

2016 Annual Drinking Water Quality Report

We're pleased to present to you this year's Annual Water Quality Report (also known as the Consumer Confidence Report). This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide all of us with a safe and dependable supply of drinking water. We currently have two active and two inactive wells that draw from the Rio Grande Basin-Fill, which underlies La Mesa and Sundance subdivisions, at depths to water of 225 to 400 feet. Well 1 was retired in April 2012; well 2 which was a minor contributor to the water system and was retired in September 2013 due to above limit arsenic levels [the well, on the average, tested 15 ppb and the Federal limit is 10 ppb]; well 3 was put on line in an emergency mode in late November 2016 through February 6, 2017 while Well 5 was being serviced. Well 3 tests showed 23 ppb arsenic in 2014; well 5 is a major contributor to the current water supply [arsenic tested 7 ppb in 2015]; well 6 is our newest built well that went into production in April 2013. The state test result for this well in 2015 was 3 ppb. All tests are up to date according to state and Fed regulations.

We're pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report please write to La Mesa Water Cooperative, P.O. Box 53 Placitas, NM 87043. We want our members to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are usually held on the 4th Wednesday of each month at the Placitas Library. Meeting notices are posted in advance of each meeting at the mail boxes, and shown on the Coop website, lamesawatercoop.org.

You may also call any of the Board members if you would like more information about Board meetings or have a specific topic that you would like to discuss with the Board.

Bob Davey 771-3434
Jock Embry 771-2330
Dave Otter 867-7986
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La Mesa Water Cooperative routinely monitors for constituents in your drinking water according to federal and state laws. The enclosed table shows the most recent results of monitoring. The New Mexico Environment Department (NMED) conducts well testing and tests each well every three years for organic and inorganic contaminants. Testing for contaminants is done on a schedule set by NMED. Tests are conducted for Coliform bacteria on a monthly basis and all of our results have been negative. Radio-nuclides testing is done every five years. **You will be promptly notified if NMED notifies us of any violations.**

Violation Notice

On January 9, 2017, we received a “**Notice of Violation – Stage 2 Disinfectants/Disinfection ByProducts Rule Monitoring**” from the New Mexico Environment Department (NMED). We received this violation for not collecting the required number of samples under this rule in 2014. We should have collected samples at 2 locations, but samples were collected at only one location. We are now in compliance as the correct number of samples were collected in both 2015 and 2016.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u> <u>Low</u> <u>High</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Inorganic Contaminants								
Nitrate [measured as Nitrogen](ppm)	10	10	0.11	0	0.11	2016	No	Run off from fertilizer use Leaching from septic tanks, sewage; Erosion of natural deposits.
Fluoride (ppm)	4	4	0.48	0.39	0.48	2015	No	Erosion of natural deposits; Discharge from fertilizer
Arsenic (ppb)	0	10	7	3	7	2015	No	Erosion of natural deposits; Runoff from orchards
Chromium (ppb)	100	100	1	0	1	2015	No	Erosion of natural deposit
Radioactive Contaminants								
Uranium (µg/L)	0	30	6	3	6	2015	No	Erosion of natural deposit
Gross alpha including radon & uranium (pCi/L)	0	15	5.2	5.0	5.2	2015	No	Erosion of natural deposit
Gross alpha excluding radon & uranium (pCi/L)	0	15	3	1.2	3.0	2015	No	Erosion of natural deposit
Combined radium 226/228 (pCi/L)	0	5	0.67	0.11	0.67	2015	No	Erosion of natural deposit
Disinfectants & Disinfection By-Products								
Chlorine (ppm)	4	4	0.40	0.24	0.57	2016	No	Water additive used to control microbes
TTHM's [Total Trihalomethanes] (ppb)	0	80	12	2.2	12	2016	No	By-product of drinking water chlorination
Halocetic Acids (HAA5) (ppb)	0	60	1.2	0	.72	2016	No	By-product of drinking water chlorination

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water 90%</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.19	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead – action level at Consumer taps (ppb)	0	15	1.5	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unit Descriptions	
<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
<u>Term</u>	<u>Definition</u>
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variance and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

<u>Violation</u>	<u>Explanation</u>	<u>Length</u>	<u>Corrective Steps Taken</u>	<u>Health Effects</u>
Did not collect the correct number of Stage 2 Disinfection Byproducts Rule samples in 2014.	New Rule required 2 samples be collected but only one sample was collected.		Required sampling Completed in 2015 and 2016 without incident.	None

Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations. Some people who drink water containing arsenic significantly in excess of the regulatory standard over many years, could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. As of January 23, 2006 the Environmental Protection Agency (EPA) has imposed a more stringent standard of 10 ppb (parts per billion) compared to the previous standard of 50 ppb.

In 2006 La Mesa Water Cooperative began the process of addressing arsenic abatement, primarily because Well #3's arsenic level is 22 ppb - below the old standard, but non-compliant with the new one, so this well is not currently in use. Well #5 was drilled and put on-line in 2007. It is located at the La Mesa Park site on 5 Calle Cienega, and is presently supplying water with an arsenic level below the 10 ppb standard. For future water needs, your Board is studying alternatives to cleaning up the arsenic in well #3. In 2015, the La Mesa Water Cooperative installed an arsenic treatment system at Well # 6. A pilot study was conducted and the system was deemed capable of treating the arsenic at this well. Due to the variability of the arsenic in the well, the treatment is expected to be required six months per year.

Chlorine is injected into your drinking water at each well site to provide disinfection. Chlorine is used to kill bacteria which may be in the water.

As you can see by the table, our system had no water quality violations. We're proud that your drinking water meets or exceeds all federal and state requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels. Our water is sampled regularly and tested by the New Mexico Environment Department.

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include 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:

- 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, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;
- pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants or the lack thereof 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).

Source Water Assessment and Its Availability

The La Mesa Cooperative water system is properly maintained and operated, and sources of drinking water are generally protected from potential sources of contamination based on well construction, hydro geologic settings, and system operations and management. The susceptibility rank of the entire water system is Moderately High which is typical rating for NM community well systems.

Although throughout the U.S. it is common to find potential sources of contamination located atop wellheads, continued regulatory oversight, wellhead protection plans and other planning efforts continue to be the primary methods of protecting and ensuring high quality drinking water.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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. La Mesa Water Coop 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 <http://www.epa.gov/safewater/lead>.

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.

Sincerely,

La Mesa Water Cooperative
March 2016