

**Water Quality Report for water treated in 2018**  
**LOWER VALLEY WATER USERS COOPERATIVE ASSOCIATION**  
**KIRTLAND, NEW MEXICO**

**WATER QUALITY**

We're pleased to present to you this year's Annual Water Quality 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 are committed to ensuring the quality of your water.

**DRINKING WATER SOURCES**

Our water source is treated surface water from the San Juan and Animas rivers.

**SOURCE WATER ASSESSMENT**

We have a source water protection plan available in our office that provides more information such as potential sources of contamination.

**ADDITIONAL INFORMATION**

If you have any questions about this report or concerning your water utility, please contact **Keith Lee at 598-5585**. We want our customers to be informed about their water utility. **If you have more than one (1) household connected to your water meter, please share this report with those extra users'**. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on **every third Monday of the month at 12:30 p.m. at the offices of Lower Valley Water Users Cooperative Association, 4286 US Hwy 64, Kirtland, NM.**

**WATER QUALITY**

Lower Valley Water Users Cooperative Association routinely monitors for constituents in your drinking water according to Federal and State laws. The table in this report lists all the drinking water contaminants we detected during the 2018 calendar year. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

**TERMS AND ABBREVIATIONS**

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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

**Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**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.

**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 (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Pico curies per liter (pCi/L)** - Pico curies per liter is a measure of the radioactivity in water.

**Maximum Contaminant Level - 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 - 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

**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.

**LRAA** - Locational Running Annual Average

**(TOC) Total organic carbon** : has no health effects. Total organic carbon provides a medium for the formation of disinfection byproducts.

**TTHMs: (Total Trihalomethanes)**. Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**Haloacetic Acids:** Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**Turbidity:** Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for Microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

**Uranium:** Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

**Fluoride:** Some people who drink water containing fluoride in excess of the MCL over many years, could get bone disease including pain and tenderness of the bones. Children may get mottled teeth.

**Barium:** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

**Copper:** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**LEAD** 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. Lower Valley 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 <http://www.epa.gov/safewater/lead>.

## TEST RESULTS

Substance	MCL	MCLG	Our	Range of	UNITS	Sample	Violation	Likely Source of Contamination
			Water	Detection		Date	(Y or N)	
<b>Microbiological</b>								
Coliform Bacteria Present/Absent	0	0	10-9-2018	P/A	N/A	JAN-DEC 2018	N	Naturally present in the environment
Turbidity (NTU)	0.3	0.3	0.11	.05-.12	NTU	JAN-DEC 2018	N	Soil Runoff
<b>Radioactive</b>								
Alpha emitters	15	0	0	0	pCi/l	Dec-14	N	Erosion of natural deposits
Beta/Photon emitters	50	0	2.1	2.1	pCi/l	Dec-14	N	Decay of natural & man-made deposits
Uranium, mass concentration	30	0	0	0	ug/l	Dec-14	N	Erosion of natural deposits
Combined radium	5	0	0.06	0.06	pCi/l	Dec-14	N	Erosion of natural deposits
<b>Inorganic</b>								
Copper	AL=1.3	1.3	0.42	0 sites exceeded AL	PPM	Jul-17	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	AL=15	0	1.9	0 site exceeded AL	PPB	Jul-17	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	4	4	0.28	0.28	PPM	Aug-18	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium	2	2	0.090	0.090	ppm	Aug-2018	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Disinfection and Disinfection By-Products</b>								
TTHM (Total Trihalomethanes)	80	N/A	LRAA 70	30-116	UG/L	JAN-DEC 2018	N	By-product of drinking water chlorination
Haloacetic Acids	60	N/A	LRAA 70	33-97.7	UG/L	JAN-DEC 2018	Y	By-product of drinking water chlorination
Chlorine	4	N/A	1.2	0.5-1.2	PPM	JAN-DEC 2018	N	Added to water as a Disinfectant
<b>Secondary Parameters</b>								
Total organic carbon (TOC)	N/A	N/A	2.05	.80-2.05	Mg/l	JAN-DEC 2018	N	Naturally Occurring in the earth
<b>Synthetic Organics</b>								
Hexachlorocyclopentadiene	50	0	0.1	0.1	PPB	May-17	N	Naturally Occurring in the earth

**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.**

*Microbiological Contaminants:*

(1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

**CONTAMINANTS IN WATER**

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 storm water 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 storm water 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 storm water 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.

**SPECIAL POPULATION ADVISORY**

Some people may be more vulnerable to contaminants in drinking water than the general Population. Immune-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).

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

**Lower Valley Water Users Association Had Levels of Haloacetic Acids above Drinking Water Standards**

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results show that our system exceeds the standard or maximum contaminant level (MCL), for Haloacetic Acids. The standard for Haloacetic Acids is 0.060 mg/L. The average level of Haloacetic Acids over the last quarter is shown in the table below:

Sample Location	Sample Date	Quarter & Year	HAA5 LRAA (mg/L)
TTHM-1, 3215 US 64	8/7/2018	3Q2018	0.063
HAA5-1, 154 RD 6480	8/7/2018	3Q2018	0.070
HAA5-1, 154 RD 6480	11/6/2018	4Q2018	0.061

**What should I do?**

- There is nothing you need to do. You do not need to boil your water or take corrective actions. However, if you have specific health concerns, consult your doctor.
- If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.

**What does this mean?**

This is not an emergency. If it had been, you would have been notified within 24 hours. However, some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer. Additionally, some people who drink water containing Haloacetic Acids in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems.

**What is being done?**

**[We have increased our settling time before we add disinfection and decreased the time the water is in the storage tanks. Our last HAA5 Test was 33.0 at 154 Road 6480 and 39.4 at 3215 US 64. (We are back in compliance)].**

**For more information, please contact:**

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