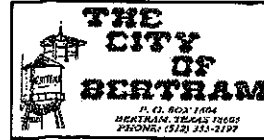


# City of Bertram (PWS #0270012)

Annual Drinking Water Quality Report for 1/1/16 to 12/31/16

## 2016 Consumer Confidence Report



**Special Notice:** 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; 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 a (800-426-4791.)

### Substances that could be in water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which may reasonably be expected to contain at least small amounts of some contaminants does not necessarily indicate that the water poses a health risk. 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 can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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 or wildlife;

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or materials used in plumbing components.

may result from urban storm water runoff, industrial or domestic waste water 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.

### Where does our water come from?

The City Of Bertram obtains our drinking water from groundwater sources. The groundwater comes from the Ellen Burger Aquifer.

### Naturally Occurring Bacteria

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us, in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presences of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we tested many water samples for coliform bacteria. In that time, we had one positive sample for coliform bacteria. Federal regulations now require that public water that test positive for coliform bacteria must be further analyzed for fecal coliform bacteria. During the increased monitoring period we had zero samples test positive for coliform bacteria. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration.

### Lead and Drinking Water

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 Bertram Public Works is 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 concerned about by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### Public Participation Opportunities

City council meetings are held the 2<sup>nd</sup> and 4<sup>th</sup> Tuesday of each month at 6:00 p.m. in the Council Chambers, 110 E Vaughan Street.

### Questions?

For more information about this report, or for any questions relating to your drinking water, please call Adam Lambert, Director of Public Works: (512) 751-8613.

### Sampling Results

During the past year we have taken many water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants, and chlorine residual levels. The tables show only those contaminants that were detected in the water.

### Definitions

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**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 highest 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.

evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum residual disinfectant level goal or MRDLG:** The level of 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)

**N/A:** Not applicable

**NTU:** Nephelometric turbidity units (a measure of turbidity)

**PCI/L:** Picocuries per liter (a measure of radioactivity)

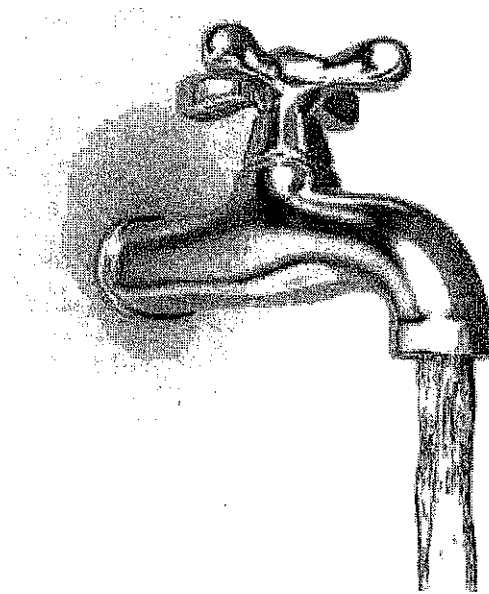
**Action level Goal or ALG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

**PPB:** One part substance per billion parts water (or micrograms per liter).

**PPM:** One part substance per million parts water (or milligrams per liter).

**PPT:** One part substance per trillion parts water (or nanograms per liter).



Disinfection Data							
Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
(Chlorine or Chloramines)	(Average of 2015 Data)	(Minimum single sample result)	(Maximum single sample result)				Disinfectant used to control microbes
Chlorine	1.17	0.39	2.12	4.0	<4.0	PPM	Chlorine Gas

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	0 Positive Sample	0		0	N	Naturally present in the environment

Source Water Susceptibility Assessment Result Interpretation										
Asbestos	Cyanide	Metals	Microbial	Minerals	Radiochemical	Sythetic Organic Chemicals	Disinfection Byproduct	Volatile Organic Chemicals	Drinking Water Contaminant Candidate	Other
Low	Low	High	Low	Medium	Low	Low	Low	Low	Low	Low

Lead and Copper							
Contaminants	Collection Date	90 <sup>th</sup> Percentile	# Sites Over AL	MCLG	MCL	Units	Likely Source of Contamination
Copper	2013	0.251	10	1.3	1.3	PPM	Erosion of natural deposits; Leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2013	2.92	10	0	15	PPM	Corrosion of household plumbing systems; Erosion of natural deposits.

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)	2015	6	6.3-6.3	No goal for the total	60	PPB	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	119	19.3-19.3	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	2014	0.107	0.101-0.107	2	2	PPM	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2015	0.3	0.28-0.3	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)	2015	4	3.23-3.80	10	10	PPM	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2014	3.2	3.1-3.2	50	50	PPB	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely source of contamination
Combined Radium 226/228	2015	1.5	1.5-1.5	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2015	3.0	3.0-3.0	0	15	Pci/L	N	Erosion of natural deposits.
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Tetrachloroethylene	2015	1	0-0.5	0	5	PPB	N	Discharge from factories and dry cleaners.

**Source Water Assessment & Protection Text  
for 2004 Consumer Confidence Report**  
(To be sent to customers in 2005)

**1. Text for systems receiving assessment report with at least one contaminant list as highly susceptible.**

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 (512) 639-6491.

**2. Text for systems receiving assessment report with no contaminants listed as highly susceptible.**

TCEQ completed an assessment of your source water and results indicate that our sources have a low susceptibility to 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 (512) 639-6491.

**3. Text for systems not receiving an assessment report.**

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being conducted by the TCEQ and should 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 in this assessment will allow us to focus our source water protection strategies.

**4. Text for systems that purchase 100%**

The TCEQ has completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact (512) 639-6491.