2021 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Belle Oaks Water System

PWS # TX1230075

936-756-7400 Annual Water Quality Report for the period of January 1 to December 31, 2021

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:

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 936-756-7400

En Español: Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de liamar al tel. (936) 756-7400 para hablar con una persona bilingüe en español.

SPECIAL NOTICE

Required language for ALL community public water supplies:

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 bottle 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.

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 protections 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 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).

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 https://www.epa.gov/safewater/lead.

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.

Information about Secondary Constituents - 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, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

No Source Water Assessment for your drinking water source(s) has been conducted by the TCEQ for your water system. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment allows us to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system contact Ron Payne at 936-756-7400. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: https://www.tceq.texas.gov/gis/swaview

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

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

Action Level:	explanation. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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
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	The level of a contaminant in drinking water below which there is no known or expected risk to health.
MCLG:	MGLGs allow for a margin of safety.
Maximum residual disinfectant level or	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a
MRDL:	disinfectant is necessary for control of microbial contaminants.
Maximum residual disinfectant level goal or	The level of a drinking water disinfectant below which there is no known or expected risk to health.
MRDLG:	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) not applicable.
na: 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 millions

Definitions:

ppq: ppt: Treatment Technique or TT:	parts per quadrillion, or picograms per liter (pg/L) parts per trillion, or nanograms per liter (ng/L) A required process intended to reduce the level of a contaminant in drinking water.	
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Information about Source Water

Information about Source Water BELLE OAKS WATER purchases water from WEST JEFFERSON COUNTY MWD. WEST JEFFERSON COUNTY MWD provides purchase surface water from the Lower Neches River Valley Authority (LNVA) located in Jefferson County.

2021 Water Quality Test Results

Disinfection By- Products	Collection Date	Highest Level Detected	Range of Individual	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2021	0.841	0 - 0.841	0.8	1	ppm	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2021	0.0493	0.0493 - 0.0493	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2021	30	30 - 30	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	03/01/2016	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	4.08 NTU	1 NTU	Y	Soil runoff.
Lowest monthly % meeting limit	89%	0.3 NTU	Y	Soil runoff.

Information Statement: 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 system and disinfectants.

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

Disinfection By- Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2021	8	7.7 -7.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM	2021	8	8.2 -8.2	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 HAA5 sample results collected at a location over a year

^{*}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 Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2021	0.11	0-0.11	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2021	1.3	1.3	0.0353	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing
Lead	2021	0	15	2.81	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2021	2.96	0.51 – 3.90	4	4	ppm	N	Water additive used to control microbes.

Violations

Chlorine

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.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	04/01/2021		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation	Violation Explanation
INITIAL TAP SAMPLING (LCR)	07/01/2021		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.