



# Liberty Utilities<sup>®</sup>

## Annual Water Quality Report

Presented by: Liberty Utilities (Rio Rico Water & Sewer) Corp.

PWS ID#: 12-011

Water testing performed in 2014

Este informe contiene información muy importante sobre su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

### Maintaining Our High Water Standards

We are once again pleased to present our annual water quality report! This edition covers all testing completed from January 1 through December 31, 2014. This report is designed to provide you with a snapshot of 2014's water quality and details about where your water comes from, what it contains and how it compares to standards set by regulatory agencies. We are committed to providing you safe, reliable drinking water, all the while continuing to protect our source water, promote water conservation and community education. Please share your thoughts about the information in this report and ask any questions you may have.

### Where Does My Water Come From

Liberty Utilities (Rio Rico Water & Sewer) Corp. serves water to a population of approximately 21,000. The water is obtained from six wells that pump it from deep aquifers which are part of a larger area known as the Older Alluvium. Our wells pump water from depths of 250 to 650 feet below the earth's surface.

A small amount of chlorine is added at each well site to protect the integrity of the water quality throughout the water system piping. While pure water is made up of hydrogen and oxygen, this life giving liquid also contains many naturally occurring minerals, and unfortunately, may contain human caused contaminants. This is why we routinely test the water.

### Important Health Information

While your drinking water meets the U.S. EPA's standard for arsenic, it does contain low levels of arsenic. The U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing it 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.

Nitrates in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Some people may be more sensitive to contaminants in drinking water than the general public. Immuno-compromised persons such as those undergoing chemotherapy, those who have undergone organ transplants, people with immune system disorders such as HIV/AIDS and others, some elderly, and infants

may be at greater risk for infection. These people should ask their health care provider about drinking water. The U.S. EPA CDC (Center for Disease Control and Prevention) guidelines on the appropriate steps to reduce the risk of infection by *Cryptosporidium*, *Giardia* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

## Lead and Drinking Water

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 used in plumbing components. We are 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](http://www.epa.gov/safewater/lead).

## Substances that Could be in Water

To ensure that tap water is safe to drink, Arizona Department of Environmental Quality prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants do not necessarily indicate that the water poses a health risk. For more information contact the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at (800) 426-4791 or visit their website at [www.epa.gov/safewater/hotline](http://www.epa.gov/safewater/hotline). For information of bottled water visit the U.S. Food and Drug Administration's website at [www.fda.gov](http://www.fda.gov).

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, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

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

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or the result of urban storm water runoff, industrial or domestic wastewater discharge, mining, farming, or oil and gas production;

**Pesticides and Herbicides**, which can originate from agriculture, urban storm water runoff, and residential uses;

**Organic Chemical Contaminants**, both synthetic and volatile organic chemicals are by-products of industrial processes and petroleum production. They may also come from gas stations, urban storm water runoff, and septic systems;

**Radioactive Contaminants**, which can be naturally occurring or the result of industrial activity such as gas and oil production and mining.

## Questions?

For more information about this report, or any questions about drinking water, please call Liberty Utilities, at (520) 281—7000.

## Testing Results



During the past year, Liberty Utilities (Rio Rico Water & Sewer) Corp., has taken weekly, monthly and quarterly water samples in order to determine the presence of any radioactive, biological, inorganic, synthetic organic or volatile contaminants. All of the substances listed here are under the Maximum Contaminant Level (MCL), Liberty Utilities believes it is important you know what was detected and how much of the substance was present. The state allows the monitoring of certain substances less than once a year because the concentrations of these substances do not change frequently.

### COPPER AND LEAD— Tested at customer's taps every 3 years. Testing date 2014.

Contaminant	EPA's Action Level (AL)	Ideal Goal (EPA's MCLG)	Lowest to Highest results found	Samples Exceeding the Action Level	Violation	Typical Sources
Lead	90% of homes less than 0.015 ppm*	0 ppm*	<0.005 — 0.0085 ppm	0	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper	90% of homes less than 1.3 ppm*	1.3 ppm*	0.008 — 0.27 ppm	0	No	Corrosion of household plumbing systems; erosion of natural deposits

### INORGANIC CHEMICALS — Tested in 2014

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Range of Test Results	Violation	Typical Sources
Arsenic <sup>(1)</sup>	5 ppm	0 ppm	0 — <0.005 ppm	No	Erosion of natural deposits, runoff from orchards and glass and electronic production waste.
Barium	2 ppm	2 ppm	ND — <0.078 ppm	No	Erosion of natural deposits, discharge from metal refineries and drilling wastes
Fluoride	4 ppm	4 ppm	ND — ND ppm	No	Erosion of natural deposit discharge from metal refineries, discharge from mines
Sulfate <sup>(2)</sup>	250 ppm	NA	47 — 120 ppm	No	Discharge from petroleum and metal refineries, discharge from mines, erosion of natural deposits
Nitrate (as Nitrogen)	10 ppm	10 ppm	0.87 — 2.5 ppm	No	Erosion of natural deposits, runoff from fertilizer use-leaching from septic tanks, sewage

(1) 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 cost of removing arsenic from drinking water

(2) Sulfate in drinking water currently has a secondary maximum contaminant level (SMCL) of 250 milligrams per liter (mg/L), based on aesthetic effects (taste and odor). This regulation is not a Federally enforceable standard, but is provided as a guideline for public water systems.

## RADIOACTIVE CONTAMINANTS — Tested in 2014

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Range of Test Results	Violation	Typical Sources
Gross Alpha	15 pCi/L	0 pCi/L	<1— 4.1(+/- 2.2) pCi/L	No	Erosion from natural deposits
Radium 226	5 pCi/L	0 pCi/L	<0.4 — <0.7 pCi/L	No	Erosion from natural deposits

## DISINFECTANTS AND DISINFECTION BYPRODUCTS —Tested in 2014

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Range of Test Results	Violation	Typical Sources
5 Haloacetic Acids(HAA5s)	0.06 ppm	0 ppm	<.0018— 0.0023 ppm	No	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHM)	0.08 ppm	0 ppm	0.0005 — 0.013 ppm	No	Byproduct of drinking water chlorination

## UNREGULATED CONTAMINANTS — Tested in 2014

Contaminant	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Range of Test Results	Violation	Typical Sources
Sodium	NA ppm	NA ppm	21 — 35 ppm	No	Erosion from natural deposits, leaching

## Definitions

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

**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.

**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.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).



## Health effects of listed regulated contaminants

**Alpha emitters (gross alpha):** Certain minerals are radioactive and may emit forms of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Arsenic:** Some people who drink water containing arsenic in excess of MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of cancer.

**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.

**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. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth and occurs only in developing teeth before they erupt from the gums.

**Haloacetic Acids (HAA5):** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

**Lead:** Infants and children who drink water containing lead in excess of the action level could experience delay in physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

**Nitrate:** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

**Radium:** Radium in excess may increase the risk of cancer.

**Total Trihalomethanes (TTHM):** 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 system and may have an increased risk of getting cancer.

**Unregulated Contaminants (Sodium):** Unregulated Contaminants are those for which EPA has not established drinking water standards. We monitor for these substances to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

## Have you heard of our programs?



### ⇒ Low Income Rate Program

Did you know that Liberty Utilities offers alternative residential water rates to low income families? You can receive 15% off of the regular price of your water or wastewater bill. For more information please contact our business office at (520) 281-7000 or visit us online at [www.libertyutilities.com](http://www.libertyutilities.com).

### ⇒ High School Scholarship Program

Liberty Utilities is proud to help our graduating seniors with a \$500 scholarship to the university or trade school of their choice. To participate in this program, contact your school's guidance counselor.

## ⇒ **Free Landscape Audits**

High water usage? Call our office for a free landscape audit. Our staff will walk your landscaping with you to identify potential leaks and high water use vegetation.

\*This is a free program. We do not go into homes or back yards.

## ⇒ **E-Bill**

View your bill online and stop the clutter of paper bills with E-Bill, our paperless billing program. Every month an email is sent to notify you when your bill is available for secure online viewing. E-Bill also allows you to view your account history and print your current and previous bills. Payments can be made each month as a one-time payment or you can set up worry free automatic payments with our SurePay program.

## ⇒ **SurePay**

SurePay is a worry-free way to pay your bill on time. Each month on the due date, the amount due will be transferred from your bank account to your Liberty Utilities account. Once set up, you will see that an Electronic Fund Transfer has been made, or “EFT” on you bank statement.

## ⇒ **Conservation Counts!**

Water is our most important resource. Without it we would not be here. That is why it is so important that we think about how we use water and use it wisely. Here are some great ways to get started.

- Find and fix all leaks promptly. That’s water that you are paying for, but not using.
- If you see water running down the street that you can’t identify, call your utility. It may be a leak.
- Water your plants in the early morning or late evening to reduce water evaporation.
- Hear that hiss? It could be your toilet leaking. Put 3 drops of food coloring in your tank and wait 15 minutes. If you see the color in the bowl, you have a leak. The most common problems are an old flapper or that your floater is too high.
- When replacing old appliances, look for the WaterSense and EnergyStar labels.

## **Want to know more?**

For more information about these programs, or any questions about drinking water, please call Liberty Utilities, at (520) 281—7000 or visit us online at [www.libertyutilities.com](http://www.libertyutilities.com).