CALIENTE PUBLIC UTILITIES Consumer Confidence Report – 2017 Covering Calendar Year – 2016

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are continually being made to improve their water systems. To learn more, please attend any of the regularly scheduled meetings. For more information please contact Chris Glassburn at 775-962-1653.

Your water comes from:

Source Name	Source Water Type
WELL 6	Ground Water
WELL 5	Ground Water
WELL 1 RR WELL	Ground Water

We protect your water from several chemical and microbial contaminates. 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. For results of the source water assessment, please contact us.

Message from EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as those 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 (800-426-4791).

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) included 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 in source water before we treat it include:

<u>Microbial contaminants</u>, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

<u>Inorganic contaminants</u>, such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Pesticides and herbicides</u> may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, can be naturally occurring or the result of mining activity

<u>Organic contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, may also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 2 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presences 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.

Water Quality Data

The tables following below list all of the drinking water contaminants that were detected during the 2016 calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1- December 31, 2016. The state 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. Some of the data, though representative of the water quality, is more than one year old.



Terms & Abbreviations

<u>Maximum Contaminant Level Goal (MCLG)</u>: the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

<u>Maximum Contaminant Level (MCL)</u>: the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

<u>Treatment Technique (TT)</u>: a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

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.

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

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

Testing Results for CALIENTE PUBLIC UTILITIES

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	No samples returned as	MCL: Systems that Collect Less Than	0	Naturally present in the
	positive	40 Samples per Month - No more than		environment
		1 positive monthly sample		

Lead and Copper	Date	90 TH Percentile	Unit	AL	Sites Over AL	Typical Source
COPPER	09/09/2015	0.081	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
LEAD	09/09/2015	5	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants	Collection	Highest	Range	Unit	MCL	MCLG	Typical Source
	Date	Value					
ARSENIC	6/08/2016	7	5.3 - 7	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	6/08/2016	0	0	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
CHROMIUM	6/08/2016	0	0	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
FLUORIDE	6/08/2016	1.2	0.99 - 1.2	ppm	2	4	Natural deposits; Water additive which promotes strong teeth.
MERCURY	6/08/2016	0.0	0.0	ppb	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
NICKEL	6/08/2016	0.000	0.000	mg/L	0.1	0.1	Erosion of natural deposits
NITRATE	6/08/2016	0.66	0.48 - 0.66	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radionuclides	Collection	Highest	Range	Unit	MCL	MCLG	Typical Source
	Date	Value					
COMBINED RADIUM	9/09/2015	< 0.7	0.269 -	pCi/L	5	0	Erosion of natural deposits
(-226 & -228)			1.46				
COMBINED URANIUM	3/27/2012	6	6	μg/L	30	0	Erosion of natural deposits
				-			_
GROSS ALPHA, INCL.	9/09/2015	7.2	3.41 -	pCi/L	15	0	Decay of natural and man-made
RADON & U			14.4				deposits
GROSS BETA	5/18/2011	2.98	0.758 -	pCi/L	50	0	Decay of natural and man-made
PARTICLE ACTIVITY			2.98				deposits
RADON	9/14/2010	576	0.4 - 576	pCi/L			Naturally occurring gas

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
ALUMINUM	6/08/2016	0.0	0.1	mg/L	0.2	•
CHLORIDE	6/08/2016	17	18	mg/L	400	
COLOR	6/08/2016	0	10	CU	15	
IRON	6/08/2016	0	1	mg/L	0.6	
MAGNESIUM	6/08/2016	7.4	9	mg/L	150	
MANGANESE	6/08/2016	0.0	0.47	mg/L	0.1	
PH	6/08/2016	7.96	7.87	PH	8.5	
SODIUM	6/08/2016	36	36	mg/L	200	20
SULFATE	6/08/2016	11	14	mg/L	500	
TDS	6/08/2016	280	310	mg/L	1000	

Health Information About Water Quality

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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. Data from the new Wells #1 & #2, with arsenic levels below the MCL at 6 ppb, meet compliance. The Well Replacement Project and the Reconditioning Project were implemented in 2010.

Infants and children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4761).

The State of Nevada has set forth a more stringent MCL of 2.0 mg/L for Fluoride than the federal limit of 4.0 mg/L assigned nationally. Your water did not exceed this stricter limit, but we are providing you with the following health information to keep you informed. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of the teeth of children, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

Violations

During the 2016 calendar year, CALIENTE PUBLIC UTILITIES is required to include an explanation of the violation(s) in the table below and the steps taken to resolve the violation(s) with this report.

Type	Category	Analyte	Compliance Period
No Violations			

Health Information About the Above Violation(s)

No Violations for 2016