U.S. Army Garrison
Yuma Proving Ground
Attn: AMIM-YMP-E
301 C Street
Yuma, AZ 85365-9498

Box Holder / Water Consumer

USAYPG

Yuma, AZ 85365-9498

2024 Water Quality Report

Consumer Confidence Report

Howard Cantonment Area

For More Information…
This Consumer Confidence Report was prepared by the Environmental Sciences Division, USAG Yuma Proving Ground. For questions, information about drinking water or additional copies of this report please contact Angela Ballinger, Safe Drinking Water Program Manager, at (928) 328-2977, or Mark Schauer of the Yuma Proving Ground Public Affairs Office at (928) 328-6189.

2024 Water Quality Report

Consumer Confidence Report

Howard Cantonment Area

Public Water System (AZ04-14403)

Staff Sergeant Nick Bacon
U.S. Army Medal of Honor Recipient

Please Note: This Consumer Confidence Report (CCR) covers only the potable water system servicing the Howard Cantonment Area (HCA) at U.S. Army Garrison (USAG) Yuma Proving Ground (YPG). No other water systems are covered or otherwise referenced in this information.

Your 2024 Water Quality

CONSUMER CONFIDENCE REPORT

U.S. Army Garrison Yuma Proving Ground

This report covers the Howard Cantonment Area AZ04-14403.

Issued June 2025

Our Continuing Commitment to You

YPG and its trained, certified water quality professionals are committed to:

- Providing high quality, safe drinking water to its residents and workforce
- Monitoring and testing the water we provide to ensure it is always safe to drink
- Providing opportunities for residents and workforce to ask questions and learn during YPG's Safety Week held each year in February, in resident town hall meetings, and via articles in the YPG Outpost

Inside this report:

Dear Valued Water Consumer,

Thank you for taking the time to read this annual water report. We are here to answer any questions or concerns you may have. Certified laboratory results show our water is well below the federal guidelines for allowable constituents in drinking water. *The proof is in the data!*

YPG is proactive in providing safe, quality water to its residents and workforce throughout all three cantonment areas supporting the mission. Although this report's data covers the Howard Cantonment Area (HCA) only, the general information is relevant to drinking water across the United States.

Our water system provided drinking water that met all regulatory requirements during 2024.

If you have any questions about the quality of your water, please contact Angela Ballinger, Safe Drinking Water Program Manager, at **928-328-2977** or **angela.m.ballinger.civ@army.mil**. We'd be happy to answer any questions you may have. Thank you for taking interest in your drinking water.

Sincerely,

Your Public Works Directorate

Introduction

This is an annual report for the Howard Cantonment Area on the quality of water delivered by YPG. Under the "Consumer Confidence Reporting Rule" of the Safe Drinking Water Act (SDWA), community water systems are required to report this water quality information to the consuming public. Presented in this report is information on the source of our water, its constituents, and the health risks associated with any contaminants.

HCA is regulated as a *community water system* because there are residents living within the service area year-round. This type of system requires additional monitoring of certain contaminants which other systems may not need due to the possibility of sensitive populations consuming the water (i.e. children and elderly).

For more information on water system classifications, please visit **https://www.epa.gov/dwreginfo/information-about-public-water-systems**.

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. In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

More information about contaminants, their potential health effects, and the appropriate means to lessen the risk can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791 or visiting the website epa.gov/safewater.

Substances in Drinking Water

The sources of drinking water (both tap water 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.

Contaminants are any physical, chemical, biological, or radiological substance or matter in water. Contaminants that may be present in source water include:

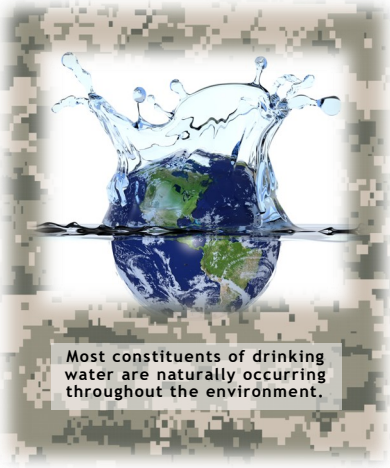
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic contaminants, such as salts and metals, which can occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, or residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can come from gas stations, urban stormwater runoff, or septic systems.

Radioactive contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.



Most constituents of drinking water are naturally occurring throughout the environment.

Primary vs. Secondary Drinking Water Regulations

The EPA sets Current Drinking Water Standards for drinking water. These standards are made up of the National ***Primary Drinking Water Regulations*** and the National ***Secondary Drinking Water Regulations***.

The ***Primary Standards*** set levels of contaminants that may pose a health risk when present in drinking water supplies and are known or anticipated to occur in public water systems. The Primary Standards contaminants are divided into Inorganic Chemicals, Organic Chemicals, Radionuclides, and Microorganisms.

The ***Secondary Standards*** are non-enforceable guidelines that establish recommendations for contaminants that may cause cosmetic effects such as skin or tooth discoloration and aesthetic effects such as taste, odor, and color. The EPA recommends Secondary Standards for water treatment systems but does not *require* systems to comply.

Questions or Concerns?

YPG Resident Town Hall **meetings are held quarterly. For a current schedule visit** www.desertoasiscommunities.com.

YPG Town Hall **meetings are held intermittently during the year. When meetings are scheduled, they are announced via email.**

FAQ: Frequently Asked Questions!

- **What if my water tastes, smells, or looks strange?**
  While certain things can affect the flavor, odor, and appearance of your tap water, not all of them are necessarily harmful. Chlorine added for safety can sometimes affect taste. Contaminants like sulfur can impact the smell, while iron will cause discoloration and staining. The overall amount of total dissolved solids (TDS) in your tap water will affect the taste, smell, and appearance. While these issues are *not harmful*, they can certainly be a nuisance. The potentially harmful contaminants are monitored regularly and are included in this report.
- **Is bottled water safer and cleaner than tap water?**
  More than half of all bottled water comes from tap water that has been lightly treated. Some tap waters may not taste as pleasant as bottled waters; it does not mean the tap water is of poor quality. It may simply be due to chlorination or a higher mineral content. This means you could be wasting your money and creating unnecessary waste by drinking bottled water. Tap water, regulated by the EPA, is tested for contaminants more frequently than bottled water, which is regulated by the FDA.
- **How can I be sure my water is safe to drink?**
  The most trustworthy way to find out what's in your water and its safety is to send samples to a state-certified lab and have it tested. You can trust that YPG does this and follows all state, federal, and Army regulations for providing safe drinking water. If public water is ever unsafe to drink, the water system is obligated by law to inform its water users. In this case, no news is good news!
- **Are there filters that I can use?**
  Due to the complexity of our installation, tap filters are NOT recommended at YPG. The lack of proper upkeep can create an opportunity for harmful bacteria to grow, creating a problem that wasn't there previously. All tap water YPG provides is safe to consume. Please review the data provided if you have concerns. If you choose to install a filter within your home, please follow manufacturer guidelines for replacing filters.
- **Who regulates the water we drink and where samples are taken?**
  The EPA, along with ADEQ, and the U.S. Army are in charge of overseeing the water that comes out of your taps within YPG. The EPA prescribes very specific rules that dictate where we sample for contaminants (both within buildings and at the water treatment plant). These rules seek to protect public health and tell us where to sample according to federal regulations. These selected sample locations are tracked and kept on file with ADEQ.
- **What are the recent EPA updates to drinking water regulations for PFAS?**
  The EPA's new PFAS rule introduces significant changes to improve the clarity and accessibility of drinking water quality reports. However, these updates will not impact reports for 2024. Previously, the EPA had established health advisories (HAs) for PFAS, with interim levels set at 0.004 parts per trillion (ppt) for PFOA and 0.02 ppt for PFOS, which are non-enforceable guidelines. YPG completed Army-required monitoring in November 2023 and those results are provided in this report. The new Maximum Contaminant Levels (MCLs), which are legally enforceable, are set at 4.0 ppt for both PFOA and PFOS. These MCLs will become enforceable starting in 2029, giving public water systems time to comply with the new standards. Initial monitoring for PFAS must be completed by April 2027, marking the transition to compliance monitoring.

What We Do at YPG

At YPG we monitor our community water system for every federally regulated contaminant. The contaminants listed on pages 6-7 are ones which were detected in your water; there are many additional contaminants that were monitored for but were not detected in your water and therefore are not listed in this report. Drinking water samples are collected from the treatment plant at the entry point to the distribution system (EPDS) and from water taps in the service area as required by federal regulations. Samples are sent to an Arizona Department of Health Services (ADHS) and EPA accredited laboratory for analysis. Results for the most recent monitoring through the end of 2024 for each contaminant are provided in this CCR.

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

ADEQ has the authority to enforce federal regulations regarding drinking water. The results are reported to ADEQ and also kept on file by the YPG Environmental Sciences Division.

YPG follows all federal regulations under the Safe Drinking Water Act.

About Lead and Copper

Lead and copper are rarely found in source waters; however, both of these metals can enter your water by leaching from household plumbing. Water that sits in your pipes for long periods may dissolve tiny amounts of lead and/or copper into household water.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

YPG is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. While HCA monitoring consistently shows levels well below the Action Level (AL), due to the age of some homes it is reasonable to assume there are outdated plumbing materials throughout the distribution system that could contribute to the levels of lead and/or copper.

Corrosion of pipes, plumbing fittings and fixtures may cause metals, including lead and copper, to enter drinking water. To assess corrosion of lead and copper, HCA conducts tap sampling for lead and copper at selected sites every 3 years as required by the rule. HCA treats water using blended phosphates and soda ash to control corrosion.

Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by Oct 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. Please contact Angela Ballinger, Safe Drinking Water Program Manager, at **928-328-2977** or **angela.m.ballinger.civ@army.mil** if you would like to view or obtain more information about the lead service line inventory, more information about your residence/building components, or results for lead sampling that has been done.

If you are concerned about lead in your water, you may choose 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 at **1 (800) 426-4791** or at **www.epa.gov/safewater/lead**.

Facts About Total Coliform Bacteria

Coliform bacteria are naturally present in the environment and are generally not harmful. Coliform bacteria may occur in soil, vegetation, animal waste, sewage, and surface waters.

YPG Howard Cantonment Area routinely tests for the presence of coliform bacteria as an indicator of the sanitary quality of drinking water.

HCA analyzed 48 coliform samples in 2024, zero of which were positive for total coliform bacteria. The maximum allowed by EPA for coliforms is one positive in any month.

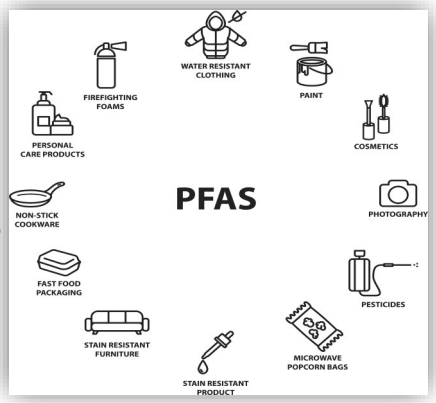
A positive coliform test result does not necessarily mean a maximum contaminant level (MCL) has been exceeded, or that there is a problem in the water system.

More information and general guidelines on ways to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline at **1(800) 426-4791** or at **https://www.epa.gov/ground-water-and-drinking-water**.

For more information on protecting your source water, please visit https://www.epa.gov/sourcewaterprotection

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS are man-made chemicals added to many industrial and consumer products to improve their performance because these chemicals increase resistance to heat, stains, water, and grease. Commercial and consumer use of PFAS started in the 1950s. PFAS are used to prevent food from sticking to cookware, making sofas and carpets resistant to stains, and making clothes and mattresses more waterproof. PFAS are also found in food packaging and firefighting materials.



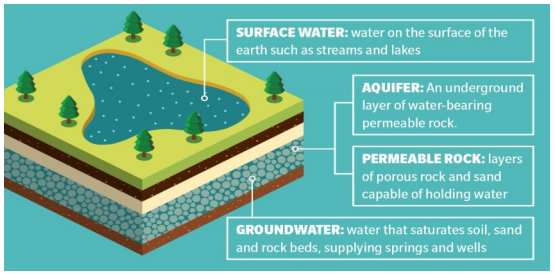
PFAS can become a contaminant if found in public water systems, drinking water wells, soil, surface and groundwater and outdoor air near industrial sources or areas with frequent PFAS use, and other areas in the environment.

The U.S. Army has required YPG to sample drinking water for PFAS since 2016. The most recent results are provided to you on Page 7. To learn more about this group of chemicals, we encourage you to visit the ADEQ website at https://www.azdeq.gov/pfas-resources. You may also read the ADEQ-provided "PFAS 101 Fact Sheet" or view ADEQ's Introduction to PFAS video on YouTube at https://www.youtube.com/watch?v=t44kSh0uKXE.

If you have any questions, please contact **Angela Ballinger**, **(928) 328-2977**, **angela.m.ballinger.civ@army.mil**.

The Source of Your Drinking Water

Our water supply for HCA is derived from groundwater pumped from the Coarse Gravel Aquifer, which lies in the ancient streambed of the Colorado River. The water is pumped from two wells that range in depth from 140 feet to 145 feet. Although the minimum depth to groundwater is approximately 29 feet, our tap water is drawn from between 105 feet to 130 feet below the ground surface. The pumped water is then treated through an electrodialysis reversal (EDR) unit to provide quality drinking water. Additionally, our water is chlorinated (treatment technique) to help prevent the growth of disease causing organisms, such as viruses and bacteria.



Arizona Source Water Assessment Program

Making the water safe to drink starts by protecting the place it comes from. We work with state scientists at the Arizona Department of Environmental Quality (ADEQ) to examine water at its source to look for possible pollutants. This is called a Source Water Assessment (SWA). Based on the information available at the time of the assessment on the hydrogeology and land uses around the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a low vulnerability designation for the degree to which this public water system drinking water source(s) are protected. A low vulnerability 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 information can be found on ADEQ's website: https://azdeq.gov/source-water-protection

Protecting Your Water

Protecting the sources of drinking water helps protect our health. It's everyone's responsibility; here are a few ways you can help:

- Eliminate excess use of lawn and garden fertilizers and pesticides—they contain hazardous chemicals that can reach your drinking water source
- Pick up after your pets
- Dispose of chemicals properly; take used motor oil to a recycling center

Low Usage Water Quality

Telework and long weekends can disrupt normal water use of many buildings on Army installations.

Lack of use can cause water quality issues:

- Color, odor and taste changes
- Higher than normal levels of lead and/or copper
- Low levels of disinfectant

How Can You Help?

- Flush each faucet point or source for 3-5 minutes
- Flush both hot and cold water at faucets
- For any location with observed discolored or odorous water:
  - Flush for an additional 5 minutes or until the water is clear and without odor. If the water does not run clear without odor after 10 minutes of flushing, submit a water quality complaint using the installation water complaint procedure.

For any ongoing issues, please contact Angela Ballinger, Safe Drinking Water Program Manager at (928) 328-2977 or angela.m.ballinger.civ@army.mil

Information on Detected Contaminants

Many people are concerned about drinking water issues identified by the news media. Elements such as arsenic and mercury, pesticides such as Aldrin and DDT, and bacteria such as E. coli have increased public concerns about the safety of the water they drink.

Our water system provided drinking water that met all regulatory requirements during 2024.

2024 Howard Cantonment Area Drinking Water Results

Parameter	Units	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	HCA Highest Result	Range/ Average	Exceeded Standard	Sample Date	Monitoring Frequency	Major Sources in Drinking Water	Health Effects
PRIMARY STANDARDS - Mandatory Health-Related Standards The National Primary Drinking Water Regulations (NPDWR) are legally enforceable primary standards and treatment techniques that apply to public water systems. Primary standards and treatment techniques protect public health by limiting the levels of contaminants in drinking water.										
Disinfection Residuals and Disinfection By-Products - Tested at customer taps.										
Total Chlorine Residuals	ppm (mg/L)	MRDL = 4.0	MRDLG = 4.0	1.64	0.12 - 1.64 Average: 0.67	No	Monthly	Monthly	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Total Trihalomethanes (TTHM)	ppb	80	N/A	15.0	8.9 - 15.0	No	July 2024	Annually	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Haloacetic Acids (HAA5)	ppb	60	N/A	3.3	2.0 - 3.3	No	July 2024	Annually	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Metals, As a By-Product of Corrosion of Consumer's Plumbing - Tested at customer taps.										
Lead	ppb	AL = 15	0	Highest Level Detected: 25.0 90th Percentile: 1.1	0.29 - 25.0	No[1]	August 2024	Once every 3 years	Corrosion of household plumbing systems; Erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Copper	ppm	AL = 1.3	1.3	Highest Level Detected: 0.44 90th Percentile: 0.40	0.15 - 0.44	No	August 2024	Once every 3 years	Corrosion of household plumbing systems; Erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.
Inorganic Chemicals - Tested after treatment.										
Arsenic[1]	ppb	10	0	1.2	Single Sample	No	January 2023	Once every 9 years	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Fluoride	ppm	4.0	4.0	0.51	Single Sample	No	March 2020	Once every 9 years	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Nitrate[2]	ppm	10	10	0.055	Single Sample	No	April 2024	Once every 3 years	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
Radionuclides - Tested after treatment.										
Uranium	ug/L	30	0	2.3±0.7	Single Sample	No	March 2023	Once every 3 years	Erosion of natural deposits	Increased risk of cancer, kidney toxicity.

[1]The EPA has established an action level, or concentration of lead and copper, that is based on a 90th percentile of all samples during a monitoring period. In other words, at least 90 percent of all samples should be below the action level concentration. While a single building at HCA did show elevated levels of lead, this did not cause an action level exceedance. The individual tap was replaced and resampled to ensure occupant safety.

2024 Howard Cantonment Area Drinking Water Results

Parameter	Units	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	HCA Highest Result	Range/ Average	Exceeded Standard	Sample Date	Monitoring Frequency	Major Sources in Drinking Water	Health Effects
**PRIMARY STANDARDS – Mandatory Health-Related Standards The following contaminants are Primary Standards which YPG monitored for, however were NOT detected in your water. Reporting non-detected contaminants is not required, but YPG is reporting for your knowledge and awareness.										
Microbiological - Tested at customer taps.										
Total Coliform Bacteria	# positive coliforms	One positive coliform sample per month	0	0	0	No	Monthly	Monthly	Naturally present in the environment	Coliforms are bacteria that indicate that other, potentially harmful bacteria may be present.
Fecal Coliform Bacteria (E. coli)	# positive E. coli	0	0	N/A, All monitoring results during 2024 were ABSENT for Total Coliform; analysis for Fecal Coliform was not required.				Monthly, if required	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Synthetic Organic Compounds (Last tested March/April 2024): 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 March 2024): 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, Xylenes

Inorganic Chemicals (Last tested March 2020): Antimony, Asbestos, Barium, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Mercury, Nitrite, Selenium, Thallium

Parameter	Units	Secondary Standard (EPA's Recommended Highest Level)	HCA Highest Level	Range/ Average	Exceeded Secondary Standard	Sample Date	Monitoring Frequency	Major Sources in Drinking Water	Noticeable Effects Above the Secondary MCL
SECONDARY STANDARDS – Aesthetic Standards National Secondary Drinking Water Regulations are non-enforceable guidelines regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, some states may choose to adopt them as enforceable standards.									
pH	NA	6.5-8.5	7.63	7.22 – 7.63 Average: 7.43	No	Monthly	Monthly in conjunction with Total Coliform	The pH level of your drinking water reflects how acidic it is. pH stands for "potential of hydrogen," referring to the amount of hydrogen found in a substance (in this case, water). pH is measured on a scale that runs from 0 to 14. Seven is neutral, meaning there is a balance between acid and alkalinity.	Low pH: bitter metallic taste; corrosion. High pH: slippery feel; soda taste; deposits.
Total Dissolved Solids (TDS)	mg/L	500	297	200 - 297 Average: 225	No	Intermittent throughout each month	Averaged monthly	TDS represents the total concentration of dissolved substances in water. TDS is made up of inorganic salts, as well as a small amount of organic matter. Common inorganic salts that can be found in water include calcium, magnesium, potassium and sodium, which are all cations, and carbonates, nitrates, bicarbonates, chlorides and sulfates, which are all anions. Cations are positively charged ions and anions are negatively charged ions.	Hardness; deposits; colored water; staining; salty taste.
Unregulated Contaminants									
Sodium	ppm	N/A	44	Single Sample	N/A	March 2023	Once every 3 years	Sodium is the sixth most abundant element on Earth and is widely distributed in soils, plants, water, and foods. Most of the world has significant deposits of sodium-containing minerals. Groundwater typically contains higher concentrations of minerals and salts than do surface waters.	Sodium is not currently a regulated substance in drinking water; however, it is of interest to some people due to individual health concerns.

Parameter	Units	EPA's Recommended Highest Level	HCA Highest Level	Range/ Average	Exceeded Recommended Level	Sample Date	Monitoring Frequency	Major Sources in Drinking Water	Noticeable Effects Above the Recommended Level
Unregulated Contaminants									
Per- and Polyfluoroalkyl Substances (PFAS)	ppt	70 (Lifetime Health Advisory; for PFOA/ PFOS only)	1.8	ND—1.8	No	November 2023	Once every 2 years	There are a variety of ways that people can be exposed to these chemicals and at different levels of exposure. Drinking water can be a source of exposure in communities where these chemicals have contaminated water supplies. Such contamination is typically localized, for example, an industrial facility where PFAS were produced or used, or an oil refinery, airfield or other location at which PFAS were used for firefighting.	Scientists are still learning about the potential health effects from PFAS exposure. Some studies have shown that certain PFAS may increase the risk of cancer, affect the immune system and impact children's development.

Definitions

90th Percentile The value in a data set in which 90 percent of the set is less than or equal to this value.

Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Contaminant Any physical, chemical, biological, or radiological substance or matter in water.

Electrodialysis Reversal (EDR) An electrodialysis reversal water desalination membrane process that has been commercially used since the early 1960s. An electric current migrates dissolved salt ions, including fluorides, nitrates and sulfates, through an electrodialysis stack consisting of alternating layers of cationic and anionic ion exchange membranes. Periodically, the direction of ion flow is reversed by reversing the polarity of the applied electric current.

Maximum Contaminant Level (MCL) The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Secondary MCLs are set to protect the odor, taste, and appearance of 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. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Abbreviations/Acronyms

<	Indicates the contaminant was not detected or was less than the laboratory reporting limit
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
AL	Action Level
CCR	Consumer Confidence Report; annual water quality report
CDC	Center for Disease Control
EDR	Electrodialysis reversal
EPA	United States Environmental Protection Agency
EPDS	Entry point to the distribution system
FDA	U.S. Food and Drug Administration
HA	Health advisory
HCA	Howard Cantonment Area
LSL	Lead Service Line
MCL	Maximum Contaminant Level
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
N/A	Not Applicable: no State or Federal standards are established
ND	Not Detected: sample was taken and chemical was not detected
NPDWR	National Primary Drinking Water Regulation
pCi/L	picocuries per Liter; a measure of radioactivity in water
PFAS	Per- and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonate
ppb	Parts per billion
ppm	Parts per million
ppt	Parts per trillion
PWS	Public water system
SDWA	Safe Drinking Water Act; federal law that sets forth drinking water regulations
SWAP	Source Water Assessment Program
TDS	Total dissolved solids
USAG	United States Army Garrison
YPG	Yuma Proving Ground

Please share this information with anyone who drinks this water (or their guardians), especially those who may not have received this report directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand, mail, email, or another method.

Would you like an electronic copy of this report?

Please visit
https://ypg-environmental.com/files/HCA_2024_CCR.pdf

For more information on anything relating to YPG drinking water, please contact Angela Ballinger, Safe Drinking Water Program Manager.

(928) 328-2977
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ONE PART PER MILLION (PPM) IS LIKE…

- 1 second in 11.6 days
- 1 teaspoon in 1,302 gallons
- 1 drop in 13.6 gallons
- 1 milligram per liter (mg/L)

ONE PART PER BILLION (PPB) IS LIKE…

- 1 second in 31.7 years
- 1 teaspoon in 1.3 million gallons
- 1 drop in 13,563 gallons
- 1 microgram per liter (µg/L)

ONE PART PER TRILLION (PPT) IS LIKE…

- 1 second in 31,710 years
- 1 teaspoon in 1.3 billion gallons
- 1 drop in 13,563,368 gallons
- 1 nanogram per liter (ng/L)