

Moongate Water System

2018 Water Quality Report

(Testing updated through 2017)

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The water that Moongate Water delivers to you comes from deep wells located in the Joranda Del Muerto Basin. Moongate Water has submitted our forty-year projection to the State Engineer. We have hired a hydrologist to study and model the water basin to determine the water quantity and recharge amounts. Moongate is the only system that has taken steps to ensure the water on the east mesa serves the people that live on the east mesa.

Moongate is pleased to report that our drinking water is safe and meets all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Moongate Water Co., Inc. vigilantly safeguards its water supplies and once again we are proud to report that our system has no violations for the maximum contaminant level or any other water quality standard. We want our customers to be informed about their water utility. Visit our web site at moongatewater.com checkout the helpful information on water quality, water conservation, water rates, scheduled water service disruptions, see Moongate's history or just utilize the links to the New Mexico Public Regulation Commission, New Mexico Environment Department, New Mexico Office of the State Engineer, City of Las Cruces or Dona Ana County. If you have any questions about this report or concerning your water utility, please contact Jeff Gariano, 575-382-7001 or jeff@moongatewater.com.

Moongate Water Co., Inc. routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of **January 1st to December 31st, 2017**. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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's Safe Drinking Water Hotline at 1-800-426-4791.

Source Water Assessment and Protection Program (SWAPP)

A Source Water Assessment and Protection Program (SWAPP) has been completed by the New Mexico Environment Department, Drinking Water Bureau (NMED-DWB). Copies may also be requested by emailing the Drinking Water Bureau by calling (505) 827-7536 (toll free 1-877-654-8720). Please include your name, address, telephone number, and email address, and the name of the Water System. NMED-DWB may charge a nominal fee for paper copies

The Moongate Water System is well maintained and operated, and sources of drinking water are generally protected from potential sources of contamination based on well construction, hydrogeologic settings, and system operations and management. The susceptibility rank of the entire water system is moderate. Although throughout the United States 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 primary methods of protecting and ensuring high quality drinking water. Please contact Mr. Jeff Gariano at 382-7001 to discuss the findings of the SWAPP report.

Why are there contaminants in my drinking water?

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, 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 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 agriculture, urban storm water runoff, and residential uses. Organic Chemical Contaminants, including synthetic and volatile organic chemicals 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. 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 that must provide the same protection for public health.

How can I get involved?

Be environmentally conscious when you dispose of waste products. Learn product safety and dispose of them properly, toxic materials thrown into an arroyo can eventually leach into the ground water or may harm our children and animals if they are in the area.

Water Testing Data terms and abbreviations

- *Non-Detects (ND)* - laboratory analysis indicates that the contaminant is not present.
- *Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- *Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- *Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- *Parts per quadrillion (ppq) or Picograms per liter (picograms/l)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- *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.
- *Million Fibers per Liter (MFL)* - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- *Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- *Variances & Exemptions (V&E)* - State or EPA permission not to meet an MCL or a treatment technique under certain conditions *Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- *Treatment Technique (TT)* - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

- *Maximum Contaminant Level* - (mandatory language) The “Maximum Allowed” (MCL) is 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.
- *Maximum Contaminant Level Goal* - (mandatory language) The “Goal”(MCLG) is 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.

Microbiological Contaminants						
Contaminant	Violation Y/N	Range of Level Detected	Date Tested	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	NO	Not Present	10 Samples collected monthly	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Fecal coliform and <i>E.coli</i>	NONE	Absent	0 Samples per month	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
Turbidity	NO	N/A		n/a	TT	Soil runoff

Radioactive Contaminants							
Contaminant	Violation Y/N	Date Reported	Current Test Results	Range Level History	MCLG	MCL	Likely Source of Contamination
Gross Alpha w/ Am-241 (pCi/l)	NO	8/28/17	2.2 pCi/L	2.0 - 3.5 pCi/L	Sigma 0.5 - 0.7	SDL 0.7 - 0.8	Erosion of natural deposits
Gross Alpha w/ U-nat	NO	8/28/17	2.8 pCi/L	2.4 - 5.2 pCi/L	Sigma 0.6 - 1.1	SDL .9 - 1.2	Erosion of natural deposits
Gross Alpha excluding radon and uranium	NO	10/21/13	0.4 pCi/L	0.4 – 2.4 pCi/L			Erosion of natural deposits
Gross Beta w/ Cs-137 (pCi/l)	NO	8/28/17	3.7 pCi/L	3.8 - 6.2 pCi/ L	Sigma 0.9 - 1.1	SDL 1.2 – 1.4	Decay of natural and man-made deposits
Gross Beta w/ Sr/Y-90	NO	8/28/17	3.8 pCi/L	3.8 - 5.8 pCi/ L	Sigma .08 - 1.0	SDL 1.1 - 1.4	Decay of natural and man-made deposits
Beta / Photon emitters	NO	10/21/13	5.3 mrem/yr	5.3 – 5.3 mrem/yr			Decay of natural and man-made deposits
Ra226, SDWA Method	NO	8/28/17	.09 pCi/L	.01 - 1.22 pCi/L	Sigma .02 - .04	SDL .01 - .02	Erosion of natural deposits
Ra228, SDWA Method	NO	8/28/17	.40 pCi/L	.20 - .98 pCi/L	Sigma .08 - .11	SDL .14 - .16	Erosion of natural deposits
Combined Radium	NO	8/28/17	0.49	0.49 – 0.49 pCi/L			Erosion of natural deposits
Uranium (mg/L), mass concentration	NO	8/28/17	3 ug/L	3 - 3ug/L	Sigma 0.5 - 0.7	SDL 1.0	Erosion of natural deposits

Inorganic / Metals

Contaminant	Violation Y/N	Date Reported	Current Test Results	Range Level History	MCLG	MCL	Likely Source of Contamination
Antimony (ppm)	NO	4/12/2017	2.6	0-2.6		.0060	EPA has not established a Reference Concentration (RfC) for antimony. However, EPA has established an RfC of 0.0002 milligrams per cubic meter (mg/m3) for antimony trioxide based on respiratory effects in rats.
Arsenic (ppm)	NO	4/12/2017	.0028 mg/L	0-.0028	0 ¹	0.010 mg/L	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	NO	4/12/2017	.079 mg/L	.036 - .079	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	NO	4/12/2017	Not Detected	Not Detected			
Cadmium (ppb)	NO	4/12/2017	Not Detected	Not Detected	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	NO	4/12/2017	Not Detected	Not Detected	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper (ppm) Collected at Consumer's Tap	NO	07/18/2016	.094 mg/l	.094 mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	NO	4/12/2017	Not Detected	Not Detected	.20		
Fluoride (ppm)	NO	4/12/2017	.087	.043 - .87	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (ppb) Collected at Consumer's Tap	NO	07/18/2016	0.95 ug/l	0.95 ug/l	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nickel (unregulated) Ppb	NO	4/12/2017	Not Detected	0.00-0.45	100	N/A	Erosion of natural deposits; discharge from mining and refining
Nitrate (as Nitrogen) (ppm)	NO	4/12/2017	2.1 mg/L	0.57 - 2.1	10 mg/L	10 mg/L	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	NO	4/12/2017	27mg/L	29			
Zinc	NO	4/12/2017	Not Detected	0.0-0.011			
Selenium (ppb)	NO	4/12/2017	7.3 ppb	1.6 – 7.3 ppb	.050	.050 mg/L	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppm)	NO	4/12/2017	Not Detected	Not Detected	0.5	.002 mg/L	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

Volatile Organic Contaminants

Contaminant	Test Results Level	Date Reported	Contaminant	Test Results Level	Date Reported
Benzene	Not Detected	4/12/2017	Carbon tetrachloride	Not Detected	4/12/2017
Chlorobenzene	Not Detected	4/12/2017	1,2-Dichloro-benzene	Not Detected	4/12/2017
1,4-Dichloro-benzene	Not Detected	4/12/2017	1,2-Dichloroethane (1,2-DCA)	Not Detected	4/12/2017

1,1-Dichloroethane (1,1-DCA)	Not Detected	4/12/2017	cis-1,2-Dichloro-ethene (cis-1,2-DCE)	Not Detected	4/12/2017
trans-1,2-Dichloro-ethene (trans-1,2-DCE)	Not Detected	4/12/2017	1,2-Dichloropropane	Not Detected	4/12/2017
Ethylbenzene	Not Detected	4/12/2017	Methylene chloride	Not Detected	4/12/2017
Styrene	Not Detected	4/12/2017	Tetrachloroethene	Not Detected	4/12/2017
Toluene	Not Detected	4/12/2017	1,2,4-Trichlorobenzene	Not Detected	4/12/2017
1,1,1-Trichloro-ethane (TCA)	Not Detected	4/12/2017	1,1,2-Trichloro-ethane	Not Detected	4/12/2017
Trichloro-ethene (TCE)	Not Detected	4/12/2017	Vinyl chloride	Not Detected	4/12/2017
Xylenes	Not Detected	4/12/2017			

Herbicides

Contaminant	Test Results Level	Date Reported	Contaminant	Test Results Level	Date Reported
Contaminant	Test Results Level	Date Tested	Contaminant	Test Results Level	Date Tested
2,4-D	Not Detected	4/12/2017	2,4,5-TP (Silvex)	Not Detected	4/12/2017
Dalapon	Not Detected	4/12/2017	Dinoseb	Not Detected	4/12/2017
Pentachlorophenol	Not Detected	4/12/2017	Picloram	Not Detected	4/12/2017

Pesticides & PCBS

Contaminant	Test Results Level	Date Reported	Contaminant	Test Results Level	Date Reported
Endrin	Not Detected	4/12/2017	Gamma-BHC	Not Detected	4/12/2017
Methoxychlor	Not Detected	4/12/2017	Toxaphene	Not Detected	4/12/2017
Heptachlor	Not Detected	4/12/2017	Heptachlor epoxide	Not Detected	4/12/2017
Polychlorinated Biphenyls	Not Detected	4/12/2017	Chlordane	Not Detected	4/12/2017

Synthetic Organic

Contaminant	Test Results Level	Date Reported	Contaminant	Test Results Level	Date Reported
Di(2-Ethylhexyl)adipate EPA The major source of di(2-ethylhexyl) adipate in drinking water is discharge from chemical factories.	.0526 ug/L	4/12/2017	Hexachlorocyclopentadiene	Not Detected	4/12/2017
Atrazine	Not Detected	4/12/2017	Alachlor	Not Detected	4/12/2017
Hexachlorobenzene	Not Detected	4/12/2017	Di(2-ethylhexyl)phthalate	Not Detected	4/12/2017
Benzo(a)pyrene	Not Detected	4/12/2017	Simazine	Not Detected	4/12/2017

Total TTHM

Contaminant	Test Results Level	Date Reported	Contaminant	Test Results Level	Date Reported
Bromodichloromethane	Not Detected	07/25/2017	Bromoform	Not Detected	07/25/2017
Chloroform	Not Detected	07/25/2017	Dibromochloromethana	Not Detected	07/25/2017
Total Trihalomethanes	Not Detected	07/25/2017			

Haloacetic Acids HAA5

Contaminant	Test Results Level	Date Reported	Contaminant	Test Results Level	Date Reported
Monochloroacetic Acid (MCAA)	Not Detected	07/20/2017	Monochloroacetic Acid (MBAA)	Not Detected	07/20/2017
Dichloroacetic Acid (DCAA)	Not Detected	07/20/2017	Trichloroacetic Acid (TCAA)	Not Detected	07/20/2017
Dibromoacetic Acid (DBAA)	Not Detected	07/20/2017	Total Haloacetic Acir (HAA5)	Not Detected	07/20/2017

National Secondary Drinking Water Regulations

National Secondary Drinking Water Regulations (NSDWRs or secondary standards) are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. The EPA does not regulate the substances listed in the table below, this information is provided as a service to our customers.

Secondary Drinking Water Tests

Contaminant (Unit Measurement)	Violation Y/N	Level Detected	Date Reported	Standard Range	Likely Source of Contamination
Alkalinity	NO	230 mg/L	10/19/2011	152.5 - 247.5	
Calcium	NO	44 mg/L	10/19/2011	44 – 78.0	
Color	NO	Not Detected	10/17/2016	15 (color units)	
Copper	NO	Not Detected	10/25/2016	0.006 - 1.0 mg/L	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Hardness (as CaCO3)		230 mg/L	10/19/2011	230 - 282	
Iron	NO	0.39 mg/L	10/19/2011		
Magnesium	NO	30 mg/L	10/19/2011	12.6 – 33.0	
Manganese	NO	.0014 -.0020 mg/L	10/25/2016	0.0014 - 0.05 mg/L	Manganese is one of the most abundant metals on the earth's surface, making up approximately 0.1% of the earth's crust.
Odor	NO	Not Detected	10/17/2016	3 threshold odor number	
Potassium	NO	4.0	10/19/2011		

pH	NO	7.91	10/19/2011	6.5-8.5	
Silver	NO	Not Detected	10/25/2016	0.10 mg/L	
Sulfate	NO	110-120 mg/L	10/13/2016	120 - 250 mg/L	Sulfate is a substance that occurs naturally in drinking water. Health concerns regarding sulfate in drinking water have been raised because of reports that diarrhea may be associated with the ingestion of water containing high levels of sulfate.
Total Dissolved Solids (TDS)	NO	381-450 mg/L	10/20/2016	345 - 833 mg/L	
Turbidity by nephelometer		8.6 ntu		7.76 - 9.91	
Zinc	NO	0.020 mg/L	10/19/2011	.02 - 5 mg/L	Zinc occurs in small amounts in almost all igneous rocks. Zinc is used in production of corrosion-resistant alloys and brass, and for galvanizing steel and iron products.

<i>Unregulated Contaminant Monitoring Regulation (UCMR2)</i>			
<i>Method</i>	<i>Date</i>	<i>Result</i>	<i>Units</i>
BDE 47	06/24/2010	<0.3	Ug/l
BDE 99	06/24/2010	<0.9	Ug/l
BDE 100	06/24/2010	<0.5	Ug/l
BDE 153	06/24/2010	<0.8	Ug/l
Dimethoate	06/24/2010	<0.7	Ug/l
HBB	06/24/2010	<0.7	Ug/l
Terbufos sulfone	06/24/2010	<0.4	Ug/l
1,3-dinitrobenzene	06/24/2010	<0.8	Ug/l
RDX	06/24/2010	<1	Ug/l
TNT	06/24/2010	<0.8	Ug/l

Other Information

On June 27, 1989 NASA tested Moongate well #11 for Freon, TCE, PCE, and NDMA. (Results NONE DETECTED)

Violation Information

Moongate Water has no violation to report. Moongate's water quality is in compliance with NMED / EPA standards.

What does this mean?

As you can see by the tables above, our system had no violations for exceeding the maximum contaminant level or any other water quality standard. 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 contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

Arsenic above 5 up through 10 ppb: While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The 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. Some people may be more vulnerable to contaminants 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).

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. Moongate Water System 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 comply with the regulations of the Safe Drinking Water Act and 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. Thank you for allowing us to continue providing your family with clean, quality water this year and for your understanding.

We at Moongate work around the clock to provide safe top quality water to every customer. We ask that all our customers help us protect and conserve our water sources, which is the heart of our community, our way of life and our children's future.

With the need for additional security and safeguards it is going to take the collective effort from all of us to keep our water and community safe. If you notice anyone where you feel they don't belong and they do not appear to be Moongate personnel please contact our office day or night.

Para recibir una explicación de este reporte en Español, por favor de ponerse en contacto con la oficina.

Moongate Water Co., Inc.

Attn. Louis A. Gariano

Phone: 575-382-7001 Fax: 575-382-7623

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www.moongatewater.com