

2020 Consumer Confidence Report for Public Water System CITY OF CLUTE

This is your water quality report for January 1 to December 31, 2020

CITY OF CLUTE provides surface water and ground water from [insert source name of aquifer, reservoir, and/or river] located in [insert name of County or City].

For more information regarding this report contact:

Name John W. Wilkinson

Phone (979) 265-7939

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (979) 265-7939.

Definitions and Abbreviations

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Action Level:

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

Definitions and Abbreviations

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

CITY OF CLUTE purchases water from BRAZOSPORT WATER AUTHORITY. BRAZOSPORT WATER AUTHORITY provides purchase surface water from the Brazos River located in Brazoria County.

[insert a table containing any contaminant that was detected in the provider's water for this calendar year, unless that contaminant has been separately monitored in your water system (i.e. TTHM, HAAS, Lead and Copper, Coliforms)].

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 John W. Wilkinson at (979) 265-7939.

SOURCE WATER NAME		TYPE OF WATER	REPORT STATUS	LOCATION
6-COBB	426 COMMERCE	GW	<u>PASS</u>	<u>COBB FIELD WELL</u>
7-LK BARBARA	1247 PECAN	GW	<u>PASS</u>	<u>LAKE BARBARA WELL</u>
8-HIGH SCHOOL	400 LAKEVIEW	GW	<u>PASS</u>	<u>HIGH SCHOOL WELL</u>
9-CITY PARK	211 N LAZY LN	GW	<u>PASS</u>	<u>CITY PARK WELL</u>
SW FROM BRAZOSPORT WATER AUTHORITY -CC FROM TX0200497		SW	<u>PASS</u>	<u>FM 2004 LAKE JACKSON</u>

WATER SOURCE:

WELL WATER SOURCE – GULF COAST AQUIFER

SURFACE WATER SOURCE – BRAZOS RIVER

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0.89	2	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing
Lead	2020	0	15	4.6	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2020 Water Quality Test Results

Disinfection By-Products.	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
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Haloacetic Acids (HAAS)	2020	15	2.6 - 22.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
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*The value in the Highest Level or Average Detected column is the highest average of all HAAS sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2020	14	3.9 - 23.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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*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
Barium	2020	0.372	0.279 - 0.372	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2020	100	0 - 100	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2020	0.5	0.43 - 0.5	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]	2020	1	0 - 0.6	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	02/02/2016	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2020	0.12	0 - 0.12	3	3	ppb	N	Runoff from herbicide used on row crops.

Disinfectant Residual

A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2020	1.82	.51 – 2.20	4	4	ppm	N	Water additive used to control microbes.

Violations

E. coli			
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, and people with severely compromised immune systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITOR GWR TRIGGERED/ADDITIONAL, MINOR	10/01/2013	01/30/2020	We failed to collect all the required follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.

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 End	Violation Explanation *
WATER QUALITY PARAMETER M/R (LCR)	07/01/2020	12/31/2020	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.

*** ALL LEAD AND COPPER SAMPLES WERE TAKEN DURING THE CORRECT TIME FRAME REFERENCED IN THE ABOVE LISTED VIOLATION. THE SAMPLES TESTED WERE CONFIRMED TO BE SAFE AND WERE PROVIDED TO ALL RESIDENTS WHERE TESTING WAS CONDUCTED. COPIES OF RESULTS WITH OFFICIAL CERTIFICATION FORM WERE SENT TO TCEQ AS REQUIRED. THIS VIOLATION IS NOT RELATED TO ANY DEFICIENCY IN THE QUALITY OF WATER BUT INSTEAD HAS TO DO WITH A CLERICAL ERROR ON LCR #'S IN RELATION TO ADDRESSES. THIS ERROR WAS CORRECTED AND RESENT TO TCEQ TO CLEAR THE VIOLATION. FOR MORE INFORMATION, FEEL FREE TO CONTACT JOHN W. WILKINSON AT (979) 265-7939.**

2020 Water Quality Test Results BRAZOSPORT WATER AUTHORITY

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2020	0.627	0.092 - 0.627	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAAS)	2020	14	14.3 - 14.3	No goal for the total	60	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

Total Trihalomethanes (TTHM)	2020	10	9.8 - 9.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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*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
Barium	2020	0.121	0.121 - 0.121	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2020	0.2	0.22 - 0.22	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]	2020	1	1.09 - 1.09	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/alpha emitters	01/21/2015	4.6	4.6 - 4.6	0	50	pCi/L*	N	Decay of natural and man-made deposits.

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

Combined Radium 226/228	01/21/2015	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.
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Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2020	0.26	0.26 - 0.26	3	3	ppb	N	Runoff from herbicide used on row crops.

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.24 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting limit	100%	0.3 NTU	N	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.
