



Consumer Confidence Report for Calendar Year 2019

Este informe contiene información muy importante sobre el agua usted bebe.
Tradúscalo ó hable con alguien que lo entienda bien.

*Please Note: The blue texts indicate that it is instruction or explanation, please **do not** include within the report. If sections or some language do not apply to your public water system, you may remove it from the report or indicate that it is not applicable for this report.*

Public Water System ID Number	Public Water System Name		
AZ04-11-044	Queen Valley Domestic improvement District		
Contact Name and Title	Phone Number	E-mail Address	
Richard C Matthews Jr. Manager	520-463-2780	qwwater@mchsi.com	
<p>We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact <u>Yvette Rivera</u> at <u>520-463-2780</u> for additional opportunity and meeting dates and times.</p>			

Drinking Water Sources

Please note: The report must contain a brief explanation regarding contaminants which may reasonably be expected to be found in drinking water. This explanation may include the language of paragraph 40 CFR 141.153 (h)(1)(i) and 40 CFR 141.153 (h)(1)(iii) shown below, or the system may use their own comparable language:

The sources of drinking water (both tap 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 pickup substances resulting from the presence of animals or from human activity.

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 (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source(s):	<i>Insert type of the water: Groundwater, Surface Water, commonly used name (if any), location, or general description of the body (or bodies) of water. Phoenix AMA (Ground Water Wells)</i>
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Drinking Water Contaminants

Microbial Contaminants: Such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife

Inorganic Contaminants: Such as salts and metals that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming

Pesticides and Herbicides: Such as agriculture, urban storm water runoff, and residential uses that may come from a variety of sources

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

Radioactive Contaminants: That can be naturally occurring or be the result of oil and gas production and mining activities.

Vulnerable Population

Instructions: If your PWS received a source water assessment (SWA) from ADEQ, include a brief summary of the susceptibility as summarized in the SWA report. Please contact your Compliance Assistance Coordinator if you do not know or need your SWA report susceptibility risk.

- **IF SWA REPORT INDICATES YOUR SUSCEPTIBILITY IS LOW RISK:** Based on the information currently available on the hydrogeologic settings of and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, the department has given a low risk designation for the degree to which this public water system drinking water source(s) are protected. A low risk designation indicates that most source water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection.

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. 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.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

Source Water Assessment

Definitions

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

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria was present

Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria was present

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment, or other requirements

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health

Maximum Residual Disinfectant Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur

Minimum Reporting Limit (MRL): The smallest measured concentration of a substance that can be reliably measured by a given analytical method

Millirems per year (MREM): A measure of radiation absorbed by the body

Not Applicable (NA): Sampling was not completed by regulation or was not required

Not Detected (ND or <): Not detectable at reporting limit

Nephelometric Turbidity Units (NTU): A measure of water clarity

Million fibers per liter (MFL)

Picocuries per liter (pCi/L): Measure of the radioactivity in water

ppm: Parts per million or Milligrams per liter (mg/L)

ppb: Parts per billion or Micrograms per liter (µg/L)

ppt: Parts per trillion or Nanograms per liter (ng/L)

ppm x 1000 = ppb

ppq: Parts per quadrillion or Picograms per liter (pg/L)

ppb x 1000 = ppt

ppt x 1000 = ppq

Lead Informational Statement: *(Applies to All Water Systems, please do not remove even if your system did not detect any Lead)*

Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. **<Queen Valley Domestic Water Improvement District>** 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. 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.

Water Quality Data – Regulated Contaminants *Instructions: 1. Data on this table must include the date and result of the most recent testing done, and recommends none older than 5 years. 2. The MCL is reported as a number equal to or greater than 1.0; the contaminant should be expressed in the same unit (CCR Units - ppm, ppb, ppt, ppq). 3. When compliance with the MCL is determined annually or less frequently, report the Highest Detected result and the range of the detected levels at all locations. When compliance with the MCL is determined by calculating the Running Annual Average (RAA), then report the highest RAA of all locations and the range of all monitoring locations. 4. If you have non-detected results, we recommend removing the contaminant from the Water Quality Data table for easier interpretation, unless it is part of a range of all samples. 5. If a section is not-applicable to your system, please remove section or insert “N/A” in each box.*

Microbiological (RTCR)	TT Violation Y or N	Number of Positive Samples	Positive Sample(s) Month & Year	MCL	MCLG	Likely Source of Contamination	
E. Coli	N	0		0	0	Human and animal fecal waste	
Fecal Indicator (From GWR source) (coliphage, enterococci and/or E. coli)	N	0		0	0	Human and animal fecal waste	
Disinfectants	MCL Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MRDL	MRDLG	Sample Month & Year	Likely Source of Contamination
Chlorine/Chloramine (ppm)	N	1.2	.3-.375	4	0	2019	Water additive used to control microbes
Chlorine dioxide (ppb) if treated with ClO ₂	N/A			800	0		Water additive used to control microbes
Disinfection By-Products	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	1ppb	.0010	60	N/A	9-2019	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	4ppb	.0040	80	N/A	9-2019	Byproduct of drinking water disinfection
Lead & Copper	MCL Violation Y or N	90 th Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	0.17	0	1.3	1.3	9/2018	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	0	0	15	0	9/2018	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Beta/Photon Emitters (mrem/yr.)	N			4	0		Decay of natural and man-made deposits
Alpha Emitters (pCi/L) (This is Gross Alpha 4000)	N	5 <3-5		15	0		Erosion of natural deposits
Combined Radium-226 & -228 (pCi/L)	N	<1	<1	5	0	3/5/19	Erosion of natural deposits
Uranium (ug/L)	N			30	0		Erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Antimony (ppb)	N	1	0	6	6	1/20/18	Discharge from petroleum refineries; fire retardants; ceramics, electronics and solder
Arsenic ¹ (ppb)	N	1		10	0	1/20/18	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes

Asbestos (MFL)	N	<0.74		7	7	10/2015	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	N	.025	.025	2	2	10/2018	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	N	<0.001		4	4	10/2018	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	N	<0.5		5	5	10/2018	Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paints
Chromium (ppb)	N	13		100	100	10/2018	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)	N	<0.025		200	200	10/2018	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	N	0.38	0.38	4	4	10/2018	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (ppb)	N	<0.0002		2	2	2/7/2019	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland.
Nitrate² (ppm)	N	2.25	Well#3-4.4	10	10	2/7/2019	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	N	<0.05	<0.05	1	1	2-2019	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	N	<.005		50	50	10/2018	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)		38	38	N/A	N/A		Erosion of natural deposits
Thallium (ppb)	N	<0.001		2	0.5	10/2018	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

¹ **Arsenic** is a mineral known to cause cancer in humans at high concentration and is linked to other health effects, such as skin damage and circulatory problems. If arsenic is less than or equal to the MCL, your drinking water meets EPA's standards. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water, and continues to research the health effects of low levels of arsenic.

² **Nitrate** 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, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Volatile Organic Chemicals (VOC)	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Benzene (ppb)	N	<0.5	<0.5	5	0	2/13/2019	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	N	<0.5	<0.5	5	0	2/13/2019	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)	N	<0.5	<0.5	100	100	2/13/19	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	N	<0.5	<0.5	600	600	2/13/19	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	N	<0.5	<0.5	75	75	2/13/19	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	N	<0.5	<0.5	5	0	2/13/19	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	N	<0.5	<0.5	7	7	2/13/19	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	N	<0.5	<0.5	70	70	2/13/19	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	N	<0.5	<0.5	100	100	2/13/19	Discharge from industrial chemical factories
Dichloromethane (ppb)	N	<0.5	<0.5	5	0	2/13/19	Discharge from pharmaceutical and chemical factories

1,2-Dichloropropane (ppb)	N	<0.5	<0.5	5	0	2/13/19	Discharge from industrial chemical factories
Ethylbenzene (ppb)	N	<0.5	<0.5	700	700	2/13/19	Discharge from petroleum refineries
Styrene (ppb)	N	<0.5	<0.5	100	100	2/13/19	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	N	<0.5	<0.5	5	0	2/13/19	Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)	N	<0.5	<0.5	70	70	2/13/19	Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)	N	<0.5	<0.5	200	200	2/13/19	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	N	<0.5	<0.5	5	3	2/13/19	Discharge from industrial chemical factories
Trichloroethylene (ppb)	N	<0.5	<0.5	5	0	2/13/19	Discharge from metal degreasing sites and other factories
Toluene (ppm)	N	<0.5	<0.5	1	1	2/13/19	Discharge from petroleum factories
Vinyl Chloride (ppb)	N	<0.5	<0.5	2	0	2/13/19	Leaching from PVC piping; discharge from chemical factories
Xylenes (ppm)	N	<0.5	<0.5	10	10	2/13/19	Discharge from petroleum or chemical factories

Water Quality Table - Unregulated Contaminant Monitoring Rule (*Applies to Water Systems that tested for UCMR in the year of the CCR, delete section if does not apply*) if your system detects contaminant, please fill out the average result and range at which the contaminant is detected. It is required to only report detected UCMR contaminants for the calendar year you tested in.

hViolation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement) *Instructions: The report must contain a clear and readily understandable explanation of the violation, including: the length of the violation, potential adverse health effect, and actions taken by the system to address the violation. Attach copy of Public Notice, if available.*

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
<i>(Example: Reporting failure)</i>	<i>(Example: Forgot to sample for RTCR)</i>	<i>(Example: 14 days)</i>	<i>(Example: Sent in May results to show that the system is not serving contaminated water)</i>
Residual disinfection levels (MRDL)	Violation was due to a report sent after the compliance date. No health effects	4 th quarter 2019	This violation was returned to compliance when report was submitted to ADEQ

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Assessments for the Revised Total Coliform Rule (RTCR) (*Applies to Systems that were required to conduct a Level 1 or Level 2 assessment because of a violation or situation, please delete section(s) if does not apply.*)

Failure to Conduct Assessments for the Revised Total Coliform Rule (*Applies to Systems that failed to conduct their Level 1 or Level 2 Assessment, please delete section if does not apply*)

Contaminant Name	TT Violation Y or N	TT Requirement
Total Coliform	N	<p>We were required to conduct an assessment of our system due to one of the following:</p> <ul style="list-style-type: none"> • More than 5.0% positive samples per period (if the number of samples are greater than or equal to 40) • <u>OR</u> More than 1 positive sample per period (if the number of samples are less than 40) • <u>OR</u> Repeat samples not collected after positive sample.