

2020 ANNUAL DRINKING WATER QUALITY REPORT

PUBLIC PARTICIPATION OPPORTUNITIES

DATE: JUNE 22ND, 2021
TIME: 5:00 P.M.
LOCATION: CITY HALL
201 WEST BROADWAY ST.
PHONE NO: 806-637-4547

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

En Espanol

Este informe incluye la informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel. (806) 637-4547 para hablar con una persona bilingue en espanol.

The City of Brownfield has safe drinking water. It is an approved water supply by the State of Texas. The drinking water is currently blended with ground water sources to enhance the flavor. Steps are currently being taken to blend additional ground water which will help control the salinity levels. The City Council has adopted a Drought Contingency Plan to be implemented during times of water shortages.

WHERE DO WE GET OUR DRINKING WATER?

Our drinking water is obtained from ground water sources as well as surface water sources. It comes from the Canadian River Municipal Water Authority/Lake Meredith and 14 ground water wells; whose source is from the Ogallala Aquifer. A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe 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 will allow us to focus our source water protection strategies, for more information on source water assessments and protection efforts at our system, please contact us.

ALL drinking water may contain contaminants. When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point of use devices. 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

2020 Consumer Confidence Report for Public Water System CITY OF BROWNFIELD

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

For more information regarding this report contact:

CITY OF BROWNFIELD provides surface water and ground water from the Canadian River Municipal Water Authority/Lake Meredith and John C. Williams Aqueduct & Wellfield, located in the Panhandle of Texas, whose source is from the Ogallala Aquifer.

Name City of Brownfield

Phone 806-637-4547

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (806) 637-4547

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 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 BROWNFIELD purchases water from CANADIAN RIVER MUNICIPAL WATER AUTHORITY. CANADIAN RIVER MUNICIPAL WATER AUTHORITY provides purchase surface water from the Canadian River Municipal Water Authority/Lake Meredith and the John C. Williams Aqueduct & Wellfield, located in the Panhandle of Texas, whose source is from the Ogallala Aquifer.

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 City of Brownfield at (806) 637-4547.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

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	0.045	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

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
Haloacetic Acids (HAA5)	2020	11	5 - 12.4	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	15	9.01 - 14.3	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
Arsenic	2020	1.9	1.9 - 1.9	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2020	0.12	0.12 - 0.12	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2020	3	2.7 - 3	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2020	114	102 - 114	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2020	0.66	0.659 - 0.66	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	1.1 - 1.1	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/photon emitters	04/16/2019	6.8	6.1 - 6.8	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.

Gross alpha excluding radon and uranium	04/16/2019	6	6 - 6	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	04/16/2019	5.8	5.7 - 5.8	0	30	ug/l	N	Erosion of natural deposits.

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
Chloramine	2020	1.89	1.3 – 2.4	4	4	Mg/L	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).	01/01/2020	03/31/2020	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.



IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

City of Brownfield has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Chapter 30, Section 290, Subchapter F. Even though these were not emergencies, as our customers, you have the right to know what happened and what we are doing to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 1/1/2017 – 12/31/2019 we did not test complete all monitoring or testing for lead and copper and therefore cannot be sure of the quality of your drinking water during that time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Lead and Copper, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which the follow-up samples were taken.

Contaminant	Required sampling frequency	Number of samples taken	When samples should have been taken	When samples were or will be taken
<i>Lead and copper tap water sampling</i>	<i>3 years</i>	<i>20</i>	<i>June 1, 2019 thru Sept 30, 2019</i>	<i>June 1, 2020 thru Sept 30, 2020</i>
<i>Lead and Copper entry point sampling</i>				
<i>Water quality parameters</i>				

What is being done?

We are working to correct the problem. For more information, please contact James Nix at 806-637-4547 or 201 West Broadway Street Brownfield, Texas 79316.

Since the violation’s occurrence, the City of Brownfield has followed TCEQ guidance to remain in compliance with the violation’s requirements by scheduling the now annual sample testing one (1) month prior to the due date to avoid any tardiness on the City of Brownfield’s behalf. We have reviewed the importance of the Lead and Copper sampling with employees and trained employees on the process of collection and submission of sampling to avoid this violation in the future. As of 2020, the City of Brownfield has collected all Lead and Copper samples.

Please share this information with all other people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the City of Brownfield. Public Water System Number:

TX2230001

Date Distributed: June 4, 2021



IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for City of Brownfield

Our system failed to collect every required coliform sample. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did and are doing to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During February 2021 we did not complete all monitoring or testing for coliform bacteria and therefore cannot be sure of the quality of your drinking water during that time.

What should I do?

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, we are required to notify you within 24 hours.

What is being done?

The City of Brownfield has collected every required coliform sample in March 2021 and are no longer in violation.

For more information, please contact James Nix, Director of Water/Wastewater at 806-637-4547 or 201 West Broadway Street, Brownfield, Texas 79316.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the City of Brownfield. Public Water System ID#: 2230001.

Date distributed: June 4, 2021



DRINKING WATER WARNING

E. coli was present in the City of Brownfield's water

BOIL YOUR WATER BEFORE USING

June 4, 2021

Specifically, in *July 2018*, the City of Brownfield's public water system violated the Maximum Contaminant Level (MCL) for E. coli as set forth in 40 CFR 141.63(c) and 141.860(a). These bacteria can make you sick and are especially a concern for people with weakened immune systems.

Bacterial contamination can occur when increased run-off enters the drinking water source (for example, following heavy rains). It can also happen due to a break in the distribution system (pipes) or a failure in the water treatment process.

What should I do? What does this mean?

- DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST. Bring all water to a boil, let it boil for one minute and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice. Boiling kills bacteria and other organisms in the water.
- *E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.*
- The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice from their healthcare providers about drinking this water.

What is being done?

The City of Brownfield corrected the violation in *July 2018*. During this time, the City of Brownfield completed a comprehensive assessment of the water system and our monitoring and operational practices to identify and correct any causes of contamination. The water system has been chlorinated and flushed. While the violation was corrected timely, the City of Brownfield did not notify the customers of the violation in the allotted the time frame. The violation was listed in the violations section of the 2018 Consumer Confidence Report, however, mandatory language as required by TCEQ was not provided.

For more information, please contact James Nix, Water/Director of Wastewater at 806-637-4547 or 201 West Broadway Street, Brownfield, Texas 79316. General guidelines on ways to lessen the risk of infection by bacteria and other disease-causing organisms are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.



AVISO SOBRE SU AGUA POTABLE
E. coli está presente en el agua del Sistema City o Brownfield
HIERVAN EL AGUA ANTES DE USARLA

June 4, 2021

The City o Brownfield's sistema publico de agua E. coli fue encontrada en su servicio de agua el día *mes de julio 2018*. Estas bacterias pueden enfermarle, y son especialmente peligrosas para personas con los sistemas inmunológicos débiles.

Contaminación bacteriana puede ocurrir cuando un exceso de aguas rebasa sus cauces y entran en las fuentes de agua potable (por ejemplo, después de una lluvia fuerte). También, puede ocurrir cuando se rompe un sistema de recolección de aguas negras (por ejemplo una tubería), o cuando hay una falla en el tratamiento de agua.

¿Qué debo hacer? ¿Qué es la significa de este?

- NO BEBA EL AGUA SIN HERVIRLA ANTES. Hierva toda el agua, déjela hervir por un minuto, y déjela reposar antes de usarla, o utilice agua embotellada. Agua hervida o embotellada debe ser usada para beber, hacer hielo, lavarse los dientes, lavar los platos y para preparar la comida hasta próximo aviso. El proceso de hervir mata a bacteria y otros organismos en el agua.
- *E. coli son bacterias cuya presencia indican que el agua está contaminada con desechos humanos o de animales. Los agentes patógenos humanos en estos desechos pueden causar consecuencias a corto plazo, como diarrea, cólicos, nausea, dolores de cabeza u otros síntomas. Pueden representar un peligro más grave para la salud de bebés, niños y niñas de corta edad, los ancianos y personas con sistemas inmunológicos en alto riesgo.*
- Los síntomas descritos arriba no ocurren solamente debido a los microbios; pueden ser resultados de otros factores. Sin embargo, si usted siente estos síntomas y los persisten, usted puede optar por hacer una consulta con su médico. Personas en situaciones de alto riesgo deben consultar con sus proveedores de servicios médicos.

¿Qué se está haciendo al respecto?

La ciudad de Brownfield corrigió la violación en *julio 2018*. Durante este tiempo, la ciudad de Brownfield completó una evaluación exhaustiva del sistema de agua y nuestras prácticas operativas y de monitoreo para identificar y corregir cualquier causa de contaminación. El sistema de agua ha sido clorado y lavado. Aunque la infracción fue corregida oportunamente, la ciudad de Brownfield no notificó a los clientes de la violación en el plazo asignado. La infracción se incluyó en la sección de violaciones del Informe de Confianza del Consumidor de 2018, sin embargo, no se proporcionó el lenguaje obligatorio requerido por TCEQ.

Para obtener más información, contacte a James Nix, Director of Water/Wastewater al 806-637-4547 o 201 West Broadway Street, Brownfield, Texas 79316. Reglas generales sobre las maneras de reducir el riesgo de infección por bacterias y otros organismos causantes de enfermedades están disponibles de la línea directa de Agua Potable Segura de EPA (1-800-426-4791).