

# WATER UTILITY OF GREATER TONOPAH - WEST PHOENIX ESTATES #6 SYSTEM

## 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.

Water Utility of Greater Tonopah - 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 West Phoenix Estates #6 (WPE 6) water system, public water system identification AZ04-07-733, which is part of the Water Utility of Greater Tonopah, 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.

In 2007, your drinking water met or surpassed all State and Federal drinking water standards, except where noted in the Important Water System Information portion of the 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?

This system has an activated alumna treatment train capable of removing fluoride and arsenic. Water from the well is chlorinated for disinfection and stored in covered storage tanks with a total capacity of 24,000 gallons. A booster pump and a hydro-pneumatic tank maintain constant pressure throughout the distribution system.

The WPE 6 system's water is produced from a well located within its service area. The well is approximately 600 feet deep with a production capacity of 25 gallons per minute (GPM).

### Source water assessment and its availability

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, employing timers for irrigation systems, maximizing xeriscape, fixing leaky faucets, etc.

In 2004 the Arizona Department of Environmental Quality (ADEQ) completed a Source Water Assessment for the well used by WPE 6. The Assessment reviewed the hydrogeologic conditions and adjacent land uses that may pose a potential risk to the water sources. These risks include, but are not limited to, gas stations, landfills, dry

cleaners, agriculture fields, waste water treatment plants, and mining activities. Once ADEQ identified the adjacent land uses, they were ranked as to their potential to affect the water sources. The results of the Assessment were that the well had a low risk of contamination due to adjacent land use.

The water is currently protected by well construction and system operations and management. Residents can help protect the well by taking hazardous household chemicals to hazardous material collection days and limiting pesticide and fertilizer use.

The complete Assessment is available for inspection at ADEQ, 1110 W. Washington St, Phoenix, Arizona 85007, between the hours of 8:00 a.m. and 5:00 p.m. Electronic copies are available from ADEQ at [dml@azdeq.gov](mailto:dml@azdeq.gov). For more information, call ADEQ's Source Water Assessment and Protection Unit at 602-771-4644 or visit their website [www.azdeq.gov/environment/water/dw/swap.html](http://www.azdeq.gov/environment/water/dw/swap.html).

\* 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> <small>*(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)</small>								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	1.5	1.2	1.5	2007	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	ND	-	-	2005	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	NA	80	ND	-	-	2005	No	By-product of drinking water disinfection

Inorganic Contaminants								
Arsenic (ppb)	0	10	8.6	ND	8.6	2007	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Chromium (ppb)	100	100	30	-	-	2005	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	5	ND	5	2007	Yes*	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	1.5	-	-	2007	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

\*See "Important Water System Information" section for more information on fluoride.

Microbiological Contaminants								
Total Coliform (positive samples/month)	0	1	0	-	-	2007	No	Naturally present in the environment

Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	2.4	1.8	2.4	2002	No	Erosion of natural deposits

Contaminants	AL	Your Water	Sample Date	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>					
Copper - action level at consumer taps (ppm)	90% of homes tested must have copper levels less than 1.3 ppm	90% of the homes tested had copper levels less than 0.19 ppm	2006	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	90% of homes tested must have lead levels less than 15 ppb	90% of the homes tested had lead levels less than 4 ppb	2006	No	Corrosion of household plumbing systems; Erosion of natural deposits

Contaminants	Secondary Standard	Your Water	Explanation and Comment
--------------	--------------------	------------	-------------------------

**Additional Contaminants**  
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.

Sodium (ppm)	NR	170	Erosion of natural deposits; Leaching
Hardness (ppm)	NA	150	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.

## General information on 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?

WPE 6 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 to 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.

## For more information please contact:

Global Water, Water Utility of Greater Tonopah, West Phoenix Estates 6, PWS AZ04-07-733  
Address: 21410 N. 19th Ave., Suite 201, Phoenix, AZ 85027  
P: 623-518-4000 F: 623-580-9659  
www.gwresources.com

## 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).

## Additional information for fluoride

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 ppm of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 ppm of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 ppm of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 ppm. For additional information, please contact us at 623-518-4000 or visit us on our website at [www.gwresources.com](http://www.gwresources.com). Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

## Additional information for 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.

## Important water system information

### 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 teeth, and occurs only in developing teeth before they erupt from the gums. The WPE 6 System is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

The WPE 6 system has a Fluoride and Arsenic Removal System which removes arsenic and fluoride from the drinking water to safe drinking water levels below the MCL. For a period of four days in July 2007, there was a treatment technique failure for the treatment system, where the system temporarily lost removal efficiency resulting with fluoride levels at or above the MCL. Public notification was issued and the system was supplied with drinking water from another approved source until the Fluoride and Arsenic Removal System was replaced. The appropriate regulatory agencies were informed of the treatment technique failure event. Monitoring is conducted on a regular basis and WPE 6 is producing drinking water with fluoride levels below the MCL.

### Unit descriptions

ppm:	parts per million, or milligrams per liter (mg/L)
ppb:	parts per billion, or micrograms per liter ( $\mu$ g/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.
Variances 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