



# Consumer Confidence Report for Calendar Year **2023**

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

<b>Public Water System ID Number</b>	<b>Public Water System Name</b>		
AZ04-12009	Valle Verde Water Company - East		
<b>Contact Name and Title</b>		<b>Phone Number</b>	<b>E-mail Address</b>
Lacey Merritt, Compliance Manager		520-649-0720	compliance@southwesternutility.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 Jason Long at 520-431-7723 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 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):** Three wells that withdraw from within the Santa Cruz River Watershed and a consecutive connection with the City of Nogales (AZ0412004)

### 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 # AZ0412004, City of Nogales 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

**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

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 and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a high-risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This does not imply that the source water is contaminated nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination.

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 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)

**ppq:** Parts per quadrillion or Picograms per liter (pg/L)  
ppm x 1000 = ppb

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.

**Valle Verde Water Company - East** 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](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 (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	0.79	0.39 – 1.61	4	4	2023	Water additive used to control microbes

Disinfection By-Products	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	ND		60	N/A	8/2023	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	5.9	5.4 – 5.9	80	N/A	8/2023	Byproduct of drinking water disinfection
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
Copper (ppm)	N	0.031	0	1.3	1.3	8/2021	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	0	0	15	0	8/2021	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha Emitters (pCi/L)	N	3.5	3.5 – 3.5	15	0	5/2021	Erosion of natural deposits
Combined Radium-226 & -228 (pCi/L)	N	ND		5	0		Erosion of natural deposits
Uranium (ug/L)	N	11	4.6 – 11	30	0	12/2023	Erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Arsenic <sup>1</sup> (ppb)	N	9.9	7.6 – 9.9	10	0	2023	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.037	0.0084 – 0.037	2	2	5/2021	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	N	0.77	0.23 – 0.77	4	4	5/2021	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate <sup>2</sup> (ppm)	N	5.8	1.4 – 5.8	10	10	5/2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	24	23	N/A	N/A		Erosion of natural deposits

<sup>1</sup> **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.

<sup>2</sup> **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.

All contaminants listed below were tested for and were NOT found in our water. These contaminants are considered Non-Detect or not present:

**Inorganic Compounds (Last tested 5/2021):** Antimony, Asbestos, Beryllium, Cadmium, Chromium, Cyanide, Mercury, Nickel, Nitrite, Selenium and Thallium.

**Synthetic Organic Compounds (Last tested 5/2021):** 2,4-D, 2,4,5-TP (a.k.a. Silvex), Acrylamide, Alachlor, Atrazine, Benzo (a) pyrene (PAH), Carbofuran, Chlordane, Dalapon, Di (2-ethylhexyl) adipate, Di (2-ethylhexyl) phthalate, Dibromochloropropane, Dinoseb, Diquat, Dioxin [a.k.a. 2,3,7,8-TCDD], Endothall, Endrin, Epichlorohydrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclo pentadiene, Lindane, Methoxychlor, Oxamyl (a.k.a. Vydate), PCBs [Polychlorinated biphenyls], Pentachlorophenol, Picloram, Simazine, Toxaphen

**Volatile Organic Compounds (Last tested 5/2023):** Benzene, Carbon tetrachloride, Chlorobenzene, o-Dichlorobenzene, p-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2 Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Toluene, Vinyl Chloride and Xylenes.

## Water Quality Table – Unregulated Contaminants

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>

Per- and Polyfluoroalkyl Substances	Highest Level Detected	Range of All Samples	Proposed MCL
<b>PFOA (in parts per trillion)</b>	14.2	2.03 - 14.2	4.0 ppt
<b>PFOS (in parts per trillion)</b>	44.6	8.87 – 44.6	4.0 ppt
<b>PFNA (in parts per trillion)</b>	ND	ND	N/A*
<b>PFHxS (in parts per trillion)</b>	15.6	3.29 – 15.6	N/A*
<b>PFBS (in parts per trillion)</b>	14.7	1.86 – 14.7	N/A*
<b>GenX (in parts per trillion)</b>	ND	ND	N/A*
<b>Calculated Hazard Index (HI)</b>	1.72		1 (no units)

\* 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).



# 2023 CONSUMER CONFIDENCE REPORT

Report Covers Calendar Year: January 1, 2023 - December 31, 2023

## REPORTE ANUAL SOBRE LA CALIDAD DEL AGUA DEL 2023\*

El reporte abarca del día 1 de Enero al 31 de Diciembre del 2023

### Public Water System (PWS) Information

<b>PWS Name:</b>	City of Nogales	<b>PWS ID #</b>	AZ04-12004	<b>Owner/Operator Name:</b>	City of Nogales
<b>Utilities Director:</b>	Alejandro Barcnas	<b>Contact Person and Title:</b>		Ruben Artana Utilities	
<b>Telephone #</b>	(520) 287-6571	<b>Fax #</b>	(520) 287-8352	<b>E-mail</b>	rartana@nogalesaz.gov
<p>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.</p>					
<b>Our water source(s):</b>	Ground Water / Upper Santa Cruz River / Potrero Creek				

\* [Este reporte contiene información muy importante sobre la calidad del agua. Es muy importante que busque a una persona que pueda ayudarlo a traducirlo al español o se puede comunicar al \(520\) 285-5754 para obtener ayuda sobre este reporte en español.](#)

### 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, 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 that 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 byproducts 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

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 of 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 and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This does not imply that the source water is contaminated nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination.

**Definitions**

AL = Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements.  
MCL = Maximum Contaminant Level - The “Maximum Allowed” is the highest level of a contaminant that is allowed in drinking water.  
MCLG = Maximum Contaminant Level Goal - The “Goal” is the level of a contaminant in drinking water below which there is no known or expected risk to health.  
MFL = Million fibers per liter.  
MRDL = Maximum Residual Disinfectant Level.  
MRDLG = Maximum Residual Disinfectant Level Goal.  
MREM = Millirems per year – a measure of radiation absorbed by the body.  
NA = Not Applicable, sampling was not completed by regulation or was not required. ND = Not Detectable, results are below the laboratory sample detection limit.  
NTU = Nephelometric Turbidity Units, a measure of water clarity.  
PCi/L = Picocuries per liter - picocuries per liter is a 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.  
PPQ = Parts per quadrillion or Picograms per liter.  
TT = Treatment Technique - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

ppm x 1000 = ppb
ppb x 1000 = ppt
ppt x 1000 = ppq

**Health Effects Language**

**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.

If **arsenic** is less than or equal to the MCL, your drinking water meets ADEQ (Arizona Department of Environmental Quality) and EPA’s standards. ADEQ and EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. ADEQ and EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Lead Information 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. **City of Nogales** 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](http://www.epa.gov/safewater/lead).

**Water Quality Data**

Microbiological (RTCR)	Violatory or N	Number of Positive Samples	Positive Sample(s) Month & Year	MCL	MCLG	Samples per Month or Year	Likely Source of Contamination
Total Coliform	N	0	0	0	0	25/month 300/year	Human and animal fecal waste
Fecal Indicator (coliphage, enterococci and/or E. coli)	N	0	0	0	0	25/month 300/year	Human and animal fecal waste

Disinfectants	Violatic Y or N	Running Annual Average (RAA)	Range of All Samples (L-H)	MRDL	MRDLG	Samples per Month or Year	Likely Source of Contamination
Chlorine/Chloramine (ppm)	N	0.58ppm	0.48 – 0.64ppm	MRDL = 4	MRDLG = 0	25/month 300/year	Water additive used to control microbes
Disinfection By-Products	Violatic Y or N	Running Annual Average (RAA)	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	21	0-21	60ppb	N/A	11/2023	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	1.1	0 – 1.1	80ppb	N/A	11/2023	Byproduct of drinking water disinfection
Lead & Copper	Violatic Y or N	90 <sup>th</sup> Percentile AND Number of Samples Over the AL	Number of Samples Exceeds AL	AL	ALG	Year Sample Dates	Likely Source of Contamination
Copper (ppm)	N	0.149		1.3	1.3	9/2021	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	<1ppb 0 samples	ND	15	0	9/2021	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	Violatic Y or N	Running Annual Average (RAA)	Range of All Samples (L-H)	MCL	MCLG	Year Sample Dates	Likely Source of Contamination
Alpha emitters (pCi/L)	N	4.7	4.7 – 4.7	15	0	2/2022	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L)	N	7.2	7.2 -7.2	5	0	5/2020	Erosion of natural deposits

All contaminants listed below were tested for and were NOT found in our water. These contaminants are considered NonDetect or not present:

**Inorganic Compounds (Last tested 2021):** Antimony, Asbestos, Beryllium, Cadmium, Cyanide, Mercury and Thallium.

**Synthetic Organic Compounds (Last tested 2022):** 2,4-D, 2,4,5-TP (a.k.a. Silvex), Acrylamide, Alachlor, Atrazine, Benzo (a) pyrene (PAH), Carbofuran, Chlordane, Dalapon, Di (2-ethylhexyl) adipate, Di (2-ethylhexyl) phthalate, Dibromochloropropane, Dinoseb, Diquat, Dioxin [a.k.a. 2,3,7,8-TCDD], Endothall, Endrin, Epichlorohydrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclo pentadiene, Lindane, Methoxychlor, Oxamyl (a.k.a. Vydate), PCBs [Polychlorinated biphenyls], Pentachlorophenol, Picloram, Simazine, Toxaphene

**Volatile Organic Compounds (Last tested 2/2022):** Benzene, Carbon tetrachloride, Chlorobenzene, o-Dichlorobenzene, p-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2 Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, 1,2,4-Trichlorobenzene, 1,1,1Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Toluene, Vinyl Chloride, Xylenes.

Your drinking water was also 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’s “PFAS 101 Fact Sheet” and to visit the ADEQ website at <https://www.azdeq.gov/pfas-resources>

\* 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). The following contaminants were tested for in September and October, 2023 and were not detected in the water:

11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS), 1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS), 1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2 FTS), 1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS), 4,8-dioxa-3H-perfluorononanoic acid (ADONA), 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS), hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX), nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorobutanesulfonic acid (PFBS), Perfluorobutanoic acid (PFBA), Perfluorodecanoic acid (PFDA), Perfluorododecanoic acid (PFDoA), Perfluoroheptanesulfonic acid (PFHpS), Perfluoroheptanoic acid (PFHpA), Perfluorohexanesulfonic acid (PFHxS), Perfluorohexanoic acid (PFHxA), Perfluorononanoic acid (PFNA), Perfluorooctanesulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), Perfluoropentanesulfonic acid (PFPeS), Perfluoropentanoic acid (PFPeA), Perfluoroundecanoic acid (PFUnA), n-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA), n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA), Perfluorotetradecanoic acid (PFTA) and Perfluorotridecanoic acid (PFTDA).

One Metal	Detected (Y/N)	Average	Range of All Samples (Low-High)	MRL (ppb)	Analytical Methods
Lithium (ppb)	Y	52.6	9.3 – 52.6	9 µg/L	EPA 200.7, SM 3120 B, ASTM D1976–20

### TIER 3 PUBLIC NOTICE

#### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

##### Monitoring Requirements Not Met for City of Nogales

Our water system violated drinking water standards in 2023. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2023 we did not monitor for Disinfection Byproducts in the correct month, Arsenic and Nitrate and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.



Contaminant	Required sampling frequency	Number of Samples Required	When samples should have been taken	When samples were taken
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Disinfection By-Products – We are required to monitor for Haloacetic Acids (HAA5) and Total trihalomethanes. These are considered chronic contaminants and can cause health effects if in excess over many years.

Disinfection Byproducts	4 samples/quarter	16/year	Samples were not taken in accordance with our approved monitoring plan for the 4th Quarter 2023	Samples were taken correctly in 1st Quarter 2024
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Arsenic – We are required to monitor Arsenic every quarter. These are considered chronic contaminants and can cause health effects if in excess over many years.

Arsenic at EPDS002	1 sample/quarter	4/year	Samples were not taken in accordance with our approved monitoring plan for the 1st Quarter 2023	Samples were taken in February 2024 with results being below 1.5 mg/L.
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Nitrate – We are required to monitor Nitrate every quarter. These are considered acute contaminants and can cause serious illness for infants less than 6 months of age.

Nitrates	3 samples/year	3/year	Samples were not taken in accordance with our approved monitoring plan for 2023	Samples were taken in February 2024 with results being below 1.5 mg/L
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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.

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

Violation Type	Explanation	Time Period	Corrective Action
Missed monitoring	Nitrate /Nitrite Did not collected	2023	Were Collected in Early 2024
Missed monitoring	Arsenic EPDS 002	3 <sup>rd</sup> Qtr 2023	Were Collected 1 <sup>st</sup> week 4 <sup>th</sup> Qtr 2023
Missed monitoring	TTHM / HAA5	4 <sup>th</sup> Qtr 2023 First Month of each quarter	We Collected 2 <sup>nd</sup> Month of 4 <sup>th</sup> Qtr