

2018 Annual Drinking Water Quality Report

(Consumer Confidence Report)



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, 2018. 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 Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) has been updated by the Texas Commission on Environmental Quality. This information describes 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 allows us to focus source water protection strategies. The assessment indicates "High" susceptibility to metal and minerals.

"High" susceptibility means there are activities near the source water and the natural conditions of the aquifer or watershed make it very likely that chemical constituents may come into contact with the source water. It does **not** mean that there are any health risks present.

For more information about your sources of water, please refer to the Source Water

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (254) 938-2505

Do I need to take special precautions?

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>.

For more information regarding this report contact:

Tim Pitts
Utility Director
(254) 938-2505

Sources of 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.



Public Participation Opportunities

Date: 2nd Monday of each month

Time: 6:00 PM

Location: Troy Community Center, 201 East Main Street, Troy, Texas

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please contact us at (254) 938-2505.

Abbreviations and Terms:

- **Action Level** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **NTU** - nephelometric turbidity units (a measure of turbidity)
- **ppm** - milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
- **MFL** - million fibers per liter (a measure of asbestos)
- **ppb** - micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
- **pCi/L** - picocuries per liter (a measure of radioactivity)
- **ppt** - parts per trillion, or nanograms per liter (ng/L)
- **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 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 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.
- **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.
- **Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- **ppq** - parts per quadrillion, or picograms per liter (pg/L)

Lead and Copper

Definitions:

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. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09-26-2007	1.3	1.3	0.08	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing.
Lead	09-26-2017	0	15	4.4	0	Ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

2018 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2018	19	19.1 - 28	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 year¹

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2018	30	0+19.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	52	2.8 -64.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2018	0.0634	0.0634 -0.0634	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	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]	2018	1	0.03 – 0.64	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrate [measured as Nitrogen Contaminants]	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.
Cyanide	2018	90	90-90	200	200	ppm	N	Discharge from plastic and fertilizer factories; discharge from steel/metal factories.

Table (received from the City of Temple) of State Test Results

							1/01/2017
1002	ALUMINUM	200.8				0.0209 MG/L	- 12/31/2017
1074	ANTIMONY, TOTAL	200.8	<	MRL	.001 MG/L		1/01/2017 - 12/31/2017
1005	ARSENIC	200.8	<	MRL	.0024 MG/L		1/01/2017 - 12/31/2017
1010	BARIUM	200.8				0.0655 MG/L	1/01/2017 - 12/31/2017
1075	BERYLLIUM, TOTAL	200.8	<	MRL	.0008 MG/L		1/01/2017 - 12/31/2017
1015	CADMIUM	200.8	<	MRL	.001 MG/L		1/01/2017 - 12/31/2017
1016	CALCIUM	200.7				57.6 MG/L	1/01/2017 - 12/31/2017
1020	CHROMIUM	200.8	<	MRL	.01 MG/L		1/01/2017 - 12/31/2017
1022	COPPER,FREE	200.8				0.09 MG/L	1/01/2017 - 12/31/2017
1915	HARDNESS, TOTAL (AS CACO3)	2340B				181 MG/L	1/01/2017 - 12/31/2017
1028	IRON	200.7				0.01 MG/L	1/01/2017 - 12/31/2017
1030	LES D	200.8	<	MRL	.001 MG/L		1/01/2017 - 12/31/2017
1031	MAGNESIUM	200.7				9.01 MG/L	1/01/2017 - 12/31/2017
1032	MANAGANESE	200.8		MRL	.0135 MG/L		1/01/2017 - 12/31/2017

1035	MERCURY	245.1	<	MRL	.0004 MG/L		1/01/2017 - 12/31/2017
1036	NICKEL	200.8				.0019 MG/L	1/01/2017 - 12/31/2017
1042	POTASSIUM	200.7				3.88 MG/L	1/01/2017 - 12/31/2017
1045	SELENIUM	200.8	<	MRL	.003 MG/L		1/01/2017 - 12/31/2017
1050	SILVER	200.8	<	MRL	.01 MG/L		1/01/2017 - 12/31/2017
1052	SODIUM	200.7				19.6 MG/L	1/01/2017 - 12/31/2017
1085	THALLIUM. TOTAL	200.8	<	MRL	.0004 MG/L		1/01/2017 - 12/31/2017
1095	ZINC	200.8	<	MRL	.005 MG/L		1/01/2017 - 12/31/2017
1928	ALKALINITY, BICARBONATE	2320B				194 MG/L	1/01/2017 - 12/31/2017
1929	ALKALINITY, CARBONATE	2320B		MRL	2 MG/L		1/01/2017 - 12/31/2017
1931	ALKALINITY, PHENOLPHTHALEIN	2320B	<	MRL	2 MG/L		1/01/2017 - 12/31/2017
1927	ALKALINITY, TOTAL	2320B	<			143 MG/L	1/01/2017 - 12/31/2017
1017	CHLORIDE	300				34 MG/L	1/01/2017 - 12/31/2017
1064	CONDUCTIVITY @ 25 C UMHOS/CM	2510B				477 M/L	1/01/2017 - 12/31/2017
1025	FLUORIDE	300				.19 MGL	1/01/2017 - 12/31/2017
1040	NITRATE	353.2				0.64 MG/L	1/01/2017 - 12/31/2017

1055	SULFATE	300				20.00 MG/L	1/01/2017 - 12/31/2017
1930	TDS	2540C				261 MG/L	1/01/2017 - 12/31/2017

These were the only positive results for samples other than minerals and metals and System DBP

Analyte Code	Analyte Name	Method	Less Than Ind.	Level Type	Reporting Level	Concentration	MP
205	ATRAZINE	525.2				.15 UG/L	1/01/2017 - 12/31/2017
2943	BROMIDICHLORO METHANE	524.2				24 UG/L	1/01/2017 - 12/31/2017
2941	CHLOROFORM	524.2				192 UG/L	1/01/2017 - 12/31/2017
2944	DIBROMOCHLOROMETHANE	524.2				16.6 UG/L	1/01/2017 - 12/31/2017

Substance (Units)	Sample Year	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Possible Source
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Turbidity Turbidity (NTU)	2018	.04	.01	.46	Treatment Technique	100%	Soil runoff
Inorganics Fluoride (ppm)	2018	0.2	0.2	0.2	4.0	4.0	(1)
Nitrate as Nitrogen (ppm)	2018	.51	.51	.51	10.0	10.0	(2)
Combine radium (pCi/L)	2011	0.10	0.10	0.10	5.0	0.00	Erosion of natural deposits
Atrazine (ppm)	2018	0.00027	0.00027	0.00027	0.003	0.003	Agricultural Runoff

Coliform Bacteria Total Coliform bacteria (presence in 5% of samples collected)	2018	NA	0.00%	0.00%	5.00%	0.00%	Naturally present in the environment
Disinfection Residual Chloramines (ppm)	2018	3.48	.571	3.81	4.00 (5)	4.00 (5)	Water additive used to control microbes
Disinfection Byproducts Total Trihalomethanes (ppb) Total Haloacetic Acids (ppb)	2018 2018	.052 .038	.045 .029	.057 .060	80 (5) 60 (5)	NA NA	By product of water disinfection By product of water disinfection
Total Organic Carbon Source Water (ppm) Drinking Water (ppm) Removal Ratio (TT)	2018 2018 2018	3.70 2.54 2.00	3.03 2.25 1.36	4.06 2.76 2.35	NA NA NA	NA NA NA	Naturally present in the environment
Unregulated Contaminants (6) Chloroform (ppb) Bromoform (ppb) Bromodichloromethane (ppb) Dibromochloromethane (ppb)	2018 2018 2018 2018	10.75 7.85 14.48 18.51	3.30 5.90 9.00 13.80	23.50 9.90 19.40 21.90	NA NA NA NA	NA NA NA NA	By product of water disinfection
Secondary & Other Unregulated Constituents Bicarbonate Alkalinity (ppm) Total Alkalinity (ppm) Chloride (ppm) Conductivity (uS/m) pH (pH units) Sodium (ppm) Sulfate (ppm) Total Dissolved Solids (ppm)	2018 2018 2018 2018 2018 2018 2018 2018	174.0 159.0 39.00 486.0 7.42 22.0 28.0 255	174.0 123.0 39.00 486.0 6.97 22.0 28.0 255	174.0 205.0 39.00 486.0 7.70 22.0 28.0 255	NA NA 300 NA >7.0 NA N/A N/A	NA NA NA NA NA NA NA NA	Erosion of limestone Natural soluble minerals/salts Naturally occurring element Electrical property of water Measure of corrosivity Erosion of natural deposits Naturally occurring compounds Total dissolved mineral constituents
Lead and Copper Copper (ppm) Lead (ppb)	Year 2016 2016	(3) 0.21 .0027	(4) .095 .0010	Action Level .039 .0250	Violation? No No		Corrosion of household plumbing and erosion of natural deposits