Annual Drinking Water Quality Report

River Rock County Water & Sewer District MT0004082

January 1 to December 31, 2022

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report please contact Christine Clarkson at 406-581-8604 .

Public Participation Opportunities: District Board Meeting are held on the 3r Thursday each month at 7:00 PM at the River Rock Community Center.

Sources of Drinking Water

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 stormwater 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 stormwater 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 stormwater 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 number 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.

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 healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high-quality drinking water, but we 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 are available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

Source Water Information for River Rock County Water & Sewer District which is classified as a *Ground Water* system.

The source water assessment report for your water system provides additional information on your source water's susceptibility to contamination. To access this report please go to: https://deq.mt.gov/water/Programs/dw-sourcewater

On the webpage look under "4. Make Results of the Delineation and Assessment Available to the Public" and then click on the grey box called "Review Source Water Assessment Reports".

River Rock County Water & Sewer Dist utilizes the listed water sources below:

Water Source Name	Water Source Type
WELL 2 GWIC 188865	Well
WELL 3 GWIC 283159	Well
WELL 1 1979 GWIC 90879	Well

Water Quality Test Results Definitions

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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.

Maximum Contaminant Level or MCL: The highest level of 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 or MCLG: 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 or MRDL: The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

Maximum residual disinfectant level 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.

N/A: Not applicable.

ND: Not detectable at testing limit.

Nephelometric Turbidity Unit (NTU) − Measure of the clarity or cloudiness of water. Turbidity more than 5 NTU is just noticeable to the typical person.

Picocuries per liter (pCi/L) − Measure of the radioactivity in water.

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Secondary Maximum Contaminant Level (SMCL): SMCLs are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

The State of Montana DEQ requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one-year-old.

Lead and Copper								
Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09-30-2021	1.3	1.3	0.178	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09-30-2021	0	15	3.74	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants								
Contaminant Group: Disinfectants and Disinfection By-Products								
Regulated Contaminants	Collection Year	Highest Level Detected	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2022	0.9	.55 - 1.4	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	4	3.7 - 3.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Contaminant Group: Inorganic Contaminants								
Regulated Contaminants	Collection Year	Highest Level Detected	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination

Arsenic	2022	0.546	.546 - .546	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2022	0.0866	.0866 - .0866	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2022	0.153	.153 - .153	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2022	0.148	.148 - .148	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2022	2	1.71 - 2.21	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2022	0.228	.228 - .228	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Violations

Violation for Montana State Chlorine Rule

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Violation Type	Violation Period	Resolution Date	Violation Explanation
STATE CHLORINE MONITORING DAILY	07/01/2022 to 07/31/2022	09-10-2022	We failed to report the daily minimum entry point chlorine residuals and report them to DEQ by the 10th of the month.

The violation was returned to compliance once the system submitted one full months of data by 10th of the following month, and for said month, the system did not have any days with a chlorine residual below the mandatory level.

2022 Annual Drinking Water Report

Cobblestone Subdivision; Belgrade, Montana 59714
Contact: Certified Operator Steve O'Neil (406) 570-3241
steveoneil@earthlink.net
PWSID# MT0004572

We are 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. This report shows our water quality and what it means.

Cobblestone Subdivision routinely monitors for constituents in your drinking water according to Federal and State laws. The table on the next page shows the results of our monitoring for the period of January 1st to December 31st, 2022. Our sampling frequency complies with EPA and State drinking water regulations. Our system had **no** violation in our sample monitoring for the period of **January 1st to December 31st, 2022**.

In the table below, you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms we've provided the following definitions and information:

- *Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water.*
- *Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health.*
- *CFU/100mL – In microbiology, colony-forming unit (CFU) is a measure of viable bacterial numbers. Unlike direct microscopic counts where all bacteria, dead and living, are counted, CFU measures only viable bacteria.*
- *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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.*

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man-made. 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.

The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public. To comply with the stricter regulation, we have selected proper sampling sites and have complied with repeat monitoring.

Contaminant Group:
Disinfectants and Disinfectant by-products

Disinfection and disinfection by-products	Violation	Sample date	Highest level detected	Range of levels detected	MCLG	MCL	Units	Likely source of contaminants
Chlorine	No	20022	0.6	0.07 - 0.58	MRDLG = 4	MRDL = 4	ppm	Water additive used to control microbes
Haloacetic Acids (HAAS)	No	2022	0	0.45 - 0.45	No goal for the total	60	ppb	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	No	2022	8	0.75 - 0.75	No goal for the total	80	ppb	By-product of drinking water disinfection

Lead and Copper

Definitions:
Action Level Goals (ALG): The level of contaminant in drinking water below which there is no known or expected risk to health.
Action level (AL) : The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Violation	Sample date	Action Level (AL)	90th Percentile	# of Sites over MCL	MCGL	Units	Likely Source of Contaminants
Copper	No	08/15/21	1.3	0.03	0	1.3	ppm	Erosion of natural deposits, leaching from wood preservatives, corrosion of household plumbing.
Lead	No	08/15/21	15	1.0	0	0	ppb	Corrosion of household plumbing, erosion of natural deposits.

*Note Cobblestone Subdivision purchases its drinking water from River Rock Subdivision. Please see attached River Rock Subdivision 2002 Consumer Confidence Report (CCR).

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.

2022 Annual Drinking Water Report

Landmark Subdivision; Belgrade, Montana 59714
Contact: Certified Operator Steve O'Neil (406) 570-3241
steveoneil@earthlink.net
PWSID# MT0004262

We are 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. This report shows our water quality and what it means.

Landmark Subdivision routinely monitors for constituents in your drinking water according to Federal and State laws. The table on the next page shows the results of our monitoring for the period of January 1st to December 31st, 2022. Our sampling frequency complies with EPA and State drinking water regulations. Our system had **no** violation in our sample monitoring for the period of **January 1st to December 31st, 2022**.

In the table below, you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms we've provided the following definitions and information:

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- *CFU/100mL – In microbiology, colony-forming unit (CFU) is a measure of viable bacterial numbers. Unlike direct microscopic counts where all bacteria, dead and living, are counted, CFU measures only viable bacteria.*
- *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.*
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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.

The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public. To comply with the stricter regulation, we have selected proper sampling sites and have complied with repeat monitoring.

Contaminant Group:
Disinfectants and Disinfectant by-products

Disinfection and disinfection by-products	Violation	Sample date	Highest level detected	Range of levels detected	MCLG	MCL	Units	Likely source of contaminants
Chlorine	No	20022	0.2	0.07 - 0.24	MRDLG = 4	MRDL = 4	ppm	Water additive used to control microbes
Haloacetic Acids (HAAS)	No	2022	0	0.29 - 0.29	No goal for the total	60	ppb	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	No	2022	1	1.4 - 1.4	No goal for the total	80	ppb	By-product of drinking water disinfection

Lead and Copper

Definitions:
Action Level Goals (ALG): The level of contaminant in drinking water below which there is no known or expected risk to health.
Action level (AL) : The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Violation	Sample date	Action Level (AL)	90th Percentile	# of Sites over MCL	MCGL	Units	Likely Source of Contaminants
Copper	No	8/15/21	1.3	0.082	0	1.3	ppm	Erosion of natural deposits, leaching from wood preservatives, corrosion of household plumbing.
Lead	No	8/15/21	15	1.0	0	0	ppb	Corrosion of household plumbing, erosion of natural deposits.

*Note Landmark purchases its drinking water from River Rock Subdivision. Please see attached River Rock Subdivision 2002 Consumer Confidence Report (CCR).

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

[1] Total Coliform – Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present. Coliforms were not found in our drinking water.

[2] Lead & Copper – 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; it is also associated with erosion of natural deposits, and leaching from wood products. Landmark Subdivision is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components within our neighborhood. 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*.