

We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. All wells are located in a remote area with no potential contaminant sources. The wells are considered to have a low vulnerability to any surface contamination. An asbestos cement pipe is installed within the distribution system. The water system is considered to have a moderate vulnerability to asbestos fibers. Monitoring for asbestos will be maintained where the asbestos pipe is located, asbestos has not been detected to date. The water system is considered to have a low vulnerability to surface contamination. Our drinking water is provided by four separate wells. In 2022, your water came from:

Source Name	Source Water Type
WELL 7	Ground Water
WELL 8	Ground Water
WELL 9	Ground Water

CONTACT INFORMATION: If you have any questions about this report or concerning your water utility, please contact Carrie Baum at 775-635-2190. We want our valued customers to be informed about their water utility.

Lander County-Battle Mountain, PWS NV0000008, routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2022. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. This report shows our water quality and what it means.

Our water system tested a minimum of 5 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their 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 by newspaper, television or radio.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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.

## **DEFINITIONS:**

In this table 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:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

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.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000.

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

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions. (Only systems with a variance or exemption are REQUIRED to include this definition. In addition, it is REQUIRED to provide an explanation of the reasons for the variance or exemption, date issued, status or remediation.)

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 contaminant in drinking water.

Maximum Contaminant Level (MCL) - (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 (MCLG) - (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 Disinfectant Level (MRDL) - (mandatory language) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - (mandatory language) 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.

## Testing Results for LANDER CO SEWER AND WATER DIST 1 BM

<b>Disinfection By-Products</b>	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
TTHM	2022	3	2.8	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Date	90 <sup>TH</sup> I	Percentile	Unit	AL	Sites Over AL	Typical Source		
COPPER, FREE 2020 - 2022		0.075	0.002 - 0.17	ppm	1.3	0	Corrosion of household plumbing system Erosion of natural deposits; Leaching from wood preservatives.		
LEAD	2020 - 2022	2	0 - 4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.		

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	5/21/2020	6.5	6-7	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff
							from glass and electronics production wastes.
BARIUM	5/21/2020	0.09	0.09	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
FLUORIDE	5/21/2020	0.3	0.1-0.3	ppm	2	4	Natural deposits; Water additive which promotes strong teeth.
NICKEL	5/21/2020	0.003	0.003	MG/ L	0.1	0.1	
NITRATE	7/14/2022	0.27	0.15 - 0.27	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (- 226 & -228)	5/21/2020	0.624	0.29 - 0.624	pCi/L	5	0	Erosion of natural deposits
COMBINED URANIUM	5/21/2020- 5/12/2021	2	2	μg/L	30	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	5/21/2020	3.85	3.39 - 3.85	pCi/L	15	0	Decay of natural and man-made deposits
RADIÚM-226	5/21/2020	0.546	0.403 - 0.546	pCi/L	5	0	
RADIUM-228	5/21/2020	0.0782	0.0782	pCi/L	5	0	

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
CHLORIDE	5/21/2020	63	47-63	MG/ L	400	
MAGNESIUM	5/21/2020	12	6.9-12	MG/ L	150	
MANGANESE	5/21/2020	0.003	ND- 0.003	MG/ L	0.1	
PH	5/21/2020	8.27	8.17-8.27	PH	8.5	
SODIUM	5/21/2020	82	56-82	MG/ L	200	20
SULFATE	5/21/2020	68	54-68	MG/ L	500	
TDS	5/21/2020	550	350-550	MG/ L	1000	
TEMPERATURE (CENTIGRADE)	5/21/2020	21.7	21.4 - 21.7	С		

## **HEALTH EFFECTS:**

While your drinking water meets EPA's standard for arsenic, it does contain arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Well 6 has not been needed to meet demand, and therefore has not been in distribution, since September 26, 2018. Wells 7, 8, and 9 have been able to meet demand.

Your water meets the EPA's standard for Lead. If present at elevated levels, however, this contaminant 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. Your Water System 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 drinking 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo hable con alguien que lo entienda bien.

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).

Total Dissolved Solids are classified as a secondary contaminant by the Environmental Protection Agency (EPA) and a suggested maximum is 1000 ppm. Concerns with secondary standards relate to aesthetic or cosmetic quality of the water rather than health concerns. TDS can give water a murky appearance and detract from the taste quality of the water. Gastrointestinal irritation in some individuals can be caused by high TDS levels. TDS can also interfere with treatment devices and is an important consideration when choosing a treatment system.

## **EXPLANATIONS:**

MCLs are set at very stringent levels. The MCLs are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

We treat your water to remove several contaminants and we add disinfectant to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. The water system is considered to have a low vulnerability to surface contamination. For results of the assessment, please contact us.

The state completed a Sanitary Survey inspection on November 25, 2020. It was noted the water system does not have a complete Cross-Connection Control Plan (CCCP) on file. The Lander County Commissioner will be reviewing the proposed CCCP. This will be submitted to the BSDW once approved.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Thank you for allowing us to continue providing your family with clean, quality water this year.

Please call our office if you have questions. We at Battle Mountain work around the clock to provide top quality water to every tap. 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.