2024 Annual Water Quality Report

For the period of January 1 through December 31, 2024

PWS ID Number: TX2390001 **Telephone: 979-337-7400**

This report 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: **Jerry Saldivar, Water Systems Superintendent, at 979-337-7434**.

El propósito de este informe es para brindarle información importante sobre su agua potable y los esfuerzos realizados por nuestro sistema de agua para proporcionar agua potable segura. Para asistencia en español, favor de llamar al teléfono (979) 337-7400.

The source of drinking water used by the City of Brenham is Surface Water from Lake Somerville in Burleson County.

Information about Source Water Assessments

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Jerry Saldivar. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:
http://www.tceq.texas.gov/gis/swaview

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww2.tceq.texas.gov/DWW/

Public Participation Opportunities

Date: July 18, 2025
Time: 1:30 PM
Location: Public Utilities Conference Room
200 W. Vulcan St.
Brenham, TX 77833
Phone: 979-337-7400
To learn more about future public meetings concerning your drinking water, or to request one, please call Public Utilities at 979-337-7400.

Water Loss Audit Results

In the water loss audit submitted to the Texas Water Development Board for the time period of January through December 2024, our system lost an estimated 91,234,653 gallons of water, which is 9.2% of the total gallons of water treated. If you have any questions about the water loss audit, please contact Jerry Saldivar at 979-337-7434.

Sources 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.

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 EPAs 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 Jerry Saldivar at 979-337-7432.

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

Lead and Copper Rules Revisions

The City of Brenham is working to identify service lines materials throughout the City owned water system and has determined < 2 % of service lines that connect to a residence, business, or structure to the water main are made from unknown materials that may consist of lead. Because these service line materials are unknown, there is the potential that some or all of the service lines could be made of lead or galvanized pipe

that was previously connected to lead. People living in homes with a lead or galvanized pipe previously connected to a lead service line have an increased risk of exposure to lead from their drinking water. The City of Brenham staff has concluded the inspection of approximately 98.2% of the services located on the City's water system and intends to inspect your service in the very near future to determine if your service has lead or galvanized piping. For information on the City of Brenham Unknown Service Lines:

https://cityofbrenham.online/qr-lslnotice

Lead Service Line Inventory

To find information on your service line or other service lines in your neighborhood please visit:

https://cityofbrenham.online/lsli

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, AND IMMUNO-COMPROMISED PERSONS

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 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.

Water Quality Test Results

Definitions & 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 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.

Level 1 Assessment: 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 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 or 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 Contaminant Level Goal or 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 or MRDL: The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal or 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 contamination.

MFL: million fibers per liter (a measure of asbestos).

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

NA: not applicable

ND – Non-Detect: A non-detect is an analytical sample where the concentration is deemed to be lower than could be detected using the method employed by the laboratory.

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 – or one ounce in 7,350,000 gallons of water.

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

ppq: parts per quadrillion, or pictograms 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.

2024 Regulated Contaminants Detected

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive Samples	Fecal Coliform or E. Coli Maximum Contaminant Level	Total Number of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1	1 positive monthly sample.	0	N	Naturally present in the environment.

Lead and Copper

Substance	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	7/31/22	1.3	1.3	0.021	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	7/31/22	0	15	0	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Total Organic Carbon

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 violations section.

Turbidity

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.29 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

Regulated Contaminants

Substance	Collection Date	Yearly Average	Lowest Single Sample	Highest Single Sample	MRDL	MRDLG	Units	Violation	Likely Source of Contamination
Disinfectants									
Chlorine Dioxide	2024	0.05	0.02	0.70	0.8	0.8	PPM	N	Water additive used to control microbes
Chloramine	2024	3.28	0.8	5.80	4.0	4.0	PPM	N	Water additive used to control microbes.

Substance	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Disinfection By-Products								
Chlorite	2024	0.346	0.0 - 0.346	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2024	29	12.0 - 25.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	46	22.9 - 88.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants								
Asbestos	1/21/2021	< 0.197	<0.197 - <0.197	7	7	7 MFL	N	The dissolution of asbestos-containing minerals and ores as well as from industrial effluents, atmospheric pollution, and A/C pipes in water- distribution systems.
Barium	2024	0.0768	0.0768 - 0.0768	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	1/18/2023	0.14	0.14 - 0.14	0.2	0.2	ppm	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.

Substance	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Inorganic Contaminants (Cont.)								
Fluoride	2024	0.68	0.68 - 0.68	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	2024	0.33	0.33 - 0.33	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite	1/10/2022	<0.05	<0.05 - <0.05	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants								
Beta/photon emitters	1/18/2023	7.4	7.4 -7.4	0	50	pCi/L*	N	Decay of natural and man-made deposits.
Synthetic Organic Contaminants (Including Pesticides and Herbicide)								
Simazine	2024	0.07	0 - 0.07	4	4	ppb	N	Herbicide runoff.
Secondary and Other Contaminants Not Regulated								
Aluminum	2024	0.279	0.279 - 0.279	0.2	0.2	ppm	N	Naturally occurring element
Calcium	2024	25.4	25.4 - 25.4	NA	NA	ppm	N	Naturally occurring element.
Chloride	2024	62	62 - 62	NA	NA	ppm	N	Naturally occurring element.
Hardness	2024	86.6	86.6 - 86.6	NA	NA	ppm	N	Naturally occurring calcium and magnesium.
Iron	2024	<0.01	<0.01 - <0.01	NA	NA	ppm	N	Corrosion of houshold plumbing systems; erosion of natural deposits.
Magnesium	2024	5.64	5.64 - 5.64	NA	NA	ppm	N	Naturally occurring element.
Manganese	2024	0.0033	0.0033 - 0.0033	0.05	0.05	ppm	N	Naturally occurring element.
Nickel	2024	0.001	0.001 - 0.001	NA	NA	ppm	N	Erosion of natural deposits.

* EPA considers 50 pCi/L to be the level of concern for beta particles

Substance	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Secondary and Other Contaminants Not Regulated (Cont.)								
pH	2024	9.60	7.66 - 9.60	NA	NA	SU	N	Measure of corrosivity of water.
Potassium	2024	7.07	7.07 -7.07	NA	NA	ppm	N	Naturally occurring element.
Silver	2024	<0.01	<0.01 - <0.01	0.1	0.1	ppm	N	Erosion of natural deposits; Discharge from refineries and factories
Sodium	2024	39.1	39.1 - 39.1	NA	NA	ppm	N	Naturally occurring element.
Sulfate	2024	46	46 - 46	300	300	ppm	N	Naturally occurring; common industrial byproduct; byproduct of oil field activity
Zinc	2024	<0.005	<0.005 - <0.005	5	5	ppm	N	Erosion of natural deposits.
Total Alkalinty	2024	65	65 - 65	NA	NA	ppm	N	Naturally soluble mineral salts.
Total Dissolved Solids	2024	248	248 -248	NA	NA	ppm	N	Total dissolved mineral constituents in water.

Unregulated Contaminants Monitoring Rule 5

The City of Brenham participated in gathering data under the EPA's Fifth Unregulated Contaminant Monitoring Rule (UCMR5). Unregulated contaminants are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring these contaminants is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. As our customers, you have a right to know that this data is available. UCMR results and occurrence data can be viewed by the public at: https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule

Under UCMR 5, public water systems nationwide will be monitoring for 29 per- and polyfluoroalkyl substances (PFAS) and lithium in drinking water. The City has monitored these compounds in the drinking water between January 2023 and December 2023.

Compound	Collection Date	Highest Level Detected	Range of Levels Detected	Minimum Reporting Level	Units	Violation
Lithium	2023	18.4	16.2 - 18.4	9	ppb	N
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2023	ND	ND	0.005	ppb	N
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2023	ND	ND	0.002	ppb	N

Compound	Collection Date	Highest Level Detected	Range of Levels Detected	Minimun Reporting Level	Units	Violation
Unregulated Contaminants Monitoring Rule 5 (Cont.)						
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	2023	ND	ND	0.003	ppb	N
hexafluoropropylene oxide dimer acid (HFPO-DA)	2023	ND	ND	0.005	ppb	N
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2023	ND	ND	0.02	ppb	N
perfluorobutanoic acid (PFBA)	2023	0.0985	< 0.005 - 0.0985	0.005	ppb	N
perfluorobutanesulfonic acid (PFBS)	2023	ND	ND	0.003	ppb	N
perfluorodecanoic acid (PFDA)	2023	ND	ND	0.003	ppb	N
perfluorododecanoic acid (PFDoA)	2023	ND	ND	0.003	ppb	N
perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2023	ND	ND	0.003	ppb	N
perfluoroheptanesulfonic acid (PFHpS)	2023	ND	ND	0.003	ppb	N
perfluoroheptanoic acid (PFHpA)	2023	ND	ND	0.003	ppb	N
perfluorohexanesulfonic acid (PFHxS)	2023	ND	ND	0.003	ppb	N
perfluorohexanoic acid (PFHxA)	2023	ND	ND	0.003	ppb	N
perfluoro-3-methoxypropanoic acid (PFMPA)	2023	ND	ND	0.004	ppb	N
perfluoro-4-methoxybutanoic acid (PFMBA)	2023	ND	ND	0.003	ppb	N
perfluorononanoic acid (PFNA)	2023	ND	ND	0.004	ppb	N
perfluorooctanesulfonic acid (PFOS)	2023	ND	ND	0.004	ppb	N

Compound	Collection Date	Highest Level Detected	Range of Levels Detected	Minimun Reporting Level	Units	Violation
Unregulated Contaminants Monitoring Rule 5 (Cont.)						
perfluorooctanoic acid (PFOA)	2023	ND	ND	0.004	ppb	N
perfluoropentanoic acid (PFPeA)	2023	0.0037	< 0.003 - 0.0037	0.003	ppb	N
perfluoropentanesulfonic acid (PFPeS)	2023	ND	ND	0.004	ppb	N
perfluoroundecanoic acid (PFUnA)	2023	ND	ND	0.002	ppb	N
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	2023	ND	ND	0.005	ppb	N
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	2023	ND	ND	0.003	ppb	N
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	2023	ND	ND	0.005	ppb	N
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2023	ND	ND	0.005	ppb	N
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2023	ND	ND	0.006	ppb	N
perfluorotridecanoic acid (PFTrDA)	2023	ND	ND	0.007	ppb	N
perfluorotetradecanoic acid (PFTA)	2023	ND	ND	0.008	ppb	N

Violations

Violations	Date of Violation	Explain violation	Length of violation	Action taken to resolve	Health Effects
None					