corrosion of 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:

*Avg:* Regulatory compliance with some MCLs are based on running annual average of monthly samples.

*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.

*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

*Action Level* - the concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.

*Treatment Technique (TT)* - (mandatory language) a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* - (mandatory language) 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* - (mandatory language) 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 disinfection level or MRDL:* the highest level of a disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

*Maximum residual disinfection level goal or MRDLG:* the level of a 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.

We're proud that your drinking water meets or exceeds all other 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.

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).

| TEST RESULTS                            |               |             |                        |                 |                  |            |          |  |
|---|---------------|-------------|------------------------|-----------------|------------------|------------|----------|--|
| Contaminant                             | Violation Y/N | Sample Date | Highest Level Detected | Range           | Unit Measurement | MCLG       | MC L     | Likely Source of Contamination         |
| Chlorine                                | N             | 2018        | .4                     | 0.2-0.4         | ppm              | MRDL G - 4 | MRDL - 4 | Water additive for control of microbes |
| <b>Inorganic Contaminants</b>           |               |             |                        |                 |                  |            |          |  |
| Arsenic                                 | N             | 2017        | 1                      | 1<br>-<br>1     | ppb              | 0          | 10       | Erosion of natural deposits            |
| Fluoride                                | N             | 2018        | 2.8                    | 2.6<br>-<br>2.9 | ppm              | 4          | 4.0      | Erosion of natural deposits            |
| Nitrate (measured) as Nitrogen          | N             | 2017        | 0.01                   | 0<br>-<br>0.01  | ppm              | 10         | 10       | Erosion of natural deposits            |
| Selenium                                | N             | 11/22/16    | 2                      | 2<br>-<br>2     | ppb              | 50         | 50       | Erosion of natural deposits            |
| <b>Radioactive Contaminants</b>         |               |             |                        |                 |                  |            |          |  |
| Combined Radium 226/228                 | N             | 2017        | 4.3                    | 2.6<br>-<br>4.3 | pCi/L            | 0          | 5        | Erosion of natural deposits            |
| Gross alpha excluding radon and uranium | N             | 2017        | 5.3                    | 0<br>-<br>5.3   | pCi/L            | 0          | 15       | Erosion of natural deposits            |

**Our system had no violations.**

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.

In April of 2011 the District installed filtration units at each of its wells to remove arsenic as well as iron and manganese. Since the filtration units described above use chlorination in the sequestering process, GHCWD is not required to submit daily/monthly chlorination content verification to the state. However, GHCWD does monitor and record daily chlorine residual content throughout the system.

While it is not in violation of the maximum content level for Fluoride, the content is fairly high. **\*\*This is an alert about your drinking water and a cosmetic dental problem that might affect children under twelve years of age.** At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system, Gore Hill County Water District, has a fluoride concentration between 2.6 and 2.8 mg/l.

Dental fluorosis in its moderate or severe forms may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under twelve and women who are pregnant should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the US Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem.

Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.\*