



# 2019

## Annual Drinking Water Quality Report (Consumer Confidence Report)

**Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements.**

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### About The Following Pages

The pages that follow list all of the federally regulated, or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to ninety seven (97) contaminants.

### 2019 Water Usage

Total: 315,971,800 gallons  
 February: 21,218,000 gallons  
 August: 30,873,000 gallons  
 10% of all usage was for outdoor use.

### Definitions

- Maximum Contaminant Level (MCL):** The maximum permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL):** The highest level of 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 (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 contamination.
- Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL)** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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 U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

**WATER SOURCES:** 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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants:

- 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 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.

**Total Water Loss:** In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2013, our system lost an estimated 10,742,000 gallons of water. If you have any questions about the water loss audit please call (936)856-4611.

# Annual Drinking Water Quality Report

## Inorganic Contaminants

Year of Range	Contaminant	Highest Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2019	Barium	0.0358	0.0358	0.0358	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2019	Fluoride	1.53	1.53	1.53	4.0	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2019	Nitrate	0.05	0.05	0.05	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2019	Selenium	0.0042	0.0042	.00042	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharges from mines.

Year of Range	Contaminant	Highest Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2019	Xylenes	<0.5	<0.5	<0.5	10000	10000	ppb	Discharge from petroleum factories; discharge from chemical factories

## Maximum Residual Disinfectant Level

Year of Range	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2019	Gaseous Chlorination, PRE	1.32	0.44	2.67	4.0	<4.0	ppm	Disinfectant used to control microbes.

## Disinfection Byproducts

Year of Range	Contaminant	Highest Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2019	Total Trihalomethanes	47.1	47.1	47.1	80	ppb	Byproduct of drinking water disinfection.

**Unregulated Initial Distribution System Evaluation for Disinfection Byproducts:** WAIVED OR NOT YET SAMPLED

**Unregulated Contaminants:** NOT REPORTED OR NONE DETECTED

## Lead and Copper

Year of Range	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2018	Lead	4.61	1	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2018	Copper	0.0605	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

## Recommended Additional Health Information for Lead:

All water systems are required by EPA to report the language below starting with the 2012 CCR to be delivered to you by July of 2013. We are providing this information now as a courtesy.

*"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. This water supply 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>."*

**Turbidity:** NOT REQUIRED

**Total Coliform:** REPORTED MONTHLY TESTS FOUND ONE TEST WITH COLIFORM BACTERIA.

**Fecal Coliform:** REPORTED MONTHLY TEST FOUND NO FECAL COLIFORM BACTERIA.

**Secondary and Other Constituents Not Regulated:** (No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2019	Bicarbonate	316	316	316	N/A	ppm	Corrosion of carbonate rocks such as limestone.
2019	Calcium	4.77	4.77	4.77	N/A	ppm	Abundant naturally occurring element.
2019	Chloride	123	123	123	250	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2019	Copper	0.0046	0.0046	0.0046	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2019	Iron	0.136	0.136	0.136	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2019	Magnesium	1.000	1.000	1.000	N/A	ppm	Abundant naturally occurring element.
2019	Manganese	0.0109	0.0109	0.0109	0.05	ppm	Abundant naturally occurring element.
2019	Nickel	<0.0010	<0.0010	<0.0010	N/A	ppm	Erosion of natural deposits.
2019	pH	8.4	8.4	8.4	6.5-8.5	units	Measure of corrosivity of water.
2019	Sodium	232	232	232	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity.
2019	Sulfate	89	89	89	250	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2019	Total Alkalinity As CaCO3	262	262	262	N/A	ppm	Naturally occurring soluble mineral salts.
2019	Total Dissolved Solids	694	694	694	500	ppm	Total dissolved mineral constituents in water.
2019	Total Hardness as CaCO3	11.9	11.9	11.9	N/A	ppm	Naturally occurring calcium.
2019	Zinc	0.0114	0.0114	0.0114	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.

**Abbreviations**

**NTU**—Nephelometric Turbidity Units  
**MFL**—million fibers per liter ( a measure of asbestos)  
**pCi/L**—picocuries per liter (a measure of radioactivity)  
**ppm**—parts per million, or milligrams per liter (mg/L)  
**ppb**—parts per billion, or micrograms per liter (ug/L)  
**ppt**— parts per trillion, or nanograms per liter  
**ppq**- parts per quadrillion, or pictograms per liter

**Secondary Constituents**

Many constituents (such as calcium, sodium, or iron) 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 concern. Therefore, secondary's are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

## Radioactive Contaminants

The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

Year or Range	Contaminant	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Source of Contamination
2016	Gross Alpha	5.8	0-5.8	0	15	pCi/L	NONE	Decay of natural and man-made deposits
2016	Gross Beta	7.2	6.9-7.2	0	50	pCi/L	NONE	Erosion of natural deposits.
2016	Radium 226/228	1.08	1.08-1.08	0	5	pCi/L	NONE	Erosion of natural deposits.

### Special Notice for ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

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; those 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 provider. 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

### Public Participation Dates

**Date:** Third Tuesday of Each Month

**Time:** 5:30 p.m.

**Location:** City Hall

**Phone:** (936) 856-4611

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

### 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 EPA's Safe Drinking Water Hotline: (1-800-426-4791).

### Where Do We get our Drinking Water?

Our drinking water is obtained from GROUND water sources. It comes from the following Lake/ River/ Reservoir/Aquifer: Jasper. The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact City of Willis. The information contained in the assessment allows us to focus our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

#### En Espanol

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel. (936)856-4611 -para hablar con una persona bilingue en espanol.

**Nova Biologicals, Inc.**  
**1775 N. Loop 336 East, Suite#4**  
**Conroe, TX 77301**



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