

2016 Annual Drinking Water Quality Report

**Borger Municipal Water System
Customer Service or Billing Questions
(806) 273-0915**

**ID# TX1170001
Water Quality Questions
(806) 273-0965**

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

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, treatment with steroids, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Our Drinking Water Meets or Exceeds All Federal (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 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. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (806)273-0965 - para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from ground water sources. It comes from the OGALLALA AQUIFER. 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 detection of these contaminants will be found in this report. If we receive or purchased water from another system, their susceptibility is not included in this assessment. For more information on source water assessments and protection efforts at our system, please contact us.

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).

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 constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

About The Following Tables

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 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allows 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. MRDLG's 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.

ABBREVIATIONS

NA – Not applicable

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 (µg/L)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

Public Participation Opportunities

Date: Monday, July 24th, 2017

Time: 7:00PM

Location: 600 N. Main
Borger, TX

INORGANIC CONTAMINATES AND SYNTHETIC ORGANIC CONTAMINATES*

Year or Range	Contaminate	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminate
2016	Arsenic	0.0020	0.0018	0.0022	10	0	ppb	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics wastes
2016	Barium	0.110	0.098	0.120	2	2	ppm	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics wastes
2016	Chromium	0.0033	0.0023	0.0042	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits
2016	Fluoride	0.627	0.560	0.693	4	4	ppm	Erosion of natural deposits; discharge from fertilizer and aluminum factories
2016	Nitrate	1.56	1.41	1.68	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2011	Gross beta emitters	7.95	6.60	9.30	50	0	pCi/L	Decay of natural and man made deposits
2011	Gross alpha	5.25	5.10	5.40	15	0	pCi/L	Erosion of natural deposits
2016	Bis (2-ethylhexyl) phthalate	0.0	0.0	0.0	6.0	0	ppb	Discharge from Rubber and chemical factories

INORGANIC CONTAMINATES

Testing waived, not reported, or none detected

MAXIMUM RESIDUAL DISINFECTION LEVEL

Year or Range	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminate
2016	Free Chlorine	0.68	0.50	0.93	4	<4.0	ppm	Disinfectant used to control microbes

TOTAL COLIFORM – Not found
FECAL COLIFORM – Not found

DISINFECTION BYPRODUCTS

Year or Range	Contaminate	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminate
2016	Total Haloacidic Acids	3.61	0	14.3	60		ppb	Byproduct of drinking water disinfection
2016	Total Trihalomethanes	0	0	0	80		ppb	Byproduct of drinking water disinfection

UNREGULATED CONTAMINATES

Year or Range	Contaminate	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminate
2016	Chloroform	0.00	0.00	0.00			ppb	Byproduct of drinking water disinfection
2016	Bromoform	0.00	0.00	0.00			ppb	Byproduct of drinking water disinfection
2016	Bromodichloromethane	0.00	0.00	0.00			ppb	Byproduct of drinking water disinfection
2016	Dibromochloromethane	0.00	0.00	0.00			ppb	Byproduct of drinking water disinfection

Chloroform, Bromoform, Bromodichloromethane, and Dibromochloromethane are disinfection byproducts. There is no maximum contaminate level for these chemicals at the entry point to disinfection.

Unregulated Contaminant Monitoring Rule 3 (UCMR3)

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. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <http://www.epa.gov/safewater/ucmr3/index.html>, or call the Safe drinking Water Hotline at (800)426-4791. Their was no detection of (UCMR3) contaminants for PWS # 1170001

LEAD AND COPPER

Year or Range	Contaminate	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminate
2016	Lead	0.0015	1	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2016	Copper	0.24	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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. 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 (Borger Water Treatment Plant did not treat any Raw surface water in 2016)

Year or Range	Contaminate	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminate
2016	Turbidity	NA	100	0.30	NTU	Soil runoff

Turbidity has no health effects; however turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

TOTAL ORGANIC CARBON (Borger Water Treatment Plant did not treat any Raw surface water in 2016)

Year or Range	Contaminate	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminate
2016	Source Water	NA	NA	NA			ppm	Naturally present in the environment

Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure the water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (TTHM’s) and haloacetic acids (HAA5) which are reported elsewhere in this report.

TWDB Water Loss Audit for City of Borger

In the Water Loss audit submitted to the Texas Water Development Board for the time period of January thru December 2016, our system lost an estimated 253,151,000 gallons of water or about 8.5% of production. If you have any questions about the loss audit, please call 273-0965.

Water Conservation

The City of Borger maintains a Drought Contingency Plan to preserve the public water supply in case of emergency conditions. The plan can be easily implemented if emergency or drought conditions persist for any length of time. The drought contingency plan ensures that ample water will always be available to meet the most critical needs of residents and business.

The City of Borger also maintains a Water Conservation Plan, which outlines steps and procedures to promote water conservation for the citizens of Borger and Industry to conserve water, our most precious resource. Using water more efficiently will not only save money but, more importantly, will also help protect the quality of life of future Texans.

The City of Borger urges everyone to be water wise. If you need information on water conservation tips, a free brochure is available, please contact the Water Quality Dept. at 806-273-0965.