

2019 Annual Drinking Water Quality Report

(Consumer Confidence Report)

June 15, 2020



City of Troy PWS ID Number: TX0140037

Phone Number: (254) 938-2505

About this report

This is your water quality report from the City of Troy for January 1 to December 31, 2019. The City of Troy provides surface and ground water from Lake Belton via the City of Temple and a well that extracts ground water from the Lower Trinity Aquifer. The City of Troy is pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where our water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. The analysis was made using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. 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.

Source Water Name	Type of Water	Report Status	Location
2-Tower St. Tower St.	GW	Y	Lower Trinity Well
SW From Temple CC From TX0140005 City of Temple	SW	S	Lake Belton

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 TROY purchases water from the CITY OF TEMPLE. The CITY OF TEMPLE provides purchased surface water from Lake Belton located in Bell County, Texas. The data on the Temple water system is as follows:

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.
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 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)
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 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.

Substance (Units)	Sample Year	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Possible Source
Turbidity Turbidity (NTU)	2019	.08	.09	0.23	Treatment Technique	100%	Soil runoff
Inorganics Fluoride (ppm)	2019	0.16	0.16	0.16	4.0	4.0	(1)
Nitrate as Nitrogen (ppm)	2019	.70	.70	.70	10.0	10.0	(2)
Combine radium (pCi/L)	2019	1.0	1.0	1.0	5.0	0.00	Erosion of natural deposits
Atrazine (UG/L)	2019	.25	.10	.33	3.0	3.0	Agricultural Runoff
Coliform Bacteria Total Coliform bacteria (presence in 5% of samples collected)	2019	NA	0.00%	0.0%	5.00%	5.00%	Naturally present in the environment
Disinfection Residual Chloramines (ppm)	2019	3.50	1.37	3.96	4.00 (5)	4.00 (5)	Water additive used to control microbes
Disinfection Byproducts Total Trihalomethanes (ppb)	2019	62.1	42.0	87.6	80 (5)	NA	By product of water disinfection
Total Haloacetic Acids (ppb)	2019	25.17	13.5	45.2	60 (5)	NA	By product of water disinfection
Total Organic Carbon Source Water (ppm)	2019	4.02	3.52	4.40	NA	NA	Naturally present in the environment
Drinking Water (ppm)	2019	2.83	2.37	3.22	NA	NA	
Removal Ratio (TT)	2019	1.52	1.05	2.69	NA	NA	
Unregulated Contaminants (6) Chloroform (ppb)	2019	14.09	9.8	22.10	NA	NA	By product of water disinfection
Bromoform (ppb)	2019	4.9	2.50	7.7	NA	NA	
Bromodichloromethane (ppb)	2019	22.7	16.0	30.6	NA	NA	
Dibromochloromethane (ppb)	2019	20.4	13.2	29.2	NA	NA	
Secondary & Other Unregulated Constituents Bicarbonate Alkalinity (ppm)	2019	163	163	163	NA	NA	Erosion of limestone
Total Alkalinity (ppm)	2019	130.0	134.0	183.0	NA	NA	Natural soluble minerals/salts
Chloride (ppm)	2019	28.0	28.0	28.0	NA	NA	Naturally occurring element
Conductivity (uS/m)	2019	441.0	441.0	441.0	NA	NA	Electrical property of water
pH (pH units)	2019	7.33	7.12	7.61	>7.0	NA	Measure of corrosivity
Sodium (ppm)	2019	15.7	15.7	15.7	NA	NA	Erosion of natural deposits
Sulfate (ppm)	2019	24.0	24.0	24.0	300	NA	Naturally occurring compounds
Total Dissolved Solids (ppm)	2019	235	235	235	NA	NA	Total dissolved mineral constituents
Lead and Copper Copper (ppm)	2019	0.19	0.061	.39	1.30	1.30	Corrosion of household plumbing and erosion of natural deposits
Lead (ppb)	2019	0.0016	0.001	0.0065	0.015	0.015	

Substance (Units)	Sample Year	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Possible Source
Metals Analysis							
Aluminum (ppm)	2019	0.0398	0.0398	0.0398	0.2	0.2	Erosion of natural deposits
Barium (ppm)	2019	.0559	.0559	.0559	2.0	2.0	Industrial sources
Calcium (ppm)	2019	55.2	55.2	55.2	NA	NA	Erosion of natural deposits
Copper, Free (ppm)	2019	.19	.061	.39	NA	NA	Erosion of natural deposits
Hardness, Calcium and Magnesium (ppm)	2013	149	149	149	NA	NA	Erosion of natural deposits
Iron (ppm)	2019	.01	.01	.01	NA	NA	Erosion of natural deposits
Magnesium (ppm)	2019	8.54	8.54	8.54	NA	NA	Erosion of natural deposits
Manganese (ppm)	2019	.001	.001	.001	NA	NA	Erosion of natural deposits
Nickel (ppm)	2019	.002	.002	.002	NA	NA	Erosion of natural deposits
Potassium (ppm)	2019	3.84	3.84	3.84	NA	NA	Erosion of natural deposits
Sodium (ppm)	2019	15.7	15.7	15.7	NA	NA	Erosion of natural deposits

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 Tim Pitts DBA H2O at 254-938-2505

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	0.326	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2019	0	15	5.1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2019 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)	2019	21	16.7 - 25.4	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)	2019	54	39.7 - 76.9	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	01/17/2018	0.0634	0.0634 - 0.0634	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	01/17/2018	90	90 - 90	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	01/17/2018	0.22	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]	2019	1	0 - 0.98	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	04/20/2015	0.06	0.06 - 0.06	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; 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
	2019			4	4		ppm	Water additive used to control microbes.

Violations

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
LEAD CONSUMER NOTICE (LCR)	12/30/2016	10/18/2019	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.
LEAD CONSUMER NOTICE (LCR)	12/30/2017	10/18/2019	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.