

YERMO



2016 / 2017 CONSUMER CONFIDENCE REPORT AND **Annual Water Quality Report**

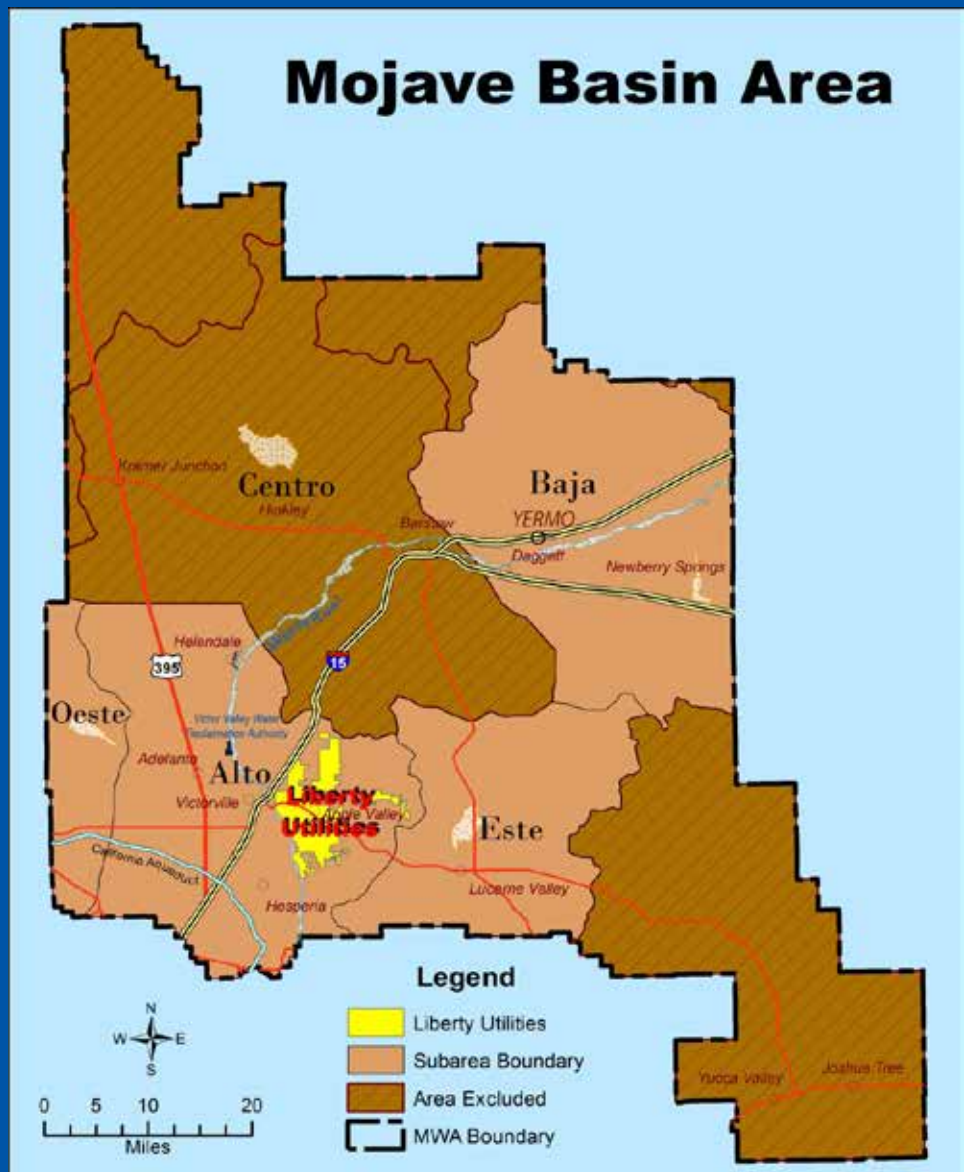
Liberty Utilities Yermo is pleased to provide you with a copy of this year's Annual Water Quality Report. We have put together information that we hope will keep you better informed on water quality issues both in general and specific to what comes from your own tap. Please feel free to contact us should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

Liberty Utilities Yermo pumps 100% of our source water from 2 wells, located in the community: Marine 1 well, which supplies the East portion of the system and the Helbro 4 well, which supplies the West portion of the system. These wells draw water from the deep Baja 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. The map to the right depicts the location of the Yermo Water service area near the intersection of Interstate 15 and CA 40 in the Baja subunit. Also shown is the service area of Liberty Utilities, who is now operating Yermo Water.



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-DDW 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 qualified 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-DDW, 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-DDW and CPUC.

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 California Department of Public Health. Yermo Water is proud to tell you that there have been no contaminants detected that

exceed any federal or state drinking water standards. Dozens of samples analyzed every year by Yermo Water contract certified laboratories assure that all primary (health related) and secondary (aesthetic) drinking water standards are being met. See the tables on the following pages 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 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 Liberty Utilities web site at www.libertyutilities.com and navigate your way to Apple Valley.

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. The SWRCB-DDW completed the Source Water Assessment in 2003 and updated it in 2011. Yermo Water wells are considered most vulnerable to the following activities associated with potential contamination of ground water: housing – low and high density, septic systems – low and high density, and transportation corridors – roads/streets. Additional activities that are potentially vulnerable for our wells are: transportation corridors – freeways/state highways, schools, railroad yards/maintenance/fueling areas, and underground storage tanks.

A copy of the complete assessment is available at Liberty Utilities and at the SWRCB-DDW San Bernardino office. You may request a summary of the assessment be sent to you by contacting Jeremy Caudell of Liberty Utilities Apple Valley at 760-240-8334 or by calling the SWRCB-DDW San Bernardino office at 909-383-4328. You may also access these summaries at <http://swap.des.ucdavis.edu/TSinfo/TSsources.asp?mySystem=3610118>.

Issues to Know About

Lead and Copper

The USEPA and SWRCB-DDW 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. Yermo Water 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.

Sensitive Populations May be More Vulnerable

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 Yermo 2016 / 2017 Annual Water Quality Report

Updated: 02/13/17

PRIMARY STANDARDS Mandatory (health-related) INORGANIC CHEMICALS	Water Quality Parameters Detected in Liberty Utilities Yermo Wells						
	State MCL	PHG or (MCLG)	Units of Measurement	Marine Well #1	Helbro Well #4	(a) Yermo Date of last Measurement	Potential Sources of Contamination
Fluoride	2	1	ppm	0.6	0.7	2015	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive that promotes strong teeth (not added by LU)
Nitrate (as NO3)	45	45	ppm	1.4	<0.4	2016	Erosion of natural deposits; runoff and leaching from fertilizer use; leaching from septic tanks and sewers
RADIONUCLIDES							
Gross Alpha	15	(0)	pCi/L	9	5	2015	Erosion of natural deposits
Uranium	20	0.43	pCi/L	13	6	2015	Erosion of natural deposits
2016 LEAD AND COPPER MONITORING							
	Action Level (AL)	PHG or (MCLG)	Units of Measurement	Number of Samples Collected	No. of Sites Exceeding Action Level	90th Percentile Level Detected	Potential Sources of Contamination
Copper (d)	1300	170	ppb	20	0	100	Internal corrosion of household water plumbing systems
Lead (d)	15	2	ppb	20	0	<1	Internal corrosion of household water plumbing systems
SECONDARY STANDARDS Aesthetic standards (non-health related) CHEMICAL PARAMETERS							
	State MCL	PHG or (MCLG)	Units of Measurement	Marine Well #1	Helbro Well #4	(a) Yermo Date of last Measurement	Potential Sources of Contamination
Chloride	500	none	ppm	35	28	2015	Runoff / leaching from natural deposits; seawater influence
Color	15	none	units	3	<3	2015	Naturally occurring organic materials
Specific Conductance	1,600	none	micromho/cm	520	500	2015	Substances that form ions when in water; seawater influence
Sulfate	500	none	ppm	37	35	2015	Runoff / leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	1,000	none	ppm	360	310	2015	Runoff / leaching from natural deposits
Turbidity / clarity	5.0	none	NTU	1.2	0.43	2015	Soil runoff
DISTRIBUTION SYSTEM							
	State MCL	PHG or (MCLG)	Units of Measurement	Yermo Range (including highest value)	Average for Yermo	(a) Yermo Date of last Measurement	Potential Sources of Contamination
Color	15	none	units	<3 - 5	3	monthly	Naturally occurring organic materials
Odor Threshold	3	none	units	1	1	monthly	Naturally occurring organic materials
Turbidity	5	none	NTU	<0.1 - 1.8	0.2	monthly	Soil runoff
Total Coliform Bacteria	No more than 1 positive	(0)	positive/negative	0	0	monthly	Naturally present in the environment
ADDITIONAL PARAMETERS							
Unregulated	Detected Unregulated Chemicals That May be of Interest to Consumers						
	State MCL	PHG or (MCLG)	Units of Measurement	Marine Well #1	Helbro Well #4	(a) Yermo Date of last Measurement	
Aggressiveness Index (b)	NS	none	units	12.1	12.3	2012	
Alkalinity (as Ca CO3)	NS	none	ppm	150	160	2015	
Boron	NS	NL = 1,000	ppb	170	180	2012	
Calcium	NS	none	ppm	45	41	2015	
Corrosivity (Langlier Index) (c)	Non-	none	positive / negative	0.29	0.31	2015	
Hardness (Ca CO3)	NS	none	ppm	140	130	2015	
Hardness (grains)	NS	none	grains	8.2	7.6	2015	
Hexavalent Chromium	10	0.020	ppb	7.6	7.4	2015	
Magnesium	NS	none	ppm	7.1	6.3	2015	
pH	6.5-8.5	none	units	7.8	7.9	2015	
Sodium	NS	none	ppm	56	58	2015	
Vanadium	NS	none	ppb	6.4	6.6	2012	

KEY TO ABBREVIATIONS AND FOOTNOTES

ND = Not detected

NL = Notification Level

NS = No Standard

NTU = Nephelometric Turbidity Units. This is a measure of the suspended material in water

ppm = parts per million or milligrams per liter

ppb = parts per billion or micrograms per liter

pCi/L = picocuries per liter

< = less than (essentially equivalent to ND)

(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 of 11 or greater indicates that the water is not aggressive (noncorrosive)

(c) = A positive number Langlier Index indicates that the water is noncorrosive

(d) = Lead and Copper are regulated as a Treatment Technique (TT) 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. Yermo has not exceeded this level.

DEFINITIONS

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) as is economically and technologically feasible. Secondary MCL's are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the U. S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): 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): 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.

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

Primary Drinking Water Standard: MCL's and MRDL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standard: Requirements that ensure that appearance, taste and smell of drinking water are acceptable.

Notification Level (NL): The concentration of a contaminant that, if exceeded, triggers notification to local political jurisdictions and customers.