BELLVIEW





2016 / 2017 CONSUMER CONFIDENCE REPORT AND Annual Water Quality Report

Liberty Utilities Bellview is pleased to provide you with a copy of this year's Annual Water Quality Report. We have put together information that we hope will keep you better informed on water quality issues both in general and specific to what comes from your own tap. Please feel free to contact us should you ever have any questions about service or quality.

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



LIBERTY UTILITIES BELLVIEW SOURCES

Liberty Utilities Bellview (LUB) pumps 100% of our source water from one deep well located in the community. This well draws water from the deep Alto subunit of the Mojave ground water basin. This high quality aquifer is recharged from snowmelt from the San Bernardino Mountains to the south and the Mojave River to the west. Also, the Mojave Water Agency (MWA) imports water from the California State Water project to spread in the Mojave River to help recharge the ground water. Some of the water we pump has been age-dated close to 10,000 years old by the United States Geologic Survey. That means it has been protected and naturally filtered for a very long time.



What EPA Says About the Kinds of Contaminants That Might Be Found In Drinking Water

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. In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) and the California State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The federal Food and Drug Administration (FDA) and SWRCB regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health.

Contaminants that may be present in untreated source water include:

- **Microbial contaminants,** such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants,** such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants** that can be naturally occurring or be the result of oil and gas production and mining activities.

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. The tables in this report indicate which minerals and substances have been detected in the water provided by LU-AV. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline at 1-800-426-4791. You can also go to the following websites for more information:

USEPA - www.epa.gov/safewater

CA State Water Resources Control Board -

www.waterboards.ca.gov/drinking_water/programs/index.shtml



What are drinking water standards?

Drinking water standards are regulations that the EPA sets to control the level of contaminants in the nation's drinking water. EPA, the SWRCB and the California Public Utilities Commission (CPUC) are the agencies responsible for establishing drinking water quality standards in California. These standards are part of the Safe Drinking Water Act's "multiple barrier" approach to drinking water protection, which includes assessing and protecting drinking water sources; protecting wells and surface water; making sure water is treated as needed by the appropriate treatment technology by gualified operators; ensuring the integrity of distribution systems; and making information available to the public on the quality of their drinking water. With the involvement of EPA, SWRCB, the CPUC, drinking water utilities, communities and citizens, these multiple barriers ensure that tap water is safe to drink. The water delivered to your home meets standards required by EPA, SWRCB and CPUC. To recover the growing cost of meeting and maintaining EPA, SWRCB and CPUC standards, LUB submits a General Rate Case to the CPUC every three years. The CPUC is responsible for establishing water rates for LUB.

If you would like more information about water quality, or to find out about upcoming opportunities to participate in public meetings, please call Jeremy Caudell at 760-240-8334.

This report describes those contaminants that have been detected in the analysis of almost 200 different potential contaminants, nearly 100 of which are regulated by EPA and the SWRCB. LUB is proud to tell you that there have been no contaminants detected that exceed any federal or state drinking water standards. Hundreds of samples analyzed every month and thousands every year by LUB contract certified laboratories assure that all primary (health related) and secondary (aesthetic) drinking water standards are being met. See the tables on the following page to see how your water quality rates.

This report is intended to provide information for all water users. If received by an absentee landlord, a business, or a school, please share the information with tenants, employees or students. We

Sensitive Populations May be More Vulnerable

will be happy to make additional copies of this report available. Complete records of water quality analyses are open for inspection by the public upon request. You may also access this report on the LUB web site at www.libertyutilities.com and navigate your way to Bellview.

Source Water Assessment Completed and Available

The 1996 Safe Drinking Water Act amendments required states to perform an assessment of potentially contaminating activities near drinking water sources of all water utilities. In California, the SWRCB required the utilities to perform the assessments themselves. LUB completed the Source Water Assessment in December of 2002. The assessment has been updated since for three new wells. LUB wells are considered most vulnerable to the following activities associated with potential contamination of ground water in Bellview: high density housing, high and low density septic systems, parks, irrigated crops, golf courses and sewer collection systems. Additional activities that are potentially vulnerable for our wells are: gas stations, roads, streets, railroads, storm water injection wells, storm drain discharge points, storm water detention facilities, agricultural and irrigation water wells, historic grazing, historic waste dumps and landfills, machine shops and leaking underground storage tanks.

A copy of the complete assessment is available at Liberty Utilities Bellview and at the SWRCB San Bernardino office. You may request a summary of the assessment be sent to you by contacting Jeremy Caudell at 760-240-8334 or by calling the SWRCB office at 909-383-4328.

Issues to Know About

Lead and Copper

While there have never been any problems with lead or copper at LUB the USEPA and the SWRCB require the following information be presented in this report. 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. LUB 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 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 www.epa.gov/safewater/lead.

Unregulated Contaminant Monitoring

The Safe Drinking Water Act requires EPA to identify unregulated contaminants for potential regulation. Every five years, EPA identifies a list of unregulated contaminants to be monitored for by the nation's water utilities over a three year period. This monitoring occurred in 2013 – 2015 with the third UCMR. LUB has monitored for a total of 29 chemical contaminants from all of our wells spread out over the three years along with a corresponding sampling from the distribution system reflecting water from each well. Once EPA has obtained this occurrence data nationally, they are required to determine if there is a meaningful opportunity for increased health protection of drinking water by regulating these contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Persons with compromised immune systems 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 provider. The USEPA and the national Centers for Disease Control (CDC) have guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants. These are available by calling the Safe Drinking Water Hotline at 1-800-426-4791.

WATER RESULTS LIBERTY UTILITIES Bellview Heights 2016 / 2017 Annual Water Quality Report

Updated: 02/13/17

PRIMARY STANDARDS	Water Quality Parameters Detected in Liberty Utilities Apple Valley, Bellview Heights Water System for 2016									
Mandatory health-related INORGANIC CHEMICALS	State MCL	Public Health Goal (MCLG)			ality Results leights Well 7	(a) Date of Last Measurement	Potential Sources of Contamination			
Arsenic	10	0.0	ppb	4.5		2015	Erosion of natural deposits; runoff from orchards; glass and electronic production wastes			
Fluoride	2.0	1.0	ppm	0.3		2015	Erosion of natural deposits; discharge from fertilizer and aluminum factories			
Hexavalent Chromium (Cr+6)	10.000	0.0	ppb		2.3 2015		Discharge from steel and pulp mills and chrome plating; erosion of natural deposits			
DISTRIBUTION SYSTEM										
Chlorine Residual	MRDL = 4	MRDLG = 4	ppm	average = 0.51 range = 0.11 - 1.0		weekly	Added for disinfection purposes			
Microbiological Heterotrophic Plate Count Bacteria	NS	none	CFU/ml	average = 2.13 range = <1 - 30		weekly	Naturally present in the environment			
Total Trihalomethanes (TTHMs)	80	none	ppb		1.4	once per year 201	6 By-product of drinking water d	isinfection		
2016 LEAD AND COPPER MONITORING	State Action Level	PHG	Units of Measurement		of Samples lected	90th Percentile Level Detected	Potential Sources of Contamination			
Copper (d)	1,300	300	ppb	5		Avg. & Range <1 (none above AL)	Internal corrosion of household water plumbing systems			
Lead (d)	15	0.2	ppb	5		Avg. & Range <1 (none above AL)	Internal corrosion of household water plumbing systems			
SECONDARY STANDARDS Aesthetic standards - non-health related CHEMCIAL PARAMETERS	State MCL	Public Health Goal (MCLG)	Units of Measurement	Water Quality Results Bellview Heights Well 7		(a) Date of Last Measurement	Potential Sources of Contamination			
Chloride	500	none	ppm	4.8		2015	Runoff / leaching from natural deposits; seawater influence			
Specific Conductance	1,600	none	micromho/cm	270		2015	Substances that form ions when in water; seawater influence			
Sulfate	500	none	ppm	8.3		2015	Runoff / leaching from natural deposits; industrial wastes			
Total Dissolved Solids (TDS)	1,000	none	ppm		170	2015	Runoff / leaching from natural	deposits		
ADDITIONAL PARAMETERS Unregulated	Detected Unregulated Chemicals That May be of interest to Consumers									
	State M	State MCL Public He		alth Goal (MCLG) Units of M		leasurement	Water Quality Results Bellview Heights Well 7	(a) Date of Last Measurement		
Aggressiveness Index (b)	NS		none		units		11.7	2012		
Alkalinity (as Ca CO3)	NS		none		F	opm	91	2015		
Calcium	NS		none		ppm		15	2015		

Calcium	NS	none	ppm	15	2015
Hardness (Ca CO3)	NS	none	ppm	48	2015
Hardness (grains)	NS	none	grains	2.8	2015
Corrosivity (Langlier Index) (c)	Non-corrosive	none	+/-	-0.06	2015
Magnesium	NS	none	ppm	2.5	2015
рН	NS	none	units	8.1	2015
Sodium	NS	none	ppm	37	2015

San Bernardino County Department of Health Services requires this separate notice be sent to you since you are not served by the main Liberty Utilities Apple Valley (LU-AV) water system.

This page reports to you the water quality of the one well that serves the LU-AV Bellview Heights water system. This system also has an emergency connection to Victor Valley Water District. The table of results in the original Annual Water Quality Report (attached) depicts the water quality for the entire LU-AV water system. Please refer to this page for information on the quality of water piped to your home.

For a key to notes and abbreviations on this page, please refer to the Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors Key on the "Water Results page in the attached report.

If you have any questions about your water quality, please call **Jeremy Caudell at 760-240-8334**

KEY TO ABBREVIATIONS AND FOOTNOTES

- MCL = Maximum Contaminant Level
- AL = Action Level
- **MRDL** = Maximum Residual Disinfectant Level
- **MRDLG** = Maximum Residual Disinfectant Level Goal
- $\mathbf{NS} = No$ Standard
- ND = Not Detected
- **CFU / ml** = colony forming units per millimeter
- **ppm** = parts per million or milligrams per liter
- **ppb** = parts per billion or micrograms per liter

- (a) = The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants in groundwater sources do not change frequently. Some of our data, though representative, are more than one year old.
- (b) = An aggressiveness index greater than 12 indicates that the water is not aggressive (noncorrosive).
- (c) = A positive Langlier Index indicates that the water is noncorrosive.
- (d) =Lead and Copper are regulated as a Treatment Technique under the Lead and Copper Rule. It requires water systems to take samples at "most vulnerable" consumer taps every three years and treatment steps must be taken if more than 10% of tap samples exceed the AL.