

# 2023 Consumer Confidence Report for Public Water System ISAACSON MUD

This is your water quality report for January 1 to December 31, 2023

ISAACSON MUD provides Purchased Ground Water from  
GULF COAST AQUIFER located in WHARTON COUNTY.

Name: ISAACSON MUNICIPAL UTILITY DISTRICT

Phone: 979.543.6844

Este reporte incluye información importante sobre el agua para tomar.

Para asistencia en español, favor de llamar al telefono (979)543-6844.

## Definitions and Abbreviations

Definitions and Abbreviations

The following tables contain scientific terms and measures, some of which may require explanation.

Action Level:

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must

Avg:

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

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.

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.

MCL (Maximum Contaminant Level

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.

MCLG (Maximum Contaminant Level Goal)

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.

MRDL

(Maximum residual disinfectant level)

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.

MRDLG

(Maximum residual disinfectant level goal)

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.

MFL:

million fibers per liter (a measure of asbestos)

mrem:

millirems per year (a measure of radiation absorbed by the body)

na:

not applicable.

NTU:

nephelometric turbidity units (a measure of turbidity)

pCi/L:

picocuries per liter (a measure of radioactivity)

ppb:

micrograms per liter or parts per billion

ppm:

milligrams per liter or parts per million

ppq

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

ppt

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

Treatment Technique or TT

A required process intended to reduce the level of a contaminant in drinking water.

## Information about your 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.

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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

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.
- Pesticides and herbicides, which 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 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 the system's business office.

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).

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. We are responsible for providing high quality drinking water, but we 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. If you are concerned about lead in your water, you may wish 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 or at <http://www.epa.gov/safewater/lead>.

## Information about Source Water

ISAACSON MUD purchases water from CITY OF EL CAMPO. The CITY OF EL CAMPO provides purchase ground water from GULF COAST AQUIFER located in WHARTON COUNTY.

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact :

**JOE ZAMORA JR (MUD WATER OPERATOR) 979.240.0457 [izamora@jzutilities.com](mailto:izamora@jzutilities.com)**

**JERRY LEWIS (City of El Campo Director of Utilities) 979.543.5075 [jlewis@cityofelcampo.org](mailto:jlewis@cityofelcampo.org)**

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
<b>Copper</b>	09/13/2022	1.3	1.3	0.0559	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b>	09/13/2022	0	15	1.4	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

## 2023 Water Quality Test Results

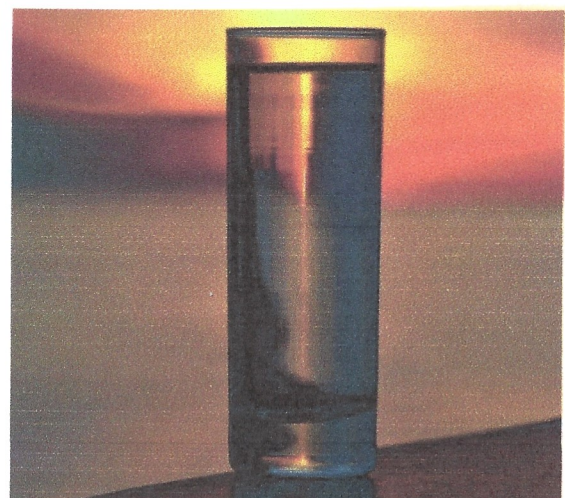
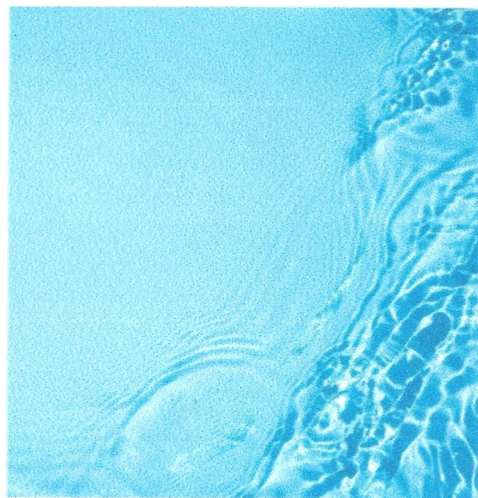
Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Total Trihalomethanes (TTHM)</b>	2023	1	1.2 - 1.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

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

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Nitrate [measured as Nitrogen]</b>	2023	0.34	0.34 - 0.34	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

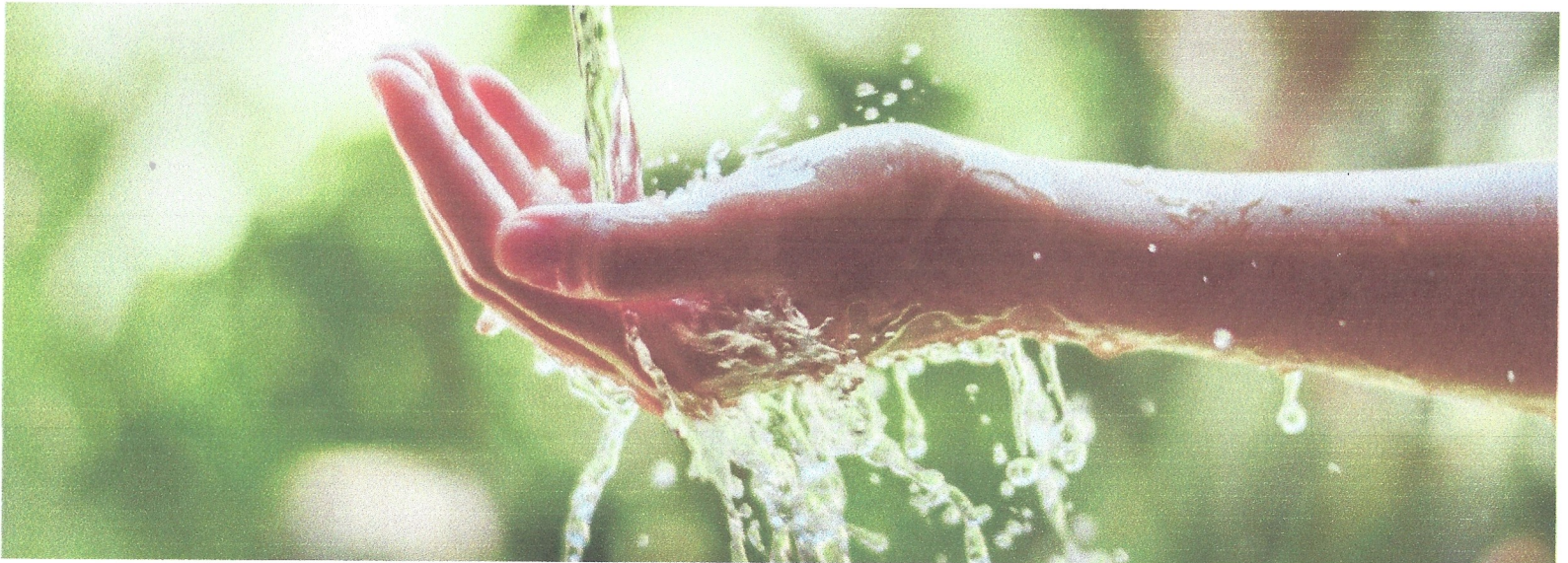
## **Disinfectant Residual**

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
<b>FREE CHORINE</b>	2023	1.05	0.59 – 1.44	4	4	ppm	N	Water additive used to control microbes.



# ANNUAL WATER QUALITY REPORT

Reporting Year 2023



*Presented By*  
**City of El Campo**

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (979) 541-5075.



PWS ID#: TX2410002



## Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies.

Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

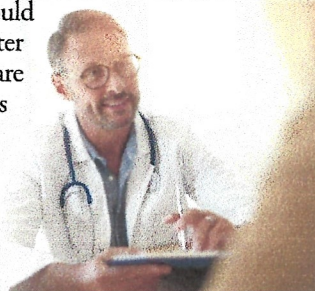
## Community Participation

You are invited to attend the El Campo City Council meetings and voice any concerns you may have about your drinking water. The city council meets the second and fourth Monday of every month at 6:00 p.m. at City Hall, 315 East Jackson Street. Please call (979) 541-5000 to confirm meeting times.

## Important Health Information

While your drinking water meets the U.S. Environmental Protection Agency's (U.S. EPA) standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. 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 linked to other health effects such as skin damage and circulatory 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; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791.



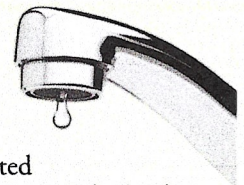
## Where Does My Water Come From?

The City of El Campo Water Department customers are fortunate because they enjoy an abundant water supply from five wells. These wells draw water from a combination of the Angelina and Chicot groundwater formations, which range in depth from 750 to 1,400 feet. Combined, these wells are capable of producing about eight million gallons of high-quality drinking water every day. In 2023 your water department produced and delivered to your taps 660,679,000 gallons of water - an average of 1,810,079 gallons per day! These numbers indicate that the current water supply should be adequate to provide the City of El Campo with quality drinking water for several years to come.

## Source Water Assessment

Source water susceptibility Assessment for your drinking water source is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

For more information about your source of water, please visit the source water assessment viewer at [tceq.texas.gov/gis/swaview](https://tceq.texas.gov/gis/swaview). For further details about source water assessments, please visit Drinking Water Watch at [dww2.tceq.texas.gov/DWW/](https://dww2.tceq.texas.gov/DWW/).



## What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

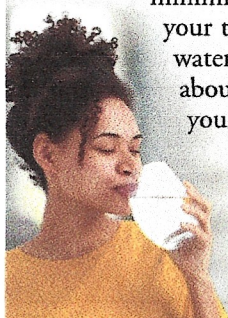
Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit [bit.ly/3Z5AMm8](http://bit.ly/3Z5AMm8).

## Lead in Home Plumbing

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. This water supply is responsible for providing high-quality drinking water, but we 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 two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish 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 (800) 426-4791 or [epa.gov/safewater/lead](http://epa.gov/safewater/lead).



## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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 be naturally occurring 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, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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 our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

“When the well is dry, we know the worth of water.”  
—Benjamin Franklin

**QUESTIONS?** For more information about this report, or for any questions relating to your drinking water, please call Jerry Lewis, Director of Utilities, at (979) 541-5076.

## Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board for 2023, our system lost an estimated 63,501,916 gallons of water. If you have any questions about the water loss audit, please call (979) 541-5076.

### Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:



- Operating and maintaining equipment to purify and clarify water.
- Monitoring and inspecting machinery, meters, gauges, and operating conditions.
- Conducting tests and inspections on water and evaluating the results.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

## BY THE NUMBERS



**5.1** TRILLION

The dollar value needed to keep water, wastewater, and stormwater systems in good repair.



**12** THOUSAND

The average amount in gallons of water used to produce one megawatt-hour of electricity.



**2**

How often in minutes a water main breaks.



**47.5** TRILLION

The amount in gallons of water used to meet U.S. electric power needs in 2020.



**1.7** TRILLION

The gallons of drinking water lost each year to faulty, aging, or leaky pipes.

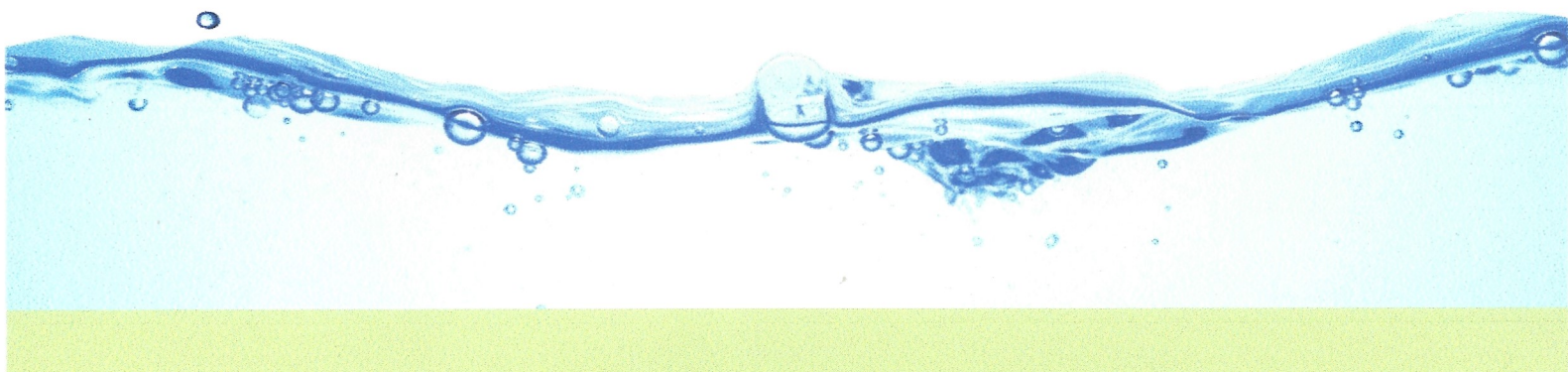
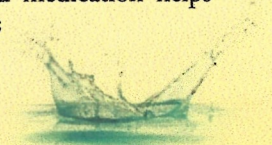


**33**

The percentage of water sector employees who will be eligible to retire in 2033.

### Think before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit [bit.ly/3IeRyXy](https://bit.ly/3IeRyXy).



## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set (unless a TOC violation is noted in the Violation column).

REGULATED SUBSTANCES										
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE			
Alpha Emitters (pCi/L)	2023	15	0	4	ND-4	No	Erosion of natural deposits			
Arsenic (ppb)	2023	10	0	6.7	6.4-6.7	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes			
Barium (ppm)	2023	2	2	0.226	0.203-0.226	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits			
Chlorine (ppm)	2023	[4]	[4]	1.31	0.91-1.81	No	Water additive used to control microbes			
Fluoride (ppm)	2023	4	4	0.34	0.31-0.34	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories			
Haloacetic Acids [HAA5]-Stage 2 (ppb)	2023	60	NA	1.0	ND-1.0	No	By-product of drinking water disinfection			
Nitrate (ppm)	2023	10	10	1	0.32-0.50	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits			
Selenium (ppb)	2023	50	50	12.2	7.4-12.2	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines			
TTHMs [total trihalomethanes]-Stage 2 (ppb)	2022	80	NA	6.5	ND-6.5	No	By-product of drinking water disinfection			
Uranium (ppb)	2023	30	0	1.8	1.6-1.8	No	Erosion of natural deposits			

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.13	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2022	15	0	1.3	0/30	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).