

# ***Annual Drinking Water Quality Report***

## **Worden Ballantine Yellowstone County Water & Sewer District**

**PWSID#MT0000022**

Worden, MT 59088

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 source of water is ground under direct influence of surface water. At the present time we serve 800 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%20Information/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.

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 contact **Sandra Kust**. She is a certified operator. If you want to learn more about our water, please call her at **406-670-4550**, or attend any of our regularly scheduled meetings held the second Monday of every month. If interested, please call 406-670-4550 for more information.

Worden Ballantine Yellowstone 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>, 2020**. For constituents that are not monitored yearly, we have reviewed our records back to the last five years.

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. Worden Ballantine Yellowstone 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	Date	90th % value	Units	Action level	Source of Contamination
Lead	9/18/18	<1	ppb	15	Household plumbing
Copper	9/18/18	0.67	ppm	1.3	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 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.

*Picocuries per liter (pCi/L)*-Picocuries per liter is a measure of the radioactivity in water.

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.

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

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).

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 advice from your health care provider.

TEST RESULTS								
Contaminant	Violation Y/N	Sample Date	Highest Level Detected	Range	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>								
Arsenic	N	2020	2	2-2	ppb	0	10	Erosion of natural deposits
Barium	N	2019	0.05	ND - 0.05	ppm	2	2	Erosion of natural deposits
Nitrate + Nitrite as N	N	2020	11.8	4.31 - 11.8	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride	N	2019	0.5	0.4 - 0.5	ppm	4	4	Erosion of natural deposits
Selenium	N	2019	19	4-19	ppb	50	50	Erosion of natural deposits
<b>Disinfection By-Products</b>								
Haloacetic Acids (HAAs)	N	2020	12	NA	ppb	0	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	N	2020	30	NA	ppb	0	80	By-product of drinking water disinfection
<b>Radioactive Contaminants</b>								
Gross Alpha	N	2019	10	1.9-10	pCi/L	0	15	Erosion of natural deposits
Combined Radium 226/228	N	2019	1.4	ND-1.4	pCi/L	0	5	Erosion of natural deposits
Uranium	N	2019	12.6	7.9 - 12.6	ppb	0	30	Erosion of natural deposits

**Our system had one violation.** A water sample showed that the amount of Nitrate and Nitrite in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the first and second quarter of 2020. Infants below the age of six months who drink water containing Nitrate and Nitrite in excess of the MCL could become seriously ill and if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

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.