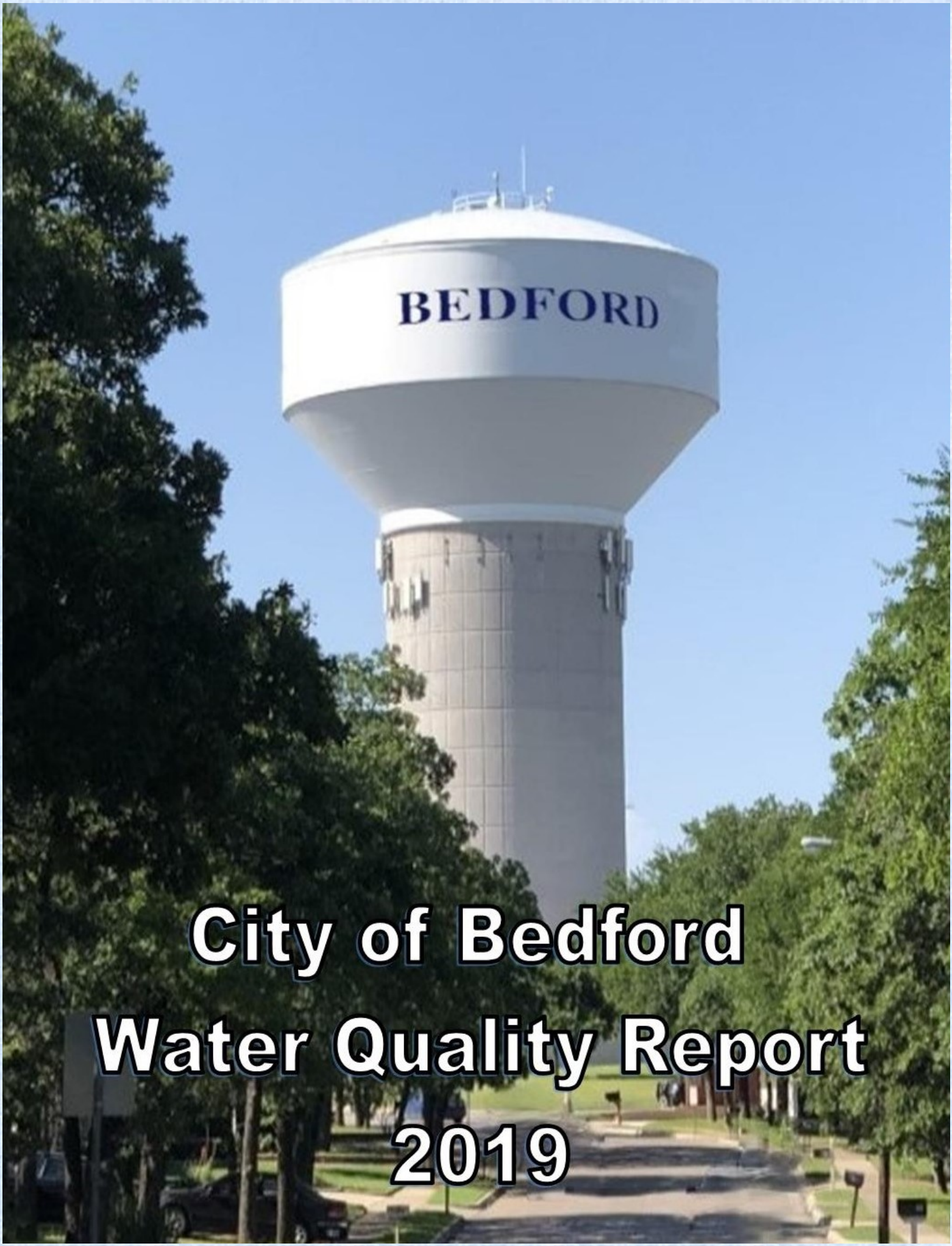

City of Bedford
Water Quality Report
2019

2019 CONSUMER CONFIDENCE REPORT FOR CITY OF BEDFORD

SAFE DRINKING WATER

Our drinking water meets or exceeds all federal Environmental Protection Agency (EPA) drinking water requirements. This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent EPA required tests and is presented on the attached page. We hope this information helps you become more knowledgeable about what's in your drinking water.

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.** In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

CITY OF BEDFORD'S WATER SOURCE

The source of drinking water used by the City of Bedford is purchased surface water supplied from the Trinity River Authority's (TRA) Tarrant County Water Supply Project (TCWSP). The raw water source is Lake Arlington. The City of Bedford obtains groundwater from the Trinity Aquifer through two deep-water wells. For 2019, the City purchased 2,265,601,020 gallons of wholesale water from the Trinity River Authority (TRA) and pumped 88,815,000 gallons from city wells. The City of Bedford also had a total water loss percentage of 1.18%.

SPECIAL NOTICE FOR HIGH RISK INDIVIDUALS

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immune-compromised individuals 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 at (800-426-4791)**.

SOURCE WATER ASSESSMENT RESULTS

The Texas Commission on Environmental Quality (TCEQ) completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessment and protection efforts within the City of Bedford's system, please contact **Dan Mitchell, Utilities Superintendent at (817) 952-2200.**.

NOTICE OF TEMPORARY OPEN INTERCONNECT WITH THE CITY OF HURST

The City of Bedford received water from the City of Hurst from January 22 – March 29, 2019, due to a significant leak at a city water main in the southwest portion of the City. The water line was placed temporarily out of service while repairs were made. In order to supply water to residents affected by the temporary outage, it was necessary to obtain water from the City of Hurst. If you would like more information regarding water quality for the City of Hurst, please contact **Mark Overcash, Director of Utilities at (817) 788-7206**.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (817) 952-2200.

QUESTIONS/COMMENTS

If there are any questions or concerns regarding this Consumer Confidence Report, you can contact the **City of Bedford Public Works Department at (817) 952-2200.**

CONTAMINANTS DETECTED IN THE CITY OF BEDFORD'S 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.

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 contaminant (which can be naturally-occurring or 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. Many constituents, such as calcium and sodium, 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 concerns. Therefore, secondary's are not required to be reported in this document, but they may greatly affect the appearance and taste of your water. For more information on taste, odor, or color of drinking water, please contact the **City of Bedford Public Works Department at (817) 952-2200.**

REQUIRED ADDITIONAL HEALTH INFORMATION FOR LEAD

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. The City of Bedford is responsible for providing high quality drinking water but 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.

COUNCIL MEETINGS

City Council meetings for the City of Bedford are held on the second and fourth Tuesday of every month and are open to the public. Citizens that wish to address City Council members regarding water quality for the City of Bedford, are encouraged to contact the **City Secretary's office at 817-952-2104.**

LETTER TO CUSTOMER FROM TRA

Please see attached letter regarding monitoring and reporting violations from TRA.

CITY OF BEDFORD TEXAS

WE NEED TO TELL YOU ABOUT A MONITORING VIOLATION:

The City of Bedford currently purchases water from the Trinity River Authority's (TRA) Tarrant County Water Supply Project (TCWSP). The City is required to inform you of an incident that resulted in a monitoring/reporting violation for failing to monitor or report as required in the Surface Water Monthly Operating Report (SWMOR).

A plant shutdown was scheduled on June 18, 2019, for construction activities. One of the 24 filters was scheduled to receive a new turbidity meter during this Plant shutdown. The old turbidity meter was removed and the new meter installation was delayed. When the Plant resumed normal operation, the filter was activated with no turbidity meter installed. This resulted in no turbidity measurement for one filter for approximately five hours. At no time during the five hours did the combined filter effluent turbidity levels exceed standards and there is no reason to believe that the quality of water was compromised.

The following is Mandatory language required by the Texas Commission on Environmental Quality for Monitoring and Reporting Violations:

The TRA TARRANT COUNTY WATER PROJECT, PWS ID TX2200199, has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Tittle 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems that treat surface water and/or ground water under the direct influence of surface water are required to submit monthly operating reports with operational data of the treatment, disinfection and quality of the water provided to their customers.

Trinity River Authority (TRA) failed to monitor and/or report the following constituents **Turbidity, in 1 filter* for 5 hours**

*At no time during these 5 hours did the combined filter effluent turbidity levels exceed standards.

This/These violation(s) occurred in the monitoring period(s) **June 18, 2019, for 5 hours**

Results of regular monitoring are an indicator of whether or not your drinking water is safe. We did not complete all monitoring and/or reporting for surface water constituents, and therefore TCEQ cannot be sure of the safety of your drinking water during that time.

Standard Operating Procedures are in place for taking a filter out of service which include lock out/tag out procedures and this has been provided to staff.

Please share this information with all 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.

If you have any questions regarding this matter, you may contact **Sid McCain** at **817-267-4227.**

City of Bedford

Tabl A Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2019	20	3.6 - 27.3	0	60	ppb	N	By-product of drinking water disinfection.
the highest average of all HAA5 sample results collected at a location over a year'								
Total Trihalomethanes (TTHM)	2019	40	7.58 - 52	0	80	ppb	N	By-product of drinking water disinfection.
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	2019	1	1-1	0	10	ppb	N	Erosion of natural deposites; runoff from orchards and glass. Electronics production wastes.
Barium	2019	0.035	0.035-0.035	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2019	3	3-3	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2019	1.13	1.13 - 1.13	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2019	0.291	0 - 0.291	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2019	0.224	0.001 - 0.224	1	1	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	2019	1.3	1.3	0.26	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2019	0	15	1.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Microbiological Contaminants	**MCL**	**Highest No. of Positive**	**Fecal Coriform or E. Coli MCL**	**Total No. of Positive E. Coli or Fecal Coliform Samples**	**MCLG**	**Violation**		**Source of Contaminant**
Total Coliform Bacteria	5% of monthly samples are positive	0	0	0	0	N		Naturally present in the environment; as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.
*MCLG and MCL are given in exposure units of millirem/year (set of 0 and 4 respectively), but samples are measured in activity units of picoCuries/Liter (pCi/L)								
Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Individual Samples**	**MCLG**	**MCL**	**Units**	**Violation**	**Source of Contaminant**
Combined Radium 226/228	1/22/2015	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.
Disinfectant Residual	**Year**	**Average Level**	**Range of Levels Detected**	**MRDL**	**mrdlg**	**Units**	**Violation**	**Likely Source of Contamination**
Total Chlorine	2019	2.59	0.6 - 4.0	4	4	ppm	N	Water additive used to control microbes

Table B Unregulated Contaminants

"Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted"

Unregulated Contaminants	Year	Highest Level Detected	Range of Levels Detected	Units	Source of Contaminant
Bromodichloromethane	2019	19.6	3.01-19.6	ppb	By-product of drinking water
Bromoform	2019	2.9	1.01-2.90	ppb	By-product of drinking water
Chloroform	2019	18.6	7.6-18.6	ppb	By-product of drinking water
Germanium	2018	1.2	0.3 - 1.2	ppb	Naturally occurring element
Manganese	2018	22.8	1.5 - 22.8	ppb	Naturally occurring element

The following table contains scientific terms and measures, some of which may require explanation

Action Level (AL):	The concentration of a contaminant which, if exceeded, triggars treatment or other requiements which a water system must follow.
Action Level Goals (AGL):	The level of a contaminant in drinking water below which there is no known or expected risk to health. AGLs 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 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 has 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 of 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.
mrem:	Millirems per year (a measure of radiation absorbed by the body).
MFL:	Million fibers per liter (a measure of asbestos).
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 - or one ounce in 7,350,000 gallons of water. (ug/L)
ppm:	Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. (mg/L)
ppt:	Parts per trillion, or nanograms per liter (ng/L).
ppq:	Parts per quadrillion, or picograms per liter (pg/L).
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Trinity River Authority of Texas

These substances are regulated or are required to be monitored in drinking water. None of the detected substances exceeded the regulated limits in 2019 or the analysis which was most recently performed under reduced sampling requirements for substances unlikely to exceed limits.

Table A. Regulated Contaminates

Contaminant	Collection Date or Range	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	6/17/2019	0.3	0.3 - 0.3	3	3	ppb	N	Runoff from herbicides used on row crops.
Bromate	2019	<5.00	<5 - <5	0	10*	ppb	N	By- product of drinking water disinfection.
*Compliance is based on Running Annual Average of monthly average for Bromate at the end of each quarter, which was less then 5 ppb for each quarter in 2018								
Cyanide	6/17/2019	118	118-118	200	200	ppb	N	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Total Organic Carbon (TOC) Removal ratio*	2019	1.62	1.08 - 1.62	none	TT=1.0	None	N	Naturally present in the enviroment
*Removal ratio is the percent TOC removed by the treatment process divided by the percent of TOC removal required by TCEQ								
Turbidity	Turbidity is a measure of the degree to which the water loses transparency due to the presents of suspended particles. The more total suspended solids in the water, the higher the turbidity. Turbidity is a good measure of the quality of drinking water.							Soil runoff
Highest single measurement	2019	0.26	0.03 - 0.26	0	TT=1.0	NTU	N	
% of samples ≤ .3 NTU	2019	Lowest was 100	100 -100	100	TT= 95	%	N	

Table B Unregulated Contaminants

"Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted"

Contaminants	Collection Date or Range	Highest Single Sample	Range of Levels Detected	Units	Source of Contamination
Dibromochloromethane	9/25/2019	7.02	7.02-7.02	ppb	By- product of drinking water disinfection.

Radionuclides

Contaminants	Collection Date or Range	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Source of Contamination
Beta/Photon emitters	5/11/2017	5.2	5.2 - 5.2	0*	50*	Pcl/l	N	Decay of natural and man-made deposits.
*MCLG and MCL are given in exposure units of millirem/year (set at 0 and 4 respectivly), but samples are measured in activity units of picoCuries/Liter (pCi/L). EPA considers 50 pCi/L to be the level of concern for Beta particles.								

Secondary and Other Constituents Not Regulated

Constituents	Collection Date or Range	Highest Single Sample	Range of Levels Detected	Secondary Limits		Units	Violation	Source of Contamination
Acetone	9/25/2019	8.03	8.03-8.03	None		ppb	N	By- product of drinking water disinfection.
Aluminum	6/17/2019	43	43-43	200		ppb	N	Abundant naturally occurring element
Bicarbonate {as Calcium Carbonate}	6/17/2019	130	130-130	None		ppm	N	Erosion of carbonate rocks suck as limestone
Calcium	6/17/2019	43	43.0-43.0	None		ppm	N	Abundant naturally occurring element
Chloride	6/17/2019	23.9	23.9-23.9	300		ppm	N	Abundant naturally occurring element; Used in water purification; By-product of oil field activity.
Conductivity @25◦C	6/17/2019	398	398-398	none		µmho/cm	N	Ability of water to conduct electricity due to electrolytes
Copper	6/17/2019	13	13-13	1000*		ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits
*This secondary limit is for Copper as a nuisance contaminant, apart from the primary list because it can stain fixtures and impart a bitter metallic taste to drinking water.								
Magnesium	6/17/2019	5.09	5.09 - 5.09	None		ppm	N	Abundant naturally occurring element
Manganese	6/17/2019	2.2	2.2 -2.2	50		ppb	N	Naturally occurring element
Zink	6/17/2019	6.1	6.1 - 6.1	5000		ppb	N	Naturally occurring element
Nickel	6/17/2019	1.4	1.4 - 1.4	None		ppb	N	Naturally occurring element
Potassium	6/17/2019	4.15	4.15 - 4.15	None		ppm	N	Abundant naturally occurring element
ph	7/11/1905	9	7.4 - 9.0	>7.0		units	N	Measure of the corrosivity of water.
Sodium	6/17/2019	28.3	28.3 - 28.3	None		ppm	N	Abundant naturally occurring element; Used in water purification; By-product of oil field activity.
Sulfate	6/17/2019	57.7	57.7 - 57.7	300		ppm	N	Naturally occurring constituent; common industrial by-product of oil field activity
Total Alkalinity {as Calcium Carbonate}	6/17/2019	130	130 - 130	None		ppm	N	Naturally occuring soluble mineral salts
Total Dissolved Solids	6/17/2019	215	215 - 215	1000		ppm	N	Total dissolved mineral constituents in water
Total Hardness {as Calcium Carbonate}	6/17/2019	128	128 - 128	Nome		ppm	N	Naturally occurring soluble Calcium and Magnesium deposits

Notes: Trinity River Authority of Texas (TRA) water source for City of Bedford
ppm = parts per million, or milligrams of contaminant per liter of water (mg/L)
ppb = parts per billion, or micrograms of contaminant per liter of water (µg/L)
NTU = Nephelometric Turbidity Units
pCi/l = picocuries per liter (a measure of radioactivity)