



## Consumer Confidence Report for Calendar Year 2021

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

Public Water System ID Number	Public Water System Name		
AZ0407079	Valley Utilities Water Co., Inc.		
Contact Name and Title	Phone Number	E-mail Address	
Jerry King, Operations Manager	623-935-1100	jerryking@vuwco.com	
<p>If you have any questions about the information within this report, please don't hesitate to contact us anytime at 623-935-1100. We encourage you to visit our website at <a href="http://www.vuwco.com">www.vuwco.com</a></p>			

### Drinking Water Sources

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 pick up 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):** 7 active wells pump groundwater from the Phoenix AMA West Salt River Valley Basin

### Consecutive Connection Sources

A public water system that receives some or all of its finished water from one or more wholesale systems by means of a direct connection or through the distribution system of one or more consecutive systems. Systems that purchase water from another system report regulated contaminants detected from the source water supply in a separate table.

**PWS # AZ0407046, Liberty Utilities, provides us a consecutive connection source of water.**

**PWS # AZ0407073, Tierra Buena Water Company, provides us a consecutive connection source of water.**

### Drinking Water Contaminants

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

**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.

**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

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

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

### Vulnerable Population

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

Based on the information currently available on the hydrogeological settings of and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this PWS, the department has given a low risk designation for the degree to which this PWS 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 measure will have little impact on protection. Further source water assessment documentation can be obtained by contacting ADEQ.

## 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 highest level of disinfectant allowed in drinking water

**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:

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. Valley Utilities Water Co. 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).

## Water Quality Data – Regulated Contaminants

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	
Lead & Copper	MCL Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination

Lead (ppb)	N	0	0	15	0	Oct 2021	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	N	0.091	0	1.3	1.3	Oct 2021	Corrosion of household plumbing systems; erosion of natural deposits
<b>Disinfectants and Disinfection By-Products</b>	<b>MCL Violation Y or N</b>	<b>Running Annual Average (RAA) OR Highest Level Detected</b>	<b>Range of All Samples (Low-High)</b>	<b>MCL</b>	<b>MCLG</b>	<b>Sample Month &amp; Year</b>	<b>Likely Source of Contamination</b>
Chlorine (ppm)	N	0.70	0.31 – 0.98	MRDL = 4	MRDLG = 4	2021	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	N	2	0-3.6	60	None	Aug 2021	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (ppb)	N	27	13.8 – 40.7	80	None	Aug 2021	By-product of drinking water disinfection.
<b>Inorganic Chemicals (IOC)</b>	<b>MCL Violation Y or N</b>	<b>Running Annual Average (RAA) OR Highest Level Detected</b>	<b>Range of All Samples (Low-High)</b>	<b>MCL</b>	<b>MCLG</b>	<b>Sample Month &amp; Year</b>	<b>Likely Source of Contamination</b>
Arsenic <sup>1</sup> (ppb)	N	7.4	4.3 – 7.4	10	0	2021	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.09	0.087 – 0.09	2	2	March 2021	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	N	0.61	0.6 – 0.61	4	4	March 2021	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Chromium (ppb)	N	10	9.5 – 10	100	100	March 2021	Discharge from steel and pulp mills; Erosion of natural deposits.
Nitrate <sup>2</sup> (ppm)	N	8.2	3.88 – 8.2	10	10	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	160	63 - 160	3000	3000	2021	Erosion of natural deposits
<p><sup>1</sup> <b>Arsenic</b> 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.</p> <p><sup>2</sup> <b>Nitrate</b> 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.</p>							
<b>Volatile Organic Contaminants (VOC)</b>	<b>MCL Violation Y or N</b>	<b>Running Annual Average (RAA) OR Highest Level Detected</b>	<b>Range of All Samples (Low-High)</b>	<b>MCL</b>	<b>MCLG</b>	<b>Sample Month &amp; Year</b>	<b>Likely Source of Contamination</b>
Toluene (ppm)	N	0.0013	0 – 0.0013	1	1	2021	Discharge from petroleum factories

#### Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
None			

Table of Detected Contaminants

Lead and Copper (Tap water at homeowner's premises)							
Contaminant	Violation Yes/No	Year Tested	Range and 90th Percentile	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Copper	N	2020	Range - 0.1-1.3 90th %tile - 0.22 Sites over AL - 0	mg/L	1.3	90% of homes tested be less than 1.3 mg/L	Corrosion of household plumbing systems, erosion of natural deposits
Lead	N	2020	Range - ND-26 90th %tile - ND Sites over AL - 2	µg/L	0	90% of homes tested be less than 15 µg/L	Corrosion of household plumbing systems, erosion of natural deposits
Contaminant	Violation Yes/No	Year Tested	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Arsenic	N	2021	4.8 - 8.6 Range 8.6 Max	µg/L	0	10	Erosion of natural deposits, runoff from orchards, runoff from glass and electronic production waste
Barium	N	2019	0.03 - 0.11 Range 0.11 Max	mg/L	2	2	Erosion of natural deposits, discharge of drilling waste, discharge of metal refineries
Chromium	N	2019	ND - 10 Range 10 Max	µg/L	100	100	Erosion of natural deposits, Discharge of steel and pulp mills.
Selenium	N	2019	ND - 3 Range Max 3	µg/L	50	50	Erosion of natural deposits, discharge of petroleum and metal refineries, discharge of mines
Nitrate	N	2021	3.6 - 7.8 Range 7.8 Max	mg/L	10	10	Runoff from fertilizer use, leaching from septic tanks/sewage, erosion of natural deposits
Fluoride	N	2019	0.4 - 1.3 Range Max 1.3	mg/L	4.0	4.0	Erosion from natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories.
Radiological Contaminants							
Gross Alpha activity	N	2019	1 - 4 Range 4 Max	pCi/L	0	15	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Microbiological Contaminants							
Total Coliform (Present)	N	2021	Absent	Present/Absent	NA	TT	Naturally present in the environment
E. coli (Present)	N	2021	Absent	Present/Absent	0	-	Human and animal fecal waste
Disinfectant/Disinfection By-product (D/DBP) Parameters							
HAA5	N	2021	ND - 2.5 Range 2.5 Max	µg/L	NA	60	Byproduct of drinking water disinfection
TTHM	N	2021	11.1 - 22.0 Range 22 Max	µg/L	NA	80	Byproduct of drinking water disinfection
Chlorine	N	2021	0.8 - 0.9 Range 0.9 Max	mg/L	4	4	Water additive used to control microbes
Unregulated Contaminants							
Sodium	NA	2021	Range - 65-150 Average - 102 Range - 150-340 Average - 235	mg/L	NA	NA	Erosion of natural deposits
Hardness	NA	2021	Grains/Gallon - 8.8-19.9 Average - 13.8	mg/L	NA	NA	Erosion of natural deposits

Violations in 2021

**Nitrate Reporting** - On March 2, 2022 we were informed by ADEQ that our water system missed a nitrate sample at one of our six required locations in the 1st Quarter of 2021. This location has a well that was being repaired in the 1st Quarter of 2021, and we had given notification that because of this repair, we may not be able to sample in the 1st Quarter. The sample was taken on April 23rd, the 1st full day the well was back in service. We were notified that because the well was in use during part of the 1st Quarter, there was an opportunity to sample, and therefore a violation was issued. The result of the nitrate sample taken on April 23rd was below the MCL, and was submitted to ADEQ by our lab on May 5, 2021.