BELL MOUNTAIN RANCH
2023 Drinking Water Quality Report
for the Calendar Year 2022

Public Water System ID: CO0118002

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

Castle Rock Water (CRW) is pleased to present this year's water quality report for Bell Mountain Ranch (BMR). CRW's goal is to provide a safe and dependable supply of drinking water. Please contact Mark Billman, 720-733-6004, with any questions or for public participation opportunities that may affect water quality.

General Information

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 (1-800-426-4791) or by visiting epa.gov/ground-water-and-drinking-water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their healthcare providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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 human activity. Contaminants that may be present in source water include:

•**Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
•**Inorganic contaminants:** 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:** may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
•**Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
•**Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.

To ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment (CDPHE) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

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. CRW is responsible for providing high-quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry, or running the dishwasher. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Colorado State Laboratory at 303-692-30-90. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Source Water Assessment and Protection (SWAP)

The CDPHE has not provided CRW with a Source Water Assessment Report for the water supply at BMR. A Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. The information can be used to evaluate the need to improve the current water treatment capabilities and prepare for future contamination threats. This can help ensure that quality finished water is delivered to your homes. In addition, the source water assessment results can provide a starting point for developing a source water protection plan. If potential sources of contamination in the BMR source water area were identified, they would be listed on the next page.

Please contact CRW to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, or learn more about the BMR system. CRW assumed responsibility for ownership and operation of the BMR system in November of 2022. CRW wants you, our valued customers, to be informed about the services that are provided, and the quality water that is delivered to you every day.

BMR Water Sources

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
WELL NO 3 (Groundwater-Well) WELL NO 2 (Groundwater-Well)	Bell Mountain Ranch does not have a SWAP report, please contact Mark Billman at 720-733-6004 with questions regarding potential sources of contamination.

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** − The highest level of contaminant allowed in drinking water.
- **Treatment Technique (TT)** − A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** − A violation of either an MCL or TT.
- **Non-Health-Based** − A violation that is not an MCL or TT.
- **Action Level (AL)** − The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** − The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (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 Goal (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.
- **Violation (No Abbreviation)** − Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** − Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** − Department permission not to meet an MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** − Gross alpha particle activity compliance value. It includes radium-226 but excludes radon-222, and uranium.
- **Picocuries per liter (pCi/L)** − Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** − Measure of the clarity or cloudiness of water. Turbidity above 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA), and Locational Running Annual Average (LRAA).
- **Average (x-bar)** − Typical value.
- **Range (R)** − Lowest value to the highest value.
- **Sample Size (n)** − Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** − One part per million corresponds to one minute in two years or a single penny in $10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** − One part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.
- **Not Applicable (N/A)** – Does not apply or is not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.
- **Level 2 Assessment** – 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 the water system on multiple occasions.

Detected Contaminants

Castle Rock Water routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found from January 1 to December 31, 2022, unless otherwise noted. The State of Colorado 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 the data, though representative, may be more than one-year-old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last five years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

Disinfectants Sampled in the Distribution System
TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm ***OR***
If the sample size is less than 40 no more than 1 sample is below 0.2 ppm
Typical Sources: Water additive used to control microbes

Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December 2022	Lowest period percentage of samples meeting TT requirement: 100%	0	1	No	4.0 ppm

Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	06/15/2021 to 06/21/2021	0.34	10	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	06/15/2021 to 06/21/2021	1	10	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Radionuclides Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Combined Radium	2018	0.8	0.8 to 0.8	1	pCi/L	5	0	No	Erosion of natural deposits

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Barium	2021	0.02	0.02 to 0.02	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2021	1	1 to 1	1	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2021	0.7	0.7 to 0.7	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Secondary Contaminants**						
**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.						
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**Secondary Standard**
Sodium	2021	39.7	39.7 to 39.7	1	ppm	N/A

Violations, Significant Deficiencies, and Formal Enforcement Actions

Treatment technique (TT) violations: BMR failed to complete an action that could affect water quality. Please read the information shown below about potential health effects for vulnerable populations. BMR was required to meet a minimum operation/treatment standard, make upgrades to the system, or evaluate the system for potential sanitary defects, and failed to do so in the period shown below. If the solution will take an extended time, you will be updated with quarterly notices.

Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
CROSS CONNECTION RULE	FAILURE TO MEET CROSS-CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS - M615	01/01/2022 - Open	The BMR system had an inadequate backflow prevention and cross-connection control program that CRW is now correcting. Uncontrolled cross-connections can lead to inadvertent contamination of the drinking water. This is due to one or more of the following: An uncontrolled cross-connection has been permitted, AND/OR an uncontrolled cross-connection has been installed or permitted, AND/OR the requirements for surveying the system for cross-connections did not occur, AND/OR the testing requirements for backflow prevention devices or methods were not completed, AND/OR the State Health Dept was not notified of a backflow contamination event.	N/A	N/A
CROSS CONNECTION RULE	FAILURE TO MEET CROSS-CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS - M614	01/1/2022 - Open	The BMR system had an inadequate backflow prevention and cross-connection control program that CRW is now correcting. Uncontrolled cross-connections can lead to inadvertent contamination of the drinking water. This is due to one or more of the following: An uncontrolled cross-connection has been permitted, AND/OR an uncontrolled cross-connection has been installed or permitted, AND/OR the requirements for surveying the system for cross-connections did not occur, AND/OR the testing requirements for backflow	N/A	N/A

Treatment technique (TT) violations: BMR failed to complete an action that could affect water quality. Please read the information shown below about potential health effects for vulnerable populations. BMR was required to meet a minimum operation/treatment standard, make upgrades to the system, or evaluate the system for potential sanitary defects, and failed to do so in the period shown below. If the solution will take an extended time, you will be updated with quarterly notices.

Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
			prevention devices or methods were not completed, AND/OR the State Health Dept was not notified of a backflow contamination event.		

Additional Violation Information

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Describe the steps taken to resolve the violation(s), and the anticipated resolution date:

Castle Rock Water took over ownership of the BMR system in November 2022. The Town of Castle Rock Municipal Code provides a legal framework for enforcing compliance, as necessary. Water service is contingent on meeting all applicable regulations. Being aware of the longstanding violations at the time of acquisition, and knowing that testing and method inspection compliance could not be achieved immediately, Castle Rock Water devised a plan to bring the system into compliance. Castle Rock Water has implemented its established cross-connection control (CCC) program, which outlines the process for compliance. Additionally, Castle Rock Water has immediately and consistently communicated with all residents via mailers, a variable message sign at the neighborhood entrance, persistent phone calls and emails, and the required quarterly Tier 2 Notice of Violation letters. As of the published date of this Drinking Water Quality Report, Castle Rock Water has brought violation M615 into full compliance. Castle Rock Water takes very seriously the compliance obligations for which it is responsible. Violation M614 will return to compliance before the end of 2023.

Backflow and Cross-Connection

BMR has an inadequate backflow prevention and cross-connection control program. Uncontrolled cross-connections can lead to inadvertent contamination of the drinking water.

BMR has either installed or permitted an uncontrolled cross-connection or we experienced a backflow contamination event.