

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. Our drinking water is provided by four separate wells.

This report shows our water quality and what it means.

## CONTACT INFORMATION:

If you have any questions about this report or concerning your water utility, please contact Tammy Dimitroff at 775-635-2728. We want our valued customers to be informed about their water utility.

Battle Mountain 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, 2016. 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.

## **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 reduce the level of a 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.

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Contaminants Contaminant	Level Detected	Range of Detection	Unit of Measure	MCL	MCLG	Violation	Likely Source
Disinfection	20100100		Modesio				
Byproducts Total Trihalomethanes (TTHMs) Collection Dates: 07/12/2016	0.76	0.76	ug/L	80	n/a	N	By-product of drinking water chlorination
Inorganic Chemicals Arsenic Collection Dates: 11/30/2011- 10/03/2016	5	5-18	ppb	10	n/a	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium Collection Dates: 06/19/2014- 09/07/2016	0.095	0.005-0.095	mg/L	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium Collection Dates: 06/19/2014- 09/07/2016	2.0	0.003-2.0	mg/L	100	100	N	Discharge from steel and pulp mills; erosion of natural deposits
Copper Collection Dates: 07/11/2016 - 08/02/2016	0.16	0.004-0.19	mg/L	1.3	1.3	N	Corrosion of household plumbing systems, erosion of natural deposits and leaching from wood preservatives.
Fluoride Collection Dates: 05/16/2013- 09/07/2016	0.8	0.2-0.8	mg/L	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Collection Dates: 07/11/2016 - 08/02/2016	4	<1-11	ppb	15	0	N	Corrosion of household plumbing systems; erosion of natural deposits.
Nickel Collection Date: 06/19/2014- 09/07/2016	0.002	0.001-0.002	mg/L			N	Erosion of natural deposits.
NO3 (Nitrate) Collection Dates: 05/19/2015- 09/07/2016	0.41	0.21-0.41	mg/L	10	10	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radionuclides							
Alpha Particles Collection Dates: 2/14/2012- 09/07/2016	1.56	0.443-1.56	pCi/L	15		N	Decay of natural and man-made deposits
Beta Particles and Photon Emitters Collection Dates: 02/21/2012 - 09/07/16	5.17	1.48-5.17	pCi/L	50		N	Decay of natural and man-made deposits.
Radium 226 Collection Dates: 02/14/2012- 05/19/2015	0.489	0.0196- 0.489	pCi/L			N	Erosion of natural deposits
Radium 228 Collection Dates: 02/14/2012-09/07/2016	0.483	-0.0626- 0.483	pCi/L			N	Erosion of natural deposits
Uranium Collection Date: 02/24/2015- 09/07/2016	4	2-4	ug/L	30	0	N	Erosion of natural deposits
Secondary Contaminants							
Chloride Collection Date: 09/07/2016	44	44	mg/L	400		N	
Magnesium Collection Date: 09/07/2016	6.9	6.9	mg/L	150		N	

pH Collection Date: 09/07/2016	8.09	8.09	mg/L	8.5	N	
Sodium Collection Date: 09/07/2016	65	65	mg/L	200 20	N	Erosion of natural deposits
Sulfate Collection Date: 09/07/2016	48	48	mg/L	500	N	
TDS Collection Date: 09/07/2016	640	640	mg/L	1000	N	
Zinc Collection Date: 09/07/2016	0.01	0.01	mg/L	5	N	

## **HEALTH EFFECTS:**

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

While your drinking water meets EPA's standard for arsenic, it does contain arsenic. An over reliance on source Well 6 in September 2016 resulted in a temporary increase in the amount of Arsenic entering the distribution system. Resumption of our proper blending technique returned arsenic levels to below the EPA standard of 10 ppb. Compliance for this contaminant is based on an annual average, which the Lander County- Battle Mountain system was able to achieve with a reading of 5 ppb. We are currently back in compliance with the blend of all wells. 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.

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. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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 ergan 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).

Your water meets State and federal requirements for Lead, but if present at elevated levels, 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. Battle Mountain 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>.

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.

## **EXPLANATIONS:**

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.

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.