YOUR 2013 WATER QUALITY REPORT

ANTHEM DISTRICT

epcor.com

PWS ID 0407504

EPCOR WATER

Safety. Quality. Community. You'll hear these words spoken often around EPCOR.

For EPCOR, being your water and wastewater utility is more than providing a service. The communities that we serve – your community – are our homes, too.

We take great pride in being your neighborhood utility and the quality of life and the quality of the water is important to us at a personal level. At EPCOR, taking care of you and your water supply is serious business. Providing high-quality, safe, reliable water—and protecting it for future generations—is an important part of what we do every day.

That's a responsibility we don't take for granted, and that's why you're receiving this report.

Each year we send you a summary of the results obtained from testing your water in state-certified drinking water analysis labs. And we'll tell you what that analysis means.

In 2013, the water that EPCOR Water provided to you surpassed or met all federal and state primary drinking water quality regulations.

We're proud of this record, and we're dedicated to upholding these results.

If you have questions about this report, our Customer Care team is here to help 24 hours a day, seven days a week. You can call us at 1-800-383-0834 or email us at mywater@epcor.com.

Thank you for caring about your water and for helping us to protect and manage the water we deliver to you. We invite you to learn more about your community's water and being water wise at epcor.com.

Sincerely,

Joe Gysel
President, EPCOR Water (USA) Inc.

ABOUT THIS REPORT

YOU WANT TO KNOW WHAT'S IN THE WATER YOU'RE DRINKING

As your water service provider, we're committed to ensuring the quality and safety of that water. That's why you are receiving this annual water quality report from us. We hope it will help you understand your community's water a little better and what we're doing to protect it.

WHAT WILL I FIND IN THIS REPORT?

This report complies with state and U.S. Environmental Protection Agency (EPA) drinking water regulations.

In it you'll find information on:

- **Where your water comes from**
- **Protecting your water**
- **What's in your water**

The information in this report is compiled from data from labs certified in drinking water analysis.

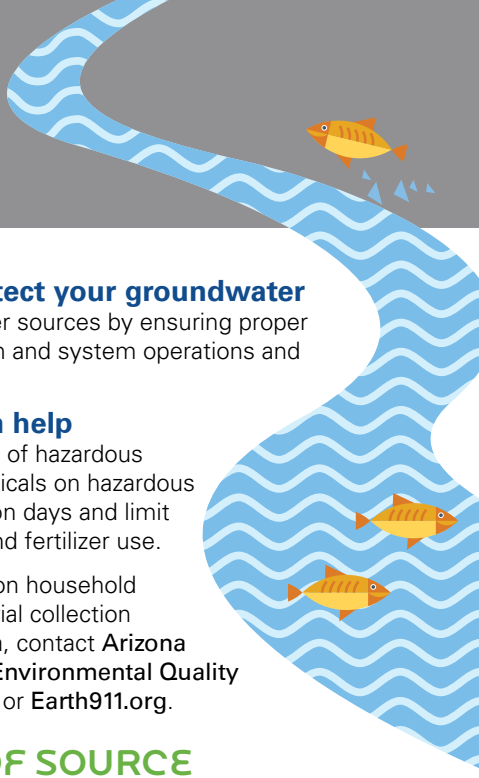
READ THIS REPORT – AND SHARE IT!

Reading this report and understanding your community's water is the first step. But it's also important to share this information with those who might not receive it directly. Please share the report with water users in your community if you're a landlord, business, school or hospital.

QUESTIONS?

EPCOR Water Customer Care:
1-800-383-0834/mywater@epcor.com
Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.
1-800-383-0834/mywater@epcor.com.

ABOUT YOUR WATER
ANTHEM DISTRICT



ABOUT YOUR DISTRICT

- EPCOR provides service to approximately 8,800 water and wastewater customers in the Anthem district.

WHERE YOUR WATER COMES FROM

- The Colorado River via the Central Arizona Project (CAP)
- City of Phoenix
- 2 wells

About your CAP water

- Primarily Colorado River water delivered from Lake Havasu via the CAP Canal to Lake Pleasant
- Anthem water is removed from the CAP Canal downstream of Lake Pleasant.
- Water delivered to this system is a mix of Colorado River and Lake Pleasant water that also contains Agua Fria River water
- Water is delivered to Anthem via an eight-mile long pipeline from the CAP Canal
- The Anthem Water Treatment Plant is a micro-filtration plant designed to meet current and future water quality requirements

City of Phoenix

- The interconnect with the City of Phoenix is supplied by the Union Hills Water Treatment Plant and/or the Lake Pleasant Water Treatment Plant, which also receives and treats water from the CAP Canal.

GROUNDWATER WELLS – AND PROTECTING THEM TOGETHER

- Two wells supply groundwater pumped from the Northern Salt River Valley
- This area is comprised of alluvium and bedrock
  - The alluvium is unconsolidated silt, sand and gravel
  - The bedrock material is conglomerate, volcanic and granite in nature, with much of the conglomerate overlaid by basaltic lava flows
- Sources of groundwater include: Natural recharge from flood flows in streams and along mountain fronts and incidental recharge from agricultural and urban irrigation, canals, effluent and artificial lakes

How we protect your groundwater

We protect water sources by ensuring proper well construction and system operations and management.

How you can help

Properly dispose of hazardous household chemicals on hazardous material collection days and limit your pesticide and fertilizer use.

For information on household hazardous material collection days in your area, contact **Arizona Department of Environmental Quality** at **602-771-2300** or **Earth911.org**.

NOTICE OF SOURCE WATER ASSESSMENT

In 2004, the Arizona Department of Environmental Quality completed a source water assessment for the two wells and one surface water intake used by EPCOR-Anthem. The assessment reviewed the adjacent land uses that may pose a potential risk to the 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 two wells had no adjacent land uses in the vicinity, and the surface water intake had one adjacent land use that posed a high risk to the source.

The complete assessment is available for inspection at the Arizona Department of Environmental Quality, 1110 W. Washington, Phoenix, AZ 85007, between the hours of 8 a.m. and 5 p.m. Electronic copies are available from **ADEQ** at **dml@azdeq.gov.**

For more information please contact **ADEQ** at **602-771-4560** or visit **www.azdeq.gov/environ/water/dw/swap.html**.

WHAT YOU CAN EXPECT TO FIND IN YOUR WATER

SOURCES OF DRINKING WATER

The sources of drinking water—both tap water and bottled water—include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over land surfaces or through the ground, it can acquire naturally occurring minerals. In some cases it can also acquire radioactive material and substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline** at **1-800-426-4791**.

SUBSTANCES THAT MAY BE PRESENT IN SOURCE WATER

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

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

ENSURING YOUR WATER IS SAFE

To ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. To ensure bottled water is safe to drink, U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water.

EPCOR'S ANTHEM PLANT RECEIVES PRESTIGIOUS NATIONAL RECOGNITION

EPCOR'S Anthem Water Treatment Facility has received the "Director's Award of Recognition" from the national Partnership for Safe Water. The facility successfully completed the self-assessment and peer review portion of Safe Water's Treatment Optimization program, which includes comprehensive evaluation of treatment plant operations and performance, identification of performance-limiting factors and the development of action plans to achieve optimization. Anthem is one of the first membrane treatment facilities in the U.S. and only the third facility in Arizona to be recognized by the Partnership for Safe Water with this prestigious award. EPCOR's participation in the partnership and completion of the self-evaluation is part of our commitment to bringing you safe drinking water that you can trust and count on every day.

For more information on the American Water Works Association and the Partnership for Safe Water, please visit **www.awwa.org.**

WHAT YOU CAN EXPECT TO FIND IN YOUR WATER

SPECIAL HEALTH INFORMATION

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 may be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the **EPA's Safe Drinking Water Hotline** at **1-800-426-4791**.

Lead

EPCOR monitored the water for lead and copper in 2011 at 30 residences throughout the community and met the federal lead and copper standards. The 30 houses sampled were representative of the types of houses throughout the system. If your house was sampled you would have received the analytical results. 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. EPCOR 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**.

HOME WATER TREATMENT UNITS

Failure to perform maintenance on your home water treatment unit can result in poor water quality.

If you installed a home treatment system such as a water softener or reverse osmosis system to improve taste or odor, remember to follow the manufacturer's instructions on operation and maintenance. For more information, contact the manufacturer of your water treatment system for maintenance instructions or assistance. Additional information about home water treatment systems is available from the **Arizona Water Quality Association** at **480-947-9850** or by writing to 6819 E. Diamond St., Scottsdale, AZ 85257.

FREQUENTLY ASKED QUESTIONS

WHY IS CHLORINE ADDED TO MY DRINKING WATER?

Chlorine is added to your water for your protection and is used as a disinfectant to ensure that harmful organisms, such as bacteria and viruses are destroyed in the treatment process.

WILL MY HOME TREATMENT DEVICE REMOVE CHLORINE?

Some home treatment devices can remove chlorine. Once chlorine is removed, the water should be treated like any other food and used as quickly as possible. We recommend that you follow the manufacturer's instructions for maintaining the device to ensure water quality.

ARE THERE OTHER WAYS TO REMOVE THE CHLORINE TASTE OR SMELL FROM MY WATER?

To remove the taste of chlorine from your water, try these tips:

- Place water in a glass container in the refrigerator overnight, uncovered. This will let the chlorine dissipate
- Bring your water to a rolling boil for five minutes and let it stand to cool
- Add a slice of lemon or a few drops of lemon juice to your glass of drinking water

WHAT IS THE WHITE OR COLORED CRYSTAL DEPOSIT ON MY DISHES OR FAUCETS?

In most cases, the crystals or sediments left behind after water evaporates are calcium carbonate. The amount of calcium in the water is referred to as hardness.

Cleaning with white vinegar can help to dissolve and remove crystal deposits. Using a commercial conditioner, liquid detergents or the "air-dry" option in dishwashers can help to decrease the calcium carbonate found on dishes.

ARE THE CRYSTALS OR WATER HARDNESS HARMFUL?

Hardness and/or crystals don't pose a health concern and can be beneficial to our customer's health. We don't treat drinking water for water hardness that can result in crystals.

WHAT IS THE LEVEL OF HARDNESS IN MY WATER?

The hardness in your water ranges from 15 to 18 grains per gallon (gpg).

The degrees of water hardness are as follows:

Degree of water hardness	Range (gpg)
Soft	Less than 1
Slightly Hard	1.0 to 3.4
Moderately Hard	3.5 to 6.9
Hard	7.0 to 10.4
Very Hard	Greater than 10.5

DEFINITION OF TERMS

gpg (grains per gallon): Used to describe the dissolved hardness minerals contained in water and is a unit of weight that equals 1/7,000 of a pound.

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.

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.

MRDLG (Maximum Residual Disinfectant 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.

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 that a water system must follow.

N/A: Not Applicable.

ND: None Detected.

NTU: Nephelometric turbidity units.

pCi/L (Picocuries per Liter): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

ppb (Parts per Billion): One part substance per billion parts water (or micrograms per liter).

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

ppt (Parts per Trillion): One part substance per trillion parts water (or nanograms per liter).

UCMR (Unregulated Contaminant Monitoring Rule): Unregulated substances are measured, but maximum contaminant levels have not been established by the government.

TTHM (Total Trihalomethanes): Consist of Chloroform, Bromoform, Bromodichloromethane and Dibromochloromethane.

HAA5 (Haloacetic Acids): Consist of Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Bromoacetic Acid and Dibromoacetic Acid.

Total Dissolved Solids: An overall indicator of the amount of minerals in water.

WHAT'S IN YOUR WATER

HOW TO READ YOUR WATER QUALITY TABLE

Below, you'll see an analysis of your drinking water.
Here's an example of how to read these tables:

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
Start here and read across	2013 or year prior	The goal level for that substance	Highest level of substance allowed	Highest amount that was found	Highest and lowest amounts found	Yes means the amount found is below gov't requirements	Where substance usually originates

YOUR WATER QUALITY TABLE

The data shown in the tables below are results from commercial laboratories certified in drinking water analysis by the Arizona Department of Health Services.

The table shows what substances were detected in your drinking water during 2013 or the last required sampling period.

Regulated Substances Detected in the Water Leaving the Treatment Facility

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
Arsenic (ppb)	2013	0	10	2.9	2.9	YES	Erosion of natural deposits
Barium (ppm)	2013	2	2	0.1	0.1	YES	Erosion of natural deposits
Selenium (ppb)	2013	50	50	3	3	YES	Erosion of natural deposits
Fluoride (ppm)	2013	4.0	4.0	0.4	0.4	YES	Erosion of natural deposits
Nitrate (ppm)	2013	10	10	0.27	0.26-0.27	YES	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Alpha Emitters (pCi/L)	2011	0	15	3.2	2.4 - 3.2	YES	Erosion of natural deposits; Certain minerals contain/emit this radiation form

WHAT'S IN YOUR WATER

Regulated Compounds Detected in the Distribution System

Substance (units)	Year Sampled	MCLG/ MRDLG	MCL/ MRDL	Average Amount Detected	Range of Detections	Compliance Achieved	Typical Source
TTHMs (ppb)	2013	NA[1]	80	51	42.2-79.9	YES	By-product of drinking water disinfection
HAA5 (ppb)	2013	NA[1]	60	25	16.0-34.0	YES	By-product of drinking water disinfection
Chlorine residual (ppm)	2013	4	4.0	0.50	0.05-1.93	YES	Water additive used to control microbes

Tap Water Samples: Lead and Copper Results

Substance (units)	Year Sampled	MCLG	Action Level	90th Percentile	Number of Samples	Number of Samples above Action Level	Compliance Achieved	Typical Source
Copper (ppm)	2011	1.3	1.3	0.53	30	0	YES	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2011	0	15	2	30	0	YES	Corrosion of household plumbing systems; erosion of natural deposits

Turbidity[3] – A Measure of the Clarity of the Water Leaving the Treatment Facility

Plant	Substance (units)	Year Sampled	MCLG	MCL	Highest Single Measurement	Compliance Achieved	Typical Source
Anthem Water Treatment Plant	NTU	2013	0	TT = 1 NTU	0.08 NTU	YES	Soil run-off
				TT = % of samples < 0.3	100%		

WHAT'S IN YOUR WATER

Other Substances Detected in the Water Leaving the Treatment Facility

Substance (units)	Year Sampled	Range of Detections	Typical Source
Hardness (grains/gallon)	2013	19.1	Natural Calcium/Magnesium content
pH (standard units)	2013	7.8-8.7	pH is a measure of acid/base properties
Sodium (ppm)	2013	94	Natural occurring element, Natural erosion

Unregulated Contaminent Monitoring Rule Substances Detected in the Water Leaving the Water Treatment Facility and in the Distribution System

Substance (units)	Year Sampled	Range of Detections
Vanadium (ppb)	2013	1.6-1.9
Chromium (ppb)	2013	0.2
Strontium (ppb)	2013	762.3-816.3
Molybdenum (ppb)	2013	3.6-4.1
Chromium VI (ppb)	2013	0.03-0.07
Chlorate (ppb)	2013	120-160

Year Sampled: The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

[3]**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.

TTHM/HAA5: Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants: Trihalomethanes: bromodichloromethane (zero); bromoform (zero); chloroform (0.07mg/L); dibromochloromethane (0.06 mg/L). Haloacetic Acids: Dichloroacetic Acid (zero); Trichloroacetic Acid (0.02mg/L). Monochloroacetic Acid (0.07mg/L), Bromoacetic Acid and Dibromoacetic Acid are regulated with this group but have no MCLGs.

ADDITIONAL MONITORING

In addition to the parameters listed in this table, other parameters were monitored for, including regulated pesticides, herbicides, petroleum by-products and metals. None of those parameters were detected in the water.

If you have any questions about this report or your drinking water, please call our **Customer Care** team at **1-800-383-0834**.

EPCOR WATER

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