



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 | | |
|--|--|-------------------------|--|
| AZ04-09060 | Wonderland Acres Domestic Water Improvement District | | |
| Contact Name and Title | Phone Number | E-mail Address | |
| Barry Harville | 928-367-6621 | kleansweepops@yahoo.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>Stephanie Irwin CPA at 928-367-6621</u> for additional opportunity and meeting dates and times.</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 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): 5 Wells: 55-800740, 55-800738, 55-217932, 55-574627, & 55-800739

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

This PWS did not receive a SWAP because the PWS was either inactive at the time or the PWS did not exist. 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 ($\mu\text{g/L}$)

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.

Wonderland Acres 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:

| 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 | 0 | Human and animal fecal waste | |
| Fecal Indicator (coliphage, enterococci and/or E. coli) | N | 0 | 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 | 0.44 | 0.23-0.35 | 4 | 0 | 2021 | 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 | ND | ND | 60 | N/A | 09-2020 | Byproduct of drinking water disinfection |
| Total Trihalomethanes (TTHM) (ppb) | N | 4 | 4 | 80 | N/A | 09-2020 | 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 | 0.18 | 0 | 1.3 | 1.3 | 09-2019 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) | N | 2.9 | 0 | 15 | 0 | 09-2019 | 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 | N/D | N/D | 4 | 0 | 05-2021 | Decay of natural and man-made deposits |
| Alpha Emitters (pCi/L) | N | 3.8 | 3.1 – 3.8 | 15 | 0 | 05-2021 | Erosion of natural deposits |
| Combined Radium-226 & -228 (pCi/L) | N/D | N/D | N/D | 5 | 0 | 05-2021 | Erosion of natural deposits |
| Uranium (ug/L) | N/A | N/D | N/D | 30 | 0 | 05-2021 | 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 | N/D | N/D | 6 | 6 | 05-2021 | Discharge from petroleum refineries; fire retardants; ceramics, electronics and solder |
| Arsenic ¹ (ppb) | N | N/D | N/D | 10 | 0 | 05-2021 | Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes |
| Asbestos (MFL) | N | N/D | 0 | 7 | 7 | 05-2021 | Decay of asbestos cement water mains; Erosion of natural deposits |
| Barium (ppm) | N | 0.26 | 0.065 – 0.26 | 2 | 2 | 05-2021 | Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits |
| Beryllium (ppb) | N | N/D | N/D | 4 | 4 | 05-2021 | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries |
| Cadmium (ppb) | N | N/D | N/D | 5 | 5 | 05-2021 | Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paints |
| Chromium (ppb) | N | N/D | N/D | 100 | 100 | 05-2021 | Discharge from steel and pulp mills; Erosion of natural deposits |
| Cyanide (ppb) | N | N/D | N/D | 200 | 200 | 05-2021 | Discharge from steel/metal factories; Discharge from plastic and fertilizer factories |

| | | | | | | | |
|----------------------------------|---|-------|------------|-----|-----|---------|---|
| Fluoride (ppm) | N | 0.086 | .074-0.98 | 4 | 4 | 05-2021 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Mercury (ppb) | N | N/D | N/D | 2 | 2 | 05-2021 | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland. |
| Nitrate (ppm) | N | 0.75 | 0.29 – 1.4 | 10 | 10 | 05-2021 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrite² (ppm) | N | 0.75 | 0.29-1.4 | 1 | 1 | 05-2021 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Selenium (ppb) | N | N/D | N/D | 50 | 50 | 05-2021 | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines |
| Sodium (ppm) | N | 17.3 | 14 – 23 | N/A | N/A | 05-2021 | Erosion of natural deposits |
| Thallium (ppb) | N | N/D | N/D | 2 | 0.5 | 05-2021 | 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.

| Synthetic Organic Chemicals (SOC) | 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 |
|---|-----------------------------|---|--|------------|-------------|--------------------------------|---|
| 2,4-D (ppb) | N | N/D | N/D | 70 | 70 | 05-2021 | Runoff from herbicide used on row crops |
| 2,4,5-TP (a.k.a. Silvex) (ppb) | N | N/D | N/D | 50 | 50 | 05-2021 | Residue of banned herbicide |
| Acrylamide | N | N/D | N/D | TT | 0 | 05-2021 | Added to water during sewage / wastewater treatment |
| Alachlor (ppb) | N | N/D | N/D | 2 | 0 | 05-2021 | Runoff from herbicide used on row crops |
| Atrazine (ppb) | N | N/D | N/D | 3 | 3 | 05-2021 | Runoff from herbicide used on row crops |
| Benzo (a) pyrene (PAH) (ppt) | N | N/D | N/D | 200 | 0 | 05-2021 | Leaching from linings of water storage tanks and distribution lines |
| Carbofuran (ppb) | N | N/D | N/D | 40 | 40 | 05-2021 | Leaching of soil fumigant used on rice and alfalfa |
| Chlordane (ppb) | N | N/D | N/D | 2 | 0 | 05-2021 | Residue of banned termiticide |
| Dalapon (ppb) | N | N/D | N/D | 200 | 200 | 05-2021 | Runoff from herbicide used on rights of way |
| Di (2-ethylhexyl) adipate (ppb) | N | N/D | N/D | 400 | 400 | 05-2021 | Discharge from chemical factories |
| Di (2-ethylhexyl) phthalate (ppb) | N | N/D | N/D | 6 | 0 | 05-2021 | Discharge from rubber and chemical factories |
| Dibromochloropropane (ppt) | N | N/D | N/D | 200 | 0 | 05-2021 | Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards |
| Dinoseb (ppb) | N | N/D | N/D | 7 | 7 | 05-2021 | Runoff from herbicide used on soybeans and vegetables |
| Diquat (ppb) | N | N/D | N/D | 20 | 20 | 05-2021 | Runoff from herbicide use |
| Dioxin [a.k.a. 2,3,7,8-TCDD] (ppq) | N | N/D | N/D | 30 | 0 | 05-2021 | Emissions from waste incineration and other combustion; discharge from chemical factories |
| Endothall (ppb) | N | N/D | N/D | 100 | 100 | 05-2021 | Runoff from herbicide use |
| Endrin (ppb) | N | N/D | N/D | 2 | 2 | 05-2021 | Residue of banned insecticide |
| Epichlorohydrin | N | N/D | N/D | TT | 0 | 05-2021 | Discharge from industrial chemical factories; an impurity of some water treatment chemicals |
| Ethylene dibromide (ppt) | N | N/D | N/D | 50 | 0 | 05-2021 | Discharge from petroleum refineries |

| | | | | | | | |
|---|-----------------------------|---|--|------------|-------------|--------------------------------|---|
| Glyphosate (ppb) | N | N/D | N/D | 700 | 700 | 05-2021 | Runoff from herbicide use |
| Heptachlor (ppt) | N | N/D | N/D | 400 | 0 | 05-2021 | Residue of banned termiticide |
| Heptachlor epoxide (ppt) | N | N/D | N/D | 200 | 0 | 05-2021 | Breakdown of heptachlor |
| Hexachlorobenzene (ppb) | N | N/D | N/D | 1 | 0 | 05-2021 | Discharge from metal refineries and agricultural chemical factories |
| Hexachlorocyclo pentadiene (ppb) | N | N/D | N/D | 50 | 50 | 05-2021 | Discharge from chemical factories |
| Lindane (ppt) | N | N/D | N/D | 200 | 200 | 05-2021 | Runoff/leaching from insecticide used on cattle, lumber, gardens |
| Methoxychlor (ppb) | N | N/D | N/D | 40 | 40 | 05-2021 | Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, |
| Oxamyl (a.k.a. Vydate) (ppb) | N | N/D | N/D | 200 | 200 | 05-2021 | Runoff/leaching from insecticide used on apples, potatoes and tomatoes |
| PCBs [Polychlorinated biphenyls] (ppt) | N | N/D | N/D | 500 | 0 | 05-2021 | Runoff from landfills; discharge of waste chemicals |
| Pentachlorophenol (ppb) | N | N/D | N/D | 1 | 0 | 05-2021 | Discharge from wood preserving factories |
| Picloram (ppb) | N | N/D | N/D | 500 | 500 | 05-2021 | Herbicide runoff |
| Simazine (ppb) | N | N/D | N/D | 4 | 4 | 05-2021 | Herbicide runoff |
| Toxaphene (ppb) | N | N/D | N/D | 3 | 0 | 05-2021 | Runoff/leaching from insecticide used on cotton and cattle |
| 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 | N/D | N/D | 5 | 0 | 05-2021 | Discharge from factories; leaching from gas storage tanks and landfills |
| Carbon tetrachloride (ppb) | N | N/D | N/D | 5 | 0 | 05-2021 | Discharge from chemical plants and other industrial activities |
| Chlorobenzene (ppb) | N | N/D | N/D | 100 | 100 | 05-2021 | Discharge from chemical and agricultural chemical factories |
| o-Dichlorobenzene (ppb) | N | N/D | N/D | 600 | 600 | 05-2021 | Discharge from industrial chemical factories |
| p-Dichlorobenzene (ppb) | N | N/D | N/D | 75 | 75 | 05-2021 | Discharge from industrial chemical factories |
| 1,2-Dichloroethane (ppb) | N | N/D | N/D | 5 | 0 | 05-2021 | Discharge from industrial chemical factories |
| 1,1-Dichloroethylene (ppb) | N | N/D | N/D | 7 | 7 | 05-2021 | Discharge from industrial chemical factories |
| cis-1,2-Dichloroethylene (ppb) | N | N/D | N/D | 70 | 70 | 05-2021 | Discharge from industrial chemical factories |
| trans-1,2-Dichloroethylene (ppb) | N | N/D | N/D | 100 | 100 | 05-2021 | Discharge from industrial chemical factories |
| Dichloromethane (ppb) | N | N/D | N/D | 5 | 0 | 05-2021 | Discharge from pharmaceutical and chemical factories |
| 1,2-Dichloropropane (ppb) | N | N/D | N/D | 5 | 0 | 05-2021 | Discharge from industrial chemical factories |
| Ethylbenzene (ppb) | N | N/D | N/D | 700 | 700 | 05-2021 | Discharge from petroleum refineries |
| Styrene (ppb) | N | N/D | N/D | 100 | 100 | 05-2021 | Discharge from rubber and plastic factories; leaching from landfills |
| Tetrachloroethylene (ppb) | N | N/D | N/D | 5 | 0 | 05-2021 | Discharge from factories and dry cleaners |
| 1,2,4-Trichlorobenzene (ppb) | N | N/D | N/D | 70 | 70 | 05-2021 | Discharge from textile-finishing factories |
| 1,1,1-Trichloroethane (ppb) | N | N/D | N/D | 200 | 200 | 05-2021 | Discharge from metal degreasing sites and other factories |
| 1,1,2-Trichloroethane (ppb) | N | N/D | N/D | 5 | 3 | 05-2021 | Discharge from industrial chemical factories |
| Trichloroethylene (ppb) | N | N/D | N/D | 5 | 0 | 05-2021 | Discharge from metal degreasing sites and other factories |
| Toluene (ppm) | N | N/D | N/D | 1 | 1 | 05-2021 | Discharge from petroleum factories |
| Vinyl Chloride (ppb) | N | N/D | N/D | 2 | 0 | 05-2021 | Leaching from PVC piping; discharge from chemical factories |
| Xylenes (ppm) | N | N/D | N/D | 10 | 10 | 05-2021 | Discharge from petroleum or chemical factories |

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

| Violation Type | Explanation, Health Effects | Time Period | Corrective Actions |
|---|--|---|--|
| Late reporting violation – Maximum Residual Disinfectant Level (MRDL) | For systems chlorinating, MRDL reports must be submitted quarterly. Disinfectant levels are collected at the time of each Total Coliform sampling. | 3 rd Quarter 2021 (July – September) 4 th Quarter 2021 (Oct. – Dec.) | MRDL reports were submitted past its due date. No further action required. |
| Missed monitoring violation – Disinfection ByProducts (TTHM & HAA5) | For systems chlorinating, DBP2 samples must be sampled. We sample for DBP2 every year in the month of August. | August 2021 | We plan on taking the 2022 DBP2 samples later this year in August. |