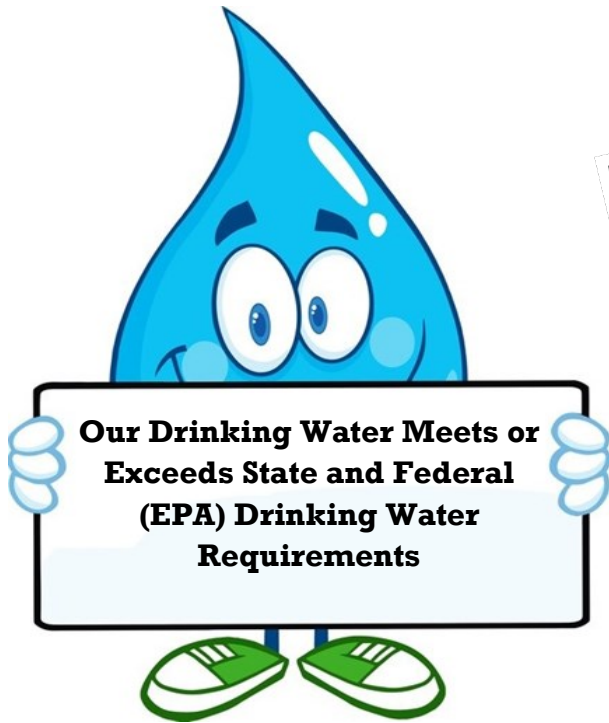


# 2023 Annual Drinking Water Quality Report Consumer Confidence Report (CCR) PWS ID: 1250029





**This report is for the period of January 1 to December 31, 2023** unless otherwise noted. It is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. For more information regarding this report contact Albert Guajardo Sr., Environmental Protection Specialist at (361) 516-6044.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (361) 516-6044.

**Since the system is not considered vulnerable to certain types of contamination; some of our data, though representative, may be more than one year old.** Violations and Enforcement Actions, if any, are also included in this report.

### **Our Drinking Water is Regulated**

**All drinking water may contain contaminants:** When drinking water meets federal standards, there may not be any health benefits to purchasing bottled water or point-of-use devices. Drinking water, including bottled water, may reasonably be expected to contain small amounts of contaminants. Presence of contaminants does not necessarily indicate a health risk. For more information about contaminants and potential health effects call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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. FDA regulations establish limits for contaminants in bottled water which must provide for the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact (361) 516-6044.

## Information About Your Drinking Water

**Special notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:** You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

**Source of 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 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 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.
- \* **Organic 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 storm water runoff, and septic systems.
- \* **Pesticides and herbicides**, which may come from a variety of sources such as agriculture or urban storm water runoff, and residential uses.
- \* **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

### Information About Secondary Contaminants

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondary contaminants are not required to be reported in this document but they may greatly affect the appearance and taste of your water. For more information on taste, odor, or color of drinking water, please contact Albert Guajardo Sr., Environmental Protection Specialist at (361) 516-6044.

## Definitions and Abbreviations

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

**Action Level Goal (ALG):** The Level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Gross Alpha (No Abbreviation):** Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.

**Health Advisory (HA):** HA values/levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations (e.g., 1 day, 10 days, a lifetime).

**Level 1 Assessment::** A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**MFL:** Million fibers per liter (a measure of asbestos)

**mrem:** millirems per year (a measure of radiation absorbed by the body).

**ng/L:** nanogram per liter, which is a measure of density.

**Not Applicable (na):** Does not apply or not available.

**NTU:** Nephelometric turbidity units (a measure of turbidity)

**pCi/L:** Picocuries per liter (a measure of radioactivity)

**ppb:** parts per billion or micrograms per liter – or one ounce in 7,350,000 gallons of water.

**ppm:** parts per million or milligrams per liter - or one ounce in 7,350 gallons of water.

**EPA:** United States Environmental Agency

**FDA:** United States Food and Drug Administration

**Level 2 Assessment:** A level 2 assessment is 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 have been found in our water system on multiple occasions.

**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 margin of safety.

**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.

**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.

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

**ppq:** parts per quadrillion, or picograms per liter (pg/L)

**ppt:** parts per trillion, or nanograms per liter (ng/L)

**PWS ID#:** Public Water System Identification Number

**TT Treatment Technique:** A required process to reduce the level of a contaminant in drinking water.

**ug/L:** micrograms per liter of water. One thousands micrograms per liter is equivalent to 1 milligram per liter. This measure is equivalent to parts per billion (ppb)

**Violation (No Abbreviation):** Failure to meet a Drinking Water Quality Regulation.

## Information About Ground Water Source

### NAVAL AUXILIARY LANDING FIELD ORANGE GROVE PWS ID # 1250028

Naval Auxiliary Landing Field Orange Grove (NALFOG) is an auxiliary landing airfield owned by the U.S. Navy. It operates under the command of Naval Air Station Kingsville and is located approximately nine miles north of Alice, Texas, in Jim Wells County. The facility normally operates on a schedule of eight hours per day five days per week. The facility has a small water system where drinking water is produced by one active well drilled into the Evangeline Aquifer. The treatment process consists of adding disinfection (free chlorine) to the groundwater before entering the distribution system.

Inorganic Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contaminants
Arsenic	04/23/2021	7	7 - 7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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.

Barium	2021	0.0802	0.0802 - 0.0802	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2021	1.23	1.23 - 1.23	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2023	0.1	0.1 - 0.1	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	2021	5	5 - 5	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

**The Texas Commission on Environmental Quality (TCEQ) completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact Albert Guajardo Sr., Environmental Protection Specialist at (361) 516-6044.**

### Disinfectant Residual Table

Year	Disinfectant	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Source of chemical
2023	Chlorine (Free)	2.20	0.76 - 3.70	4.0	4.0	ppm	Water additive (Disinfectant) used to control microbes.

This is a summary of water quality data for the Naval Auxiliary Landing Field Orange Grove (NALFOG) Public Water System. The list includes parameters which NALFOG currently tests for, in accordance with Federal and State Water Quality Regulations. The frequency of testing varies depending on the parameters and are in compliance with established standards.

Some specific chemical contaminants such as Arsenic, Barium, Fluoride, and Selenium are unlikely to change significantly with time. Such contaminants are tested within fairly long intervals and are listed below with the most current information.

## Lead and Copper

**90th Percentile Level**– This means that the concentration of lead and copper must be less than or equal to the action level in at least 90% of the samples collected. The value is obtained after disregarding 10% of the samples taken that had the highest levels. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result which represents 10% of the samples.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2021	1.3	1.3	0.24	0 out of 5	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2021	0	15	5.4	0 out of 5	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Naval Auxiliary Landing Field Orange Grove currently has a required lead and copper tap sampling frequency of every 3 years.

## Lead in Drinking 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. 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 <http://www.epa.gov/safewater/lead>.

# 2023 Water Quality Test Results

Disinfectants and Disinfection By-products	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	06/20/2022	8.8	8.8 - 8.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) *	06/20/2022	51.1	51.1 - 51.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

\*The value in the Highest Level or Average Detected column is the highest average of all TTHM and HAA5 sample results collected at a location over a year.

**NAVAL AUXILIARY LANDING FIELD ORANGE GROVE  
(NALFOG)  
Per-and polyfluoroalkyl substances (PFAS)  
TESTING RESULTS**

**What are per-and polyfluoroalkyl substances and where do they come from?**

Per-and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industrial and consumer products around the globe, including in the U.S., the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) currently used for fighting petroleum fires at airfields and in industrial fire suppression processes. PFAS chemicals are persistent in the environment, and some are persistent in the human body - meaning they do not break down and they can accumulate over time.

**Is there a federal or regulation for PFAS in drinking water?**

On April 10, 2024, the US EPA established MCLs for a subset of PFAS chemicals.

Compound	MCL
PFOA	4.0 parts per trillion (ppt) (also expressed as ng/L)
PFOS	4.0 ppt
PFHxS	10 ppt
PFNA	10 ppt
HFPO-DA (Commonly known as GenX Chemicals)	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless)  Hazard Index

EPA requires implementation of sampling in accordance with the new MCLs within three years of the publication date and implementation of any required treatment within five years.

These limits did not apply for the 2023 calendar year because they had not been published. However, the DoD proactively promulgated policies to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every two years. The DoD policy states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than the 2016 EPA health advisory (HA) level of levels less than 70 ppt but above the 4 ppt level draft at the time of policy publication), DoD committed to planning for implementation of the levels once EPA's published MCLs take effect.

**Has NALF Orange Grove tested its water for PFAS in 2023?**

Yes. In March 20, 2023 samples were collected from the galley's sink in building 24.

**PFAS Detected but below the new PFAS MCLs**

We are informing you that one of the 29 PFAS compound covered by the sampling method were detected above the method reporting limit (MRL)). The results are provided in the following table . EPA does not have a HA or MCL for all of these compounds at this time, PFOA, PFOS, PFNA, PFHxS, PFBS, and Gen X were not detected. As the regulated chemicals were below the new MCLs, there is no immediate cause for concern, but we will continue to monitor the drinking water closely.

**2023 NALFOG PFAS TEST RESULTS**  
**Collected 20 March 2023**

<b>Parameter</b>	<b>Method</b>	<b>Results (ng/L)</b>	<b>Practical Quantification Limit (PQL) AKA Method Report Limit (MRL) (ng/L)</b>	<b>Method Detection Limit (MDL) (ng/L)</b>
11 CI-PF3OUdS	533	0.45U	2.0	0.45
4:2 FTS	533	0.58U	2.0	0.58
<b>6:2 FTS</b>	<b>533</b>	<b>7.8</b>	<b>4.0</b>	<b>3.6</b>
8:2 FTS	533	0.49U	2.0	0.49
9CI-PF3ONS	533	0.51U	2.0	0.51
ADONA	533	0.44U	2.0	0.44
HFPO-DA	533	0.75U	2.0	0.75
NFDHA	533	0.30U	2.0	0.30
PFBA	533	0.63U	2.0	0.63
PFEESA	533	0.36U	2.0	0.36
PFHpS	533	0.41U	2.0	0.41
PFMBA	533	0.27U	2.0	0.28
PFMPA	533	0.34U	2.0	0.34
PFPeA	533	0.32U	2.0	0.32
PFPeS	533	0.36U	2.0	0.36
NEtFOSAA	537.1	0.88U	1.9	0.88
NMeFOSAA	537.1	1.5U	1.9	1.5
Perfluorobutanesulfonic acid	533	0.44U	2.0	0.44
Perfluorodecanoic acid	533	0.32U	2.0	0.32
Perfluorododecanoic acid	533	0.55U	2.0	0.55
Perfluoroheptanoic acid	533	0.45U	2.0	0.45
Perfluorohexanesulfonic acid	533	0.38U	2.0	0.38
Perfluorohexanoic acid	533	0.32U	2.0	0.32
Perfluorononanoic acid	533	0.34U	2.0	0.34
Perfluorooctanesulfonic acid (PFOS)	533	0.36U	2.0	0.33
Perfluorooctanoic acid (PFOA)	533	0.32U	2.0	0.32
Perfluorotetradecanoic acid	537.1	1.8U	1.9	1.8
Perfluorotridecanoic acid	537.1	1.6U	1.9	1.6
Perfluoroundecanoic acid	533	0.43U	2.0	0.43

**DoD Policy Health Advisory (HA) for PFOS/PFOA Total = 70 ng/L**  
**PFOA/PFOS Total: Not Detected**

Notes:

J - Estimated concentration above the adjusted method detection limit and below the adjusted method reporting limit

U - Indicates the compound was analyzed for, but not detected.

HA - health advisory value

**Analytical results show that of the 29 PFAS parameters analyzed, one was detected above the detection limit (refer to the yellow highlights in the table above). All remaining parameters were not detected.**



**A REMINDER TO CONSERVE WATER**

**Most of us take for granted that we will always have enough water. Unfortunately, our area often experiences long periods of drought. We encourage employees and tenants to continue to conserve water as we strive to provide clean, safe, and reliable water here at our installation.**



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