

# WATER QUALITY REPORT 2019

The Moapa Valley Water District is very pleased to provide you with the 2019 “Quality Water” Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide a safe and dependable supply of drinking water. We are pleased to report that our drinking water is safe and exceeds federal requirements. This report is provided to you to further explain our water quality and what it means.

## **YOUR WATER**

The Muddy River and Lake Mead provide none of your drinking water. In fact, no surface water of any sort is delivered to your tap. The District’s spring collection systems at the Baldwin and the Jones Spring, in addition to the MX Well and the Arrow Canyon Well provide an average of 2,311,121 gallons per day to our customers. Flowing through over 177 miles of pipeline in the District’s distribution system, the water from these groundwater sources arrives at your home having been disinfected using chlorine. Because our water supply is protected within the ground water aquifer, it does not require the level of treatment associated with surface water sources.

## **TAP VS. BOTTLED**

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 Safe Drinking Water Hotline at 1-800-426-4791.

## **VIOLATIONS AND EXCEEDANCES**

The Moapa Valley Water District had no violations with the Safe Drinking Water Act standards during the 2019 calendar year.

## **WHAT DO WE TEST FOR?**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, 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 it is treated are microbial contaminants, inorganic contaminants, pesticides and herbicides, radioactive contaminants, and organic chemical contaminants.

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

*Inorganic contaminants*, 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.

*Pesticides and herbicides* may come from a variety of sources, such as agricultural and residential uses.

*Radioactive contaminants* are naturally occurring.

*Organic chemical contaminants*, including synthetic and volatile organic chemicals, are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, and septic systems.

## **HEALTH INFORMATION**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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).

## **LEAD**

Your water meets EPA’s standard 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. Moapa Valley Water District 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 <http://www.epa.gov/safewater/lead>.

## **VANDALISM**

Vandalism affects everyone. We encouraged anyone who sees graffiti, gunshots holes, suspicious activity, etc at or around MVWD’s lines or facilities to call the company’s 24-hour emergency number at 702-397-6893 or the Metropolitan Police Department. We also ask anyone who sees damaged waterlines, facilities or equipment to immediately report it to the same number. The District appreciates any help it gets from customers and the general public in stopping these senseless acts.

The Federal Safe Drinking Water Act (SDWA) was amended in 1996 and requires states to develop and implement source water assessment programs (SWAP) to analyze existing and potential threats to the quality of public drinking water throughout the state. A summary of a system’s susceptibility to potential sources of contamination was initially provided by the State of Nevada to the water system in 2004. This summary was included in the water system’s 2004 Consumer Confidence Report. Additional or updated information the water system may have regarding significant sources of contamination in the source water area may also be available. A copy of the SWAP summary and additional or updated information may be available through your water system by contacting Joseph Davis at 702-397-6893. Information pertaining to the initial findings of the source water assessment is also available for viewing at the Bureau of Safe Drinking Water (BSDW) Carson City office between the hours of 8:00 am and 5:00 pm, Monday through Friday. It is suggested that an appointment be made if you are interested in viewing this information. The office is located at 901 South Stewart Street, Suite 4001, Carson City, Nevada, 89701, telephone number (775) 687-9520.



The table below represents routine water analysis conducted annually in order to further the Districts effort to provide the most current, meaningful information to our customers.

**WATER ANALYSIS**

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Arsenic	2/14/2019	11*	4 - 11	ppb	10	0	Erosion of natural deposits; runoff from orchards; Runoff from glass & electronics production wastes.
Fluoride	12/4/19	2.13	1.64-2.13	ppm	2	4	Erosion of natural deposits; Water additive which promotes strong teeth.
Antimony	7/29/15	2	1-2	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Barium	7/29/15	0.065	0.051-0.065	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	7/29/15	1	1	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Selenium	7/29/15	2	2	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Nitrate	12/11/19	0.435	0.423-0.435	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits.
Nickel	7/29/15	0.002	0.002	mg/L	.01	.01	Occurs naturally in soils, groundwater, and surface water. Often used in electroplating, stainless steel and alloy products, mining, and refining.
Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL		<div style="border: 2px solid blue; padding: 10px; text-align: center;"> <p><b><u>QUESTIONS?</u></b></p> <p>If you have any questions about this report or concerning your water utility, please contact Joseph Davis at (702) 397-6893. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board of Directors meetings. They are held on the second Thursday of each month at 4:00 p.m. in the Moapa Valley Water District office. Any variance from this will be noted on agendas posted at the Overton, Logandale, and Moapa Post Offices, Overton Library and the Moapa Valley Water District office. Agendas are also posted on our website <a href="http://www.moapawater.com">www.moapawater.com</a>.</p> </div>
Aluminum	12/11/19	2.64	2.64	ug/L	0.2 mg/L		
Chloride	12/11/19	59.6	59.6	mg/L	400		
Color	12/11/19	1.00	1.00	Color Units	15 color units		
Copper	12/11/19	2.15	2.15	ug/L	1000		
Magnesium	12/11/19	25.5	25.5	mg/L	150		
Iron	12/11/19	0.0708	0.0708	mg/L	0.0100		
pH	12/11/19	7.17	7.17	pH	8.5		
Sodium	6/21/18	97.3	96.9-97.3	mg/L	200		
Sulfate	12/11/19	164	164	mg/L	500		
Total Dissolved Solids	12/11/19	606	606	mg/L	1000		
Zinc	12/11/19	3.62	3.62	ug/L	5.0		
Disinfection By-Products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	
TTHM	2/21/19	11.2	3.41-11.2	ug/L	80	0	

Lead and Copper	Date	90 <sup>TH</sup> Percentile	Unit	AL	Sites over AL	Typical Source	
Copper	9/5/19 – 9/25/19	< 1.0	mg/L	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	
Lead	9/5/19 – 9/25/19	< 0.015	mg/L	15	0	Corrosion of household plumbing systems; erosion of natural deposits.	
Radionuclide's	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Combined Radium (-226 & -228)	12/11/19	2.72	1.21 - 2.72	pCi/L	5	0	Erosion of natural deposits
Uranium	12/4/19 & 12/11/19	3.83	2.03 - 3.83	µg/L	30	0	Erosion of natural deposits
Gross Alpha, Excl. Radon & U	7/10/2013	0.2	0.2	pCi/L	15	0	Erosion of natural deposits
Gross Alpha, Incl. Radon & U	7/10/2013	3.4	2.5 - 3.4	pCi/L	15	0	Decay of natural and man-made deposits

**\*\*Hardness averages 250 mg/L (17 grains per gallon)\*\***

**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/Maximum contaminant level** - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best treatment technology. MCLs are set at very stringent levels.

**Action Level** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

**ppm** - parts per million

**mg/L** - milligrams per litre/the same as parts per million

**ppb** - parts per billion

**ug/L** - micrograms per litre/the same as parts per billion

**ND**- not detected

### ARSENIC

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.”



**WATER: OUR MOST PRECIOUS RESOURCE!**

### Health Information About Water Quality

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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).

\*MVWD samples quarterly to monitor the Arsenic in our system. The Arsenic Media was partly spent or used up its life expectancy between our quarterly sampling and reached the 0.11, which is above the MCL. We have made adjustments with the Arsenic Removal Media at the Arrow Canyon facility to correct the high arsenic level.