



THE STAR OF NORTH TEXAS

PWS ID #: TX0740001

City of Bonham Is Purchased Surface Water

Annual Water Quality Report for the period of January 1 to December 31, 2015

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.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903)583-7555

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.



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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>.

Source Water Assessment

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report 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 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 Lance Capehart, Director of Utilities.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.texas.gov/DWW>

Source Water Name	Type of Water	Report Status	Location
SW FROM NTMWD BONHAM WTP CC FROM TX0740051 NORTH	SW	Active	Fannin County, Texas

**Public Participation
Opportunities**

**Date: Monthly on 2nd Monday
Time: 5:30 PM
Location: City Hall, 514 Chestnut st
Phone #: 903-583-7555**

**If you have any questions
about this report please contact:**

**Lance Capehart
Director of Public Utilities
Phone # 903-583-7555**

2015 Regulated Contaminants Detected

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	06/27/2013	1.3	1.3	0.354	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	06/27/2013	0	15	3.69	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:

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

na: not applicable.

NTU: nephelometric turbidity units (a measure of turbidity)

pCi/L: picocuries per liter (a measure of radioactivity)

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Facial Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	0	0	0	N	Naturally present in the environment.

NOTE: Reported monthly tests found no fecal coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

Regulated Contaminants									
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Total Haloacetic Acids (HAA5)	2015	26	17.9-40.4	No goal for the total	60	ppb	No	By-product of drinking water chlorination.	
Total Trihalomethanes (THM)	2015	43	20.9-61.3	No goal for the total	80	ppb	No	By-product of drinking water chlorination.	
Bromate	2015	Levels lower than detect level	0-0	5	10	ppb	No	By-product of drinking water ozonation.	
NOTE: Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.									
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Barium	2015	0.076	0.076 - 0.076	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	
Chromium	2015	0.55	0.55 - 0.55	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.	
Fluoride	2015	0.568	0.254 - 0.568	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.	
Nitrate (measured as Nitrogen)	2015	0.471	0.105 - 0.471	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.	
Nitrate Advisory: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.									
Selenium	2015	0.001	0.001 - 0.001	50	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.	
Synthetic organic contaminants including pesticides and herbicides									
Di-(2-ethylhexyl) phthalate	2015	0.5	0.5 - 0.5	0	6	ppb	No	Likely Source of Contamination Discharge from rubber and chemical factories.	
Turbidity									
Highest single measurement									
(Treatment Technique)									
Limit									
1 NTU									
0.3 NTU									
Level Detected									
0.58									
Violation									
No									
Likely Source of Contamination									
Soil runoff									
Soil runoff									
98.5%									
Lowest monthly percentage (%) meeting limit									
0.3 NTU									
NOTE: 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									
Collection Date	Highest Level Detected	Range of Levels Detected	Units	Violation	Likely Source of Contamination				
Source Water	2015	19.3	4.41 - 19.3	ppm	Naturally present in the environment.				
Drinking Water	2015	16.6	2.53 - 16.6	ppm	Naturally present in the environment.				
Removal Ratio	2015	72.7%	14.0 - 72.7	% removal*	N/A				
NOTE: Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. By-products of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.									
* Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TOECQ to be removed.									
Unregulated Contaminants									
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Violation	Likely Source of Contamination			
Chloroform	2015	41.2	32.6 - 41.2	ppb	By-product of drinking water disinfection.				
Bromodichloromethane	2015	12.2	7.38 - 12.2	ppb	By-product of drinking water disinfection.				
Dibromochloromethane	2015	3.56	1.91 - 3.56	ppb	By-product of drinking water disinfection.				
NOTE: Unregulated contaminants are those for which the 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 regulations are warranted.									
Secondary and Other Constituents Not Regulated									
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Violation	Likely Source of Contamination			
Bicarbonate	2015	61.3	61.3 - 61.3	ppm	Corrosion of carbonate rocks such as limestone.				
Calcium	2015	58.2	39.0 - 58.2	ppm	Abundant naturally occurring element.				
Chloride	2015	26.7	11.9 - 26.7	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.				
Hardness as Ca/Mg	2015	118	118 - 118	ppm	Naturally occurring calcium and magnesium.				
Iron	2015	0.039	0.039 - 0.039	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.				
Magnesium	2015	2.32	2.32 - 2.32	ppm	Abundant naturally occurring element.				
Manganese	2015	0.19	0.19 - 0.19	ppm	Abundant naturally occurring element.				
Nickel	2015	0.003	0.003 - 0.003	ppm	Erosion of natural deposits.				
pH	2015	8.30	7.40 - 8.30	units	Measure of corrosivity of water.				
Sodium	2015	11.5	11.5 - 11.5	ppm	Erosion of natural deposits; by-product of oil field activity.				
Sulfate	2015	80.4	58.0 - 80.4	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity.				
Total Alkalinity as CaCO3	2015	80.2	49.6 - 80.2	ppm	Naturally occurring soluble mineral salts.				
Total Dissolved Solids	2015	244	181 - 244	ppm	Total dissolved mineral constituents in water.				
Total Hardness as CaCO3	2015	152	111 - 152	ppm	Naturally occurring calcium.				
Zinc	2015	0.008	0.008 - 0.008	ppm	Moderately abundant naturally occurring element used in the metal industry.				