

# WILLOW VALLEY WATER COMPANY - LAKE CIMARRON

## 2007 WATER QUALITY REPORT

This report concerns the drinking water our utility provides to your home. Please take a moment to review this information and call us if you have any questions about our service to you.

Willow Valley Water Company - A subsidiary of Global Water (623) 518-4000

### Spanish (Español)

Este informe contiene informacion muy importante sobre la calidad de su agua para beber. Traduscalo o hable con alguien que lo entienda bien.

### Is my water safe?

The Willow Valley Water Company – Lake Cimarron System, public water system identification AZ04-08-129, is dedicated to providing customers with water that meets or exceeds State and Federal drinking water standards. Extensive tests of contaminants have been conducted on your water to ensure your tap water is safe to drink. Unless otherwise indicated, this report is a snapshot of last year's water quality. Included are 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 with information because informed customers are our best allies.

The Environmental Protection Agency (EPA) issues regulations which are promulgated by the Arizona Department of Environmental Quality (ADEQ) and in 2007, your drinking water met or surpassed all State and Federal drinking water standards except where noted in the Important Water System Information section of this report.

### Do I need to take special precautions?

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/Centers for Disease Control and Prevention (CDC) provides guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants. This information is available from the Federal Safe Drinking Water Hotline

(800-426-4791) and on the CDC website at [www.cdc.gov](http://www.cdc.gov).

### Where does my water come from?

Water from the well is chlorinated for disinfection, treated to remove iron and manganese and stored in a 200,000 gallon storage tank. Booster pumps and a hydropneumatic tanks maintain constant pressure throughout the distribution system and ensure adequate fire flows throughout the system. In order to sustain the demands of current and future populations, Willow Valley Water Company, is in the process of bringing on an additional well, adding treatment alternatives and evaluating sustainable storage capacities.

Lake Cimarron water system supplies water to its customers from a domestic well within its service area. The well has a depth of approximately 115 ft deep with a total production capacity of approximately 500 gallons per minute (GPM).

Water conservation is everyone's responsibility. You can directly impact the availability of water in your community through judicious use of water by irrigating at night, by employing timers for irrigation systems, maximizing xeriscape, fixing leaky faucets, etc.

At present Willow Valley obtains all its water from groundwater sources. Iron and manganese are two unregulated inorganic contaminants that are commonly found in drinking water at concentrations often higher than secondary guidelines established by EPA/ADEQ. In the Mohave Valley, the unique hydrogeologic conditions make the source water susceptible to increased concentration levels of both contaminants.

In order to assure protection of the source water and to distribute safe potable water, we add sodium hypochlorite for disinfection. The addition of sodium hypochlorite combines with the iron and manganese which may cause both contaminants to precipitate out of the water. \* continued on next page

### 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 2007. 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.

Contaminants	MCLG or MRDLG	MCL, TT or MRDL	Your Water	Range Low	High	Sample Date	Violation	Typical Source
<b>Disinfectants &amp; Disinfection By-Products*</b> (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	2.0	0.2	2.0	2007	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	30	-	-	2007	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	NA	80	110	85	110	2007	No*	By-product of drinking water disinfection
*See "Important Water System Information" section for more information on TTHMs								
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.056	-	-	2007	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	1	-	-	2006	No	Discharge from steel and pulp mills; Erosion of natural deposits
Nitrate [measured as Nitrogen](ppm)	10	10	ND	-	-	2007	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen](ppm)	1	1	ND	-	-	2007	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Microbiological Contaminants</b>								
Total Coliform (positive samples/month)	0	1	0	-	-	2007	No	Naturally present in the environment
<b>Radioactive Contaminants</b>								
Alpha emitters (pCi/L)	0	15	1.5	-	-	2003	No	Erosion of natural deposits
<b>Additional Contaminants</b> Secondary inorganic substances do not have an MCL and are measured voluntarily because these substances primarily relate to the taste, odor, or appearance of drinking water. These inorganic substances are found naturally in soil.								
Iron (ppm)	0.3		0.87					Naturally found in the soil.
Manganese (ppm)	0.05		0.64					Naturally found in the soil.
Sulfate (ppm)	250		410					Naturally found in the soil.
Sodium (ppm)	NR		92					Erosion of natural deposits; Leaching
Hardness (ppm)	NA		510					Ground water, and to a certain extent surface water, in Arizona is expected to be "hard". This is the result of the natural formation of the aquifers in the state, and the geological history of the area. Hardness is essentially the amount of calcium and magnesium carbonates in the water. Hardness is not a health concern. Hardness does not have a MCL and is measured voluntarily in order to inform customers and track changes in the drinking water.
Alkalinity (ppm)	NA		250					Alkalinity is essentially the capacity to neutralize acid. Contributes to taste issues in the water. Higher concentrations of Alkalinity can result in noticeable taste issues in the water.
TDS (ppm)	500		1100					Factors that can affect taste of the drinking water are the amount of dissolved solids in the water. The measure of solids in the water is completed by monitoring for Total Dissolved Solids. Higher concentrations of TDS can result in noticeable taste issues in the water.

This reaction may cause the water to turn brown which may result in nuisances for the end user. While iron and manganese are not regulated contaminants, due to the aesthetic problems associated with these two contaminants, Willow Valley Water Company is actively installing new treatment systems and replacing scale-encrusted pipelines to reduce the effects.

Additionally, the depth from land to groundwater is less than 100 ft which minimizes natural filtration of the earth in the protection of the groundwater source. As such, proper disposal of residual oils and greases, chemicals or cleaners is of paramount importance to ensuring the viability and integrity of our community's water supply. The water produced by the wells meets or exceeds State and Federal drinking water standards and is monitored closely by the Utility and at the State and Federal level.

For additional information on water related issues, please contact us @623-518-4000 or visit us on our website at [www.gwresources.com](http://www.gwresources.com).

## General Information About Drinking Water

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

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).

Sources of drinking water (both tap water and bottled water) include rivers, lakes, reservoirs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive materials, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include the following:

- Microbial contaminants including viruses, bacteria or parasites (such as *Cryptosporidium* or *Giardia*), which may come from agricultural or livestock operations and wildlife;
- Inorganic contaminants such as salts and metals, which can be naturally occurring or result from urban storm 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, storm water runoff and residential uses;
- Organic chemical contaminants including synthetic and volatile organic compounds, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic tanks;
- Radiochemical contaminants which occur naturally or result from oil and gas production and mining activities.

## How can I get involved?

Willow Valley Water Company customers may get involved in their water system through such activities as well-head protection (activities around wells to prevent the contamination of the ground water source that provides water to our community), and attendance at public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use.

Water resources throughout the state are under extreme pressure from development and drought and must be conserved to ensure adequate supplies for the future. Avoiding wasting water, employing smart water-use practices and reducing consumption are key elements of life in the desert. All consumers can do their part to conserve water and dispose properly of household chemicals.

In addition, reporting unauthorized entry or access to the well sites or booster stations is a critical component to ensuring continued safety and security of our community water sources. Should you notice any unusual activity in or around wells or tank sites, please contact law enforcement officials by dialing 911.

## Other information

Global Water owns and operates water and wastewater utilities in Arizona and is staffed with dedicated and professional operators, engineers, planners, customer service representatives and other personnel to ensure safe, compliant operations at all times. If you have any questions or concerns about your water quality do not hesitate to contact Global Water Resources at 623-518-4000 or on the web at [www.gwresources.com](http://www.gwresources.com).

## Important water system information

### 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 system, and may have an increased risk of getting cancer. The water system is required to monitor annually for Disinfectant By-Products (TTHM's/HAA5's) in the distribution system unless an approval for reduced monitoring is granted by ADEQ.

In August 2007, the required annual sample was taken and exceeded the MCL. Therefore, increased monitoring to quarterly is required. If the sample exceeds the MCL, the system shall increase monitoring to once per quarter. The system is not in violation of the MCL until it has completed one year of quarterly monitoring. Compliance is determined on the running annual average.

## Unit descriptions

ppm:	parts per million, or milligrams per liter (mg/L)
ppb:	parts per billion, or micrograms per liter (µg/L)
pCi/L:	picocuries per liter (a measure of radioactivity)
positive samples/month:	Number of samples taken monthly that were found to be positive
NA:	Not applicable
ND:	Not detected
NR:	Monitoring not required, but recommended.

## Important drinking water definitions

**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 the MCLGs as feasible using the best available treatment technology.

**TT:** Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

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

**Variations and Exemptions:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**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:** 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:** Monitored Not Regulated

**MPL:** State Assigned Maximum Permissible Level

## For more information please contact:

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