

# ORO VALLEY WATER UTILITY 2016 CONSUMER CONFIDENCE REPORT

Oro Valley System #AZ0410-164

January 2017

Oro Valley Water Utility is pleased to provide you with our Consumer Confidence Report. This report complies with federal legislation that requires us to give you important information about your drinking water each year. We are proud to let you know that your Oro Valley water supply is safe and dependable. Our commitment is to continue to provide you with water that meets or exceeds all legal requirements.

## EXCELLENT RESULTS!

During the past fifteen years, **NONE** of the Oro Valley Water Utility samples for analysis of Total Coliform bacteria resulted in a violation. This is an accomplishment that is due to Water Utility Staff's diligent operation and monitoring of the water system for our customers.

Total Coliform bacteria is an indicator bacteria used to more closely monitor the water system for possible unwanted bacteria. The Utility disinfects its water sources by adding Sodium Hypochlorite as a precaution against bacterial growth in its water system.

### Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR)

The goal of the initial distribution system evaluation (IDSE) is to characterize the distribution system and identify monitoring sites where customers may be exposed to high levels of total Trihalomethanes (TTHM) and Haloacetic acids (HAA5). Sampling results for these contaminants continue at a very low level allowing the State to grant an IDSE waiver. This waiver allows the Oro Valley Water Utility to comply with the IDSE requirements without additional distribution system monitoring.

### Your Water & Its Source

Public Water System #AZ0410-164, known as the Oro Valley water system, serves a population of approximately 37,800 people. This water system's service area encompasses about 33.1 square miles and currently provides water to the majority of the residents and commercial facilities within the Town of Oro Valley town limits. The majority of Oro Valley's drinking water is groundwater taken from the Cañada del Oro Wash basin. The water is pumped from 18 wells that range in depth from 350 to 1,000 feet. In addition, 27 percent of the water delivered is blended Central Arizona Project (CAP) water.

### Analytical Requirements for Safe Drinking Water

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. 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 effects can be obtained by calling the United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline at 1-800-426-4791.

Oro Valley Water Utility is required by the USEPA to perform water quality testing throughout the Oro Valley service area. During 2016, the Utility took 3,844 water samples that were tested for 112 contaminants and other water quality parameters.

The only water treatment applied to the water distribution system is chlorination. Chlorine acts as a disinfectant in the water system to prevent possible microbiological contamination. Fifty locations throughout the system are tested monthly for chlorine residual. The Utility maintains a range of 0.2 to 0.8 parts per million (ppm) of chlorine residual.

### Water Hardness

Water hardness is one of the most common water quality concerns reported by consumers. On a water hardness scale the Oro Valley water supply is normally "soft to moderately hard", but in areas where blended CAP water is being delivered, the water will be slightly harder. If you need to know the water hardness for your area, please contact the Water Utility.

### Drinking Water Contaminants

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.

Contaminants that may be present in source water include:

- ◆ Microbial contaminants, such as viruses and bacteria, which

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.

◆ 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 which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### EPA Lead Alert

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. Oro Valley Water Utility 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

#### Definitions and Abbreviations

**Maximum Contaminant Level (MCL):** 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 (MCLG):** 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.

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

**Ug/L:** microgram per liter

**pCi/l:** picocuries per liter, a measure of radioactivity

**ppm:** parts per million

**ppb:** parts per billion

**µS/cm:** micro Siemens/centimeter

**N/A:** Not Applicable

#### Health Awareness

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 microbial contaminants are available from the USEPA's Safe Drinking Water Hotline 1-800-426-4791.

#### Water Quality Data

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The State of Arizona requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old. The Utility also monitors for operational and baseline data, and for constituents that may be regulated in the near future.

#### ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) Source Water Assessment Report

This report assesses the drinking water sources of a public water system. The report provides detailed information by evaluating the hydrogeologic setting in which the sources are located and identifying adjacent land uses that are in a specified proximity of the drinking water source. The outcome of this assessment is a listing of the degree to which drinking water sources are protected by designating them as either "high risk" or "low risk". A designation of "high risk" indicates there are additional source water protection measures that can be implemented on the local level. A "low risk" designation indicates that most source water protection measures are either already implemented or the hydrogeologic setting is such that it protects the source water. In 2003, ADEQ completed a source water assessment for the Utility's 20 wells. Once ADEQ identified the adjacent land uses, the risk to source water was ranked "low risk" by ADEQ from land uses that could potentially affect the Utility's water sources. The Utility can use this information to prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. Residents can help to protect water sources by taking hazardous household chemicals to hazardous material collection centers and limiting pesticide and fertilizer use. For more information on the source water assessment, call Adam Pence, Water Quality Section, phone (520) 229-5042 or visit ADEQ's Source Water Assessment and Protection Unit website at [www.azdeq.gov/environ/water/dw/swap.html](http://www.azdeq.gov/environ/water/dw/swap.html).

**2016 DETECTED CONTAMINANTS REPORT FOR ORO VALLEY WATER UTILITY PWS #AZ0410-164**

| Contaminants     | Low | High | System Average | Units | EPA MCL | EPA MCLG | MCL Violation | Sample Date | Major Sources in Drinking Water   |
|------------------|-----|------|----------------|-------|---------|----------|---------------|-------------|---|
| Arsenic          | 0   | 3.1  | 0.79           | ppb   | 10      | 0        | NO            | 2016        | Natural deposits.   |
| Benzo Pyrene     | 0   | 0.03 | 0              | ppb   | 0.2     | 0        | NO            | 2013        | Leaching from lining of storage tanks and distribution lines.   |
| Chloride         | 3.5 | 12   | 5.2            | ppm   | 250     | 250      | NO            | 2016        | Natural deposits  |
| Combined Radium  | 0   | 0.9  | 0.1            | pCi/L | 5       | 0        | NO            | 2016        | Erosion of natural deposits.  |
| Combined Uranium | 0   | 5.6  | 0.9            | pCi/L | 30      | 0        | NO            | 2016        | Erosion of natural deposits.  |
| Copper           | 0   | 0.38 | 0.07           | ppm   | 1.3     | N/A      | NO            | 2016        | Corrosion of household plumbing, natural deposits.  |
| Fluoride         | 0   | 0.50 | 0.03           | ppm   | 4       | 4        | NO            | 2016        | Natural deposits; discharge from fertilizer; water additive that promotes strong teeth.                   |
| Gross Alpha      | 0   | 5.5  | 1.4            | pCi/L | 15      | 0        | NO            | 2016        | Erosion of natural deposits.  |
| HAA5             | 0   | 2.1  | 0.39           | ppb   | 60      | n/a      | NO            | 2016        | By-product of drinking water disinfection   |
| Lead             | 0   | 16   | 1.4            | ppb   | 15      | 0        | NO            | 2016        | Corrosion of household plumbing system; Erosion of natural deposits                                       |
| *Mercury         | 0   | 3.4  | 0.2            | ppb   | 2.0     | 2.0      | YES           | 2016        | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands |
| Nitrate          | 0.8 | 2.2  | 1.4            | ppm   | 10      | 10       | NO            | 2016        | Runoff from fertilizer use; leaching from septic tanks; sewage; natural deposits.                         |
| Sulfate          | 0   | 15   | 10.5           | ppm   | No MCL  | 250      | NO            | 2016        | Natural deposits or salt; septic system, industrial waste.  |
| Sodium           | 10  | 41   | 20.2           | ppm   | No MCL  | 20       | NO            | 2016        | Minerals, septic systems.   |
| Trihalomethanes  | 0   | 12   | 4.8            | ppb   | 80      | N/A      | NO            | 2016        | By-product of drinking water chlorination.  |

**\*IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

On 01/29/2016 we received a sample analysis that one of the samples collected on 1/12/2016 showed that our system exceeded the standard for Mercury which is 2.0. parts per billion (ppb). The average level of Mercury was found at 3.4 ppb. The confirmation sample on 2/5/16 and three subsequent quarterly samples over the past year did not detect Mercury and were zero (0.000) ppb. According to the laboratory that conducted the analysis, the initial sample is an anomaly and may have been a result of inadvertent contamination in transport or handling. This is not an emergency and there is nothing you need to do; however, as our customers, you have a right to know what happened.

**What has been done?**

Confirmation samples were collected by the water system and increased regular sampling occurred over the 2016 monitoring year. No mercury was detected in any subsequent sample.

**What should I do?**

- There is nothing you need to do
- The issue has been fully resolved
- There is no need to use an alternative water supply.
- Although not an issue here, some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
- If you have a severely compromised immune system, have an infant, are pregnant or are elderly, or if you have specific health concerns, consult your doctor.

**Who can I contact?**

For more information, please contact Adam Pence at 520-229-5042 or by mail at Oro Valley Water Utility, 11000 N La Canada Drive Oro Valley AZ 85737.

*\*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly*

This notice is being sent to you by Oro Valley Water Public Water System ID: AZ0410164 in accordance with drinking water regulations.

**Unregulated Contaminant Monitoring Rule (UCMR3)**

Unregulated contaminants are those that don't yet have drinking water standards set by the USA EPA. The purpose of monitoring for these contaminants is to help the EPA decide whether to set standards for them. **Note** Ug/L is same as parts per billion.

| Contaminant | Level Detected | Units | Sample Date | Contaminant | Level Detected | Units | Sample Date |
|-------------|----------------|-------|-------------|-------------|----------------|-------|-------------|
| Chlorate    | 130            | Ug/L  | 8/2015      | Molybdenum  | 4.5            | Ug/L  | 2/2015      |
| Chromium    | 1              | Ug/L  | 2/2015      | Strontium   | 560            | Ug/L  | 2/2015      |
| Chromium-6  | 0.54           | Ug/L  | 8/2015      | Vanadium    | 9.1            | Ug/L  | 8/2015      |

**WATER QUALITY PARAMETERS FOR ORO VALLEY WATER UTILITY PWS #AZ0410-164**

| Substance    | Unit  | Average Value | Range of Value | Substance   | Unit     | Average Value | Range of Value |
|--------------|-------|---------------|----------------|-------------|----------|---------------|----------------|
| Alkalinity   | PPM   | 97.5          | 50-150         | pH          | pH units | 7.6           | 6.8-8.2        |
| Calcium      | PPM   | 20            | 12-28          | Silica      | PPM      | 30.7          | 24-39          |
| Conductivity | µS/cm | 231.9         | 140-320        | Temperature | °C       | 21.7          | 18-24          |

Oro Valley Water Utility  
11000 North La Cañada Drive  
Oro Valley, AZ 85737

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## Consumer Confidence Report

Oro Valley Water Utility wants you to be informed about the quality of drinking water delivered to you. We welcome your comments, questions and concerns. If you need further information or if you have comments regarding this report, please contact Adam Pence at (520) 229-5042.

You may also offer comments and suggestions at public meetings. Unless otherwise posted, the Oro Valley Town Council and the Oro Valley Water Utility Commission meet as follows:

**Oro Valley Town Council Meetings**

1st & 3rd Wednesday of every month 6:00 p.m.  
Town Council Chambers

**Oro Valley Water Utility Commission Meetings**

2nd Monday of every month 6:00 p.m.  
Hopi Conference Room

11000 N. La Cañada Drive, Oro Valley, AZ 85737

Visit our website: <http://www.orovalleyaz.gov>

The Town of Oro Valley complies with the Americans with Disabilities Act (ADA). If you need any type of accommodation, please notify the Town Clerk at (520) 229-4700.