Consumer Confidence Report for Calendar Year 2023

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

Public Water System ID Number	Public Water System Name
AZ0420598	Deep Well Co-op

Contact Name and Title	Phone Number	E-mail Address
Emery Sunday	520-429-9632	desertiguanadon@gmail.com

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 Emery Sunday at 520-429-9632 for additional opportunity and meeting dates and times.

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 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):	Our water system has 1 well that draws water from the Avra Valley sub-basin of the Tucson Active Management Area basin.

Drinking Water Contaminants

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

Disinfectants and Disinfection By-products: Water additives used to control microbes, and the by-products of interactions between disinfectants and natural organic materials in water

Inorganic Contaminants: Salts, metals, and other inorganic contaminants that can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming

Pesticides and Herbicides: Synthetic organic compounds that come from agriculture, urban storm water runoff, and a wide variety of residential uses

Organic Chemical Contaminants: Synthetic and volatile organic chemical by-products that come from industrial processes, petroleum production, gas stations, urban storm water runoff, and septic systems.

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

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 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.

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 contributing to an *E. coli* MCL violation, 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 detected by the sampling laboratory above a minimum level of detection

Nephelometric Turbidity Units (NTU): Measure of water clarity for drinking water systems using surface water as source water

Million fibers per liter (MFL): Measure of asbestos contamination

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

Unit Coversions:

ppm: Parts per million or Milligrams per liter (mg/L)
ppm x 1000 = ppb

ppb: Parts per billion or Micrograms per liter (µg/L)
ppb x 1000 = ppt

ppt: Parts per trillion or Nanograms per liter (ng/L)
ppt x 1000 = ppq

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

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. Deep Well Co-op 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

As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

Disinfectants	MCL Violation Y or N	Average	Range	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Chlorine/Chloramine (ppm)	N	0.70	0.27 to 2.2	4	4	2023	Water additive used to control microbes
Lead & Copper	**AL Violation?**	**90th Percentile**	**Number of Samples Exceeding the AL**	**AL**	**ALG**	**Sample Month / Year**	**Likely Source of Contamination**
Copper (ppm)	N	0.02	0	1.3	1.3	8 / 2023	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	0.3	0	15	0	8 / 2023	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	**MCL Violation Y or N**	**Average or Highest Level Detected**	**Range**	**MCL**	**MCLG**	**Sample Month & Year**	**Likely Source of Contamination**
Alpha Emitters including uranium (pCi/L)	N	4.8	4.8 to 4.8	15	0	5 / 2020	
Inorganic Chemicals (IOC)	**MCL Violation Y or N**	**Running Annual Average (RAA) OR Highest Level Detected**	**Range**	**MCL**	**MCLG**	**Sample Month & Year**	**Likely Source of Contamination**
Arsenic[1] (ppb)	N	5.8	5.8 to 5.8	10	0	5 / 2023	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.016	0.016 to 0.016	2	2	5 / 2023	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	N	2.2	2.2 to 2.2	100	100	5 / 2023	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	N	0.54	0.54 to 0.54	4	4	5 / 2023	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate[2] (ppm)	N	1.6	1.6 to 1.6	10	10	5 / 2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	32	32 to 32	N/A	N/A	3 / 2021	Erosion of natural deposits

Water Quality Table - ADEQ PFAS Monitoring

Your drinking water was sampled for the presence and concentration of 29 different per- and polyfluoroalkyl substances, some known by the acronyms PFAS, PFOA, PFNA, PFHxS, PFBS, and GenX, a group of contaminants in the final stages of becoming regulated by the EPA.

PFAS are man-made chemicals that are resistant to heat, water, and oil. They have been used since the 1940s to manufacture various consumer products, including fire-fighting foam and stain resistant, water-resistant, and nonstick items. Many PFAS do not break down easily and can build up in people, animals, and the environment over time. Scientific studies have shown that exposure to certain PFAS can be harmful to people and animals, depending on the level and duration of exposure.

To learn more about this group of chemicals, we encourage you to read the ADEQ-provided "PFAS 101 Fact Sheet" and to visit the ADEQ website at https://www.azdeq.gov/pfas-resources.

The following summarizes PFAS detections in your drinking water. If your water system participated in sampling through the EPA, lithium is also included.

The following contaminants tested in 2023 **were not found** in your drinking water:

Hexafluoropropylene oxide dimer acid (HFPO-DA, aka GenX chemicals)*

Perfluorononanoic acid (PFNA)*
Perfluorobutanesulfonic acid (PFBS)*
Perfluorohexanesulfonic acid (PFHxS)*

Perfluorooctanesulfonic acid (PFOS)
Perfluorooctanoic acid (PFOA)
Perfluorobutanoic acid (PFBA)
Perfluorohexanoic acid (PFHxA)
Perfluorodecanoic acid (PFDA)

9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)

11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OudS)

1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS)
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2 FTS)

4,8-dioxa-3H-perfluorononanoic acid (ADONA)

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
Perfluoro-3-methoxypropanoic acid (PFMPA)
Perfluoro-4-methoxybutanoic acid (PFMBA)
Perfluorododecanoic acid (PFDoA)
Perfluoroheptanesulfonic acid (PFHpS)
Perfluoroheptanoic acid (PFHpA)
Perfluoropentanesulfonic acid (PFPeS)
Perfluoropentanoic acid (PFPeA)
Perfluoroundecanoic acid (PFUnA)

N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)

N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)

Perfluorotetradecanoic acid (PFTA)
Perfluorotridecanoic acid (PFTrDA)

* EPA is proposing a Hazard Index MCL to limit any mixture containing one or more of PFNA, PFHxS, PFBS, and/or GenX Chemicals. The Hazard Index considers the different toxicities of PFNA, GenX Chemicals, PFHxS, and PFBS. For these PFAS, water systems would use a hazard index calculation to determine if the combined levels of these PFAS in the drinking water at that system pose a potential risk and require action (Source: EPA Fact Sheet: Understanding the PFAS National Primary Drinking Water Proposal Hazard Index).

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Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)			
Violation Type	**Explanation, Health Effects**	**Time Period**	**Corrective Actions**
Late issuance of notices	Lead and Copper	2022	Returned to compliance with submission of notices for 2023 results
Late reporting	Total Coliform	July	Submitted the results