Annual Drinking Water Quality Report

TX1750028 B & B WSC

Annual Water Quality Report for the period of January 1 to December 31, 2013

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.

B & B WSC is Purchased Surface Water

For more information regarding this report contact:

Name __Bobby Armstrong

Phone _903-872-0650_____

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903) 654-0054___.

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 pickup 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 EPAs 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.

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.

Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being 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.

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 CITY OF CORSICANA	CC FROM TX1750002 CITY OF	SW	_Active_	___Navarro Mills Lake_____

"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 (Bobby Armstrong) 903-654-0054.

Water Quality Test Results

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 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)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter (pg/L)

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)*	2013	23	1.2 - 24.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2013	37	23.8 - 39.1	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**
Nitrate [measured as Nitrogen]	2013	0.34	0.29 - 0.34	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

DISINFECTANT RESIDUAL TABLE

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MDRL	MDRLG	Unit of Measure	Violation Y/N	Likely Source of Contamination
Chloramine	2013	1.5	0.5	2.5	4	4	ppm	N	Water Additive used to control Microbes

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2012	Chloroform	14.6	9.4	23.0	ppb	Byproduct of drinking water disinfection.
2012	Bromodichloromethane	12.5	8.6	16.5	ppb	Byproduct of drinking water disinfection.
2012	Dibromochloromethane	7.95	5.0	10..9	ppb	Byproduct of drinking water disinfection.

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2008	Lead	0.0		15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2008	Copper	0.0		1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching *from* wood preservatives.

Required 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."

Inorganic Contaminants

Year or Range	Contaminant	Average	Minimum Level	Maximum Level	MCL	MCLG	Units	Source of Contaminant
2008	Barium	0.041	0.041	0.041	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2012	Fluoride	0.18	0.21	0.75	5	5	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2012	Nitrate	0.2	0	0.05	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2012	Gross beta emitters	4.7	1.5	4	50	0	pCi/L	Decay of natural and man-made deposits.

Organic Contaminants

Year or Range	Contaminant	Average	Minimum Level	aximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2009	Di(2-ethylhexyl)adipate	0.02	0	0.14	400	400	ppb	Discharge from chemical factories.
2009	Di(2-ethylhexyl)phthalate	0.03	0	0.2	6	0	ppb	Discharge from rubber and chemical factories.
2009	Hexachlorocyclopentadiene	0.02	0	0.11	50	50	ppb	Discharge from chemical factories.
2009	Atrazine	0.52	0	3.16	3	3	ppb	Runoff from herbicide used on row crops.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2012	Chloramine Residual	2.3	0.5	6.25	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2012	Total Haloacetic Acids	23.55	21.8	30	60	ppb	Byproduct of drinking water disinfection.
2012	Total Trihalomethanes	33.15	46.4	49	80	ppb	Byproduct of drinking water disinfection.

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
2008	Aluminum	0.038	0.038	0.038	.05	ppm	Abundant naturally occurring element.
2012	Bicarbonate	82	74	93	NA	ppm	Corrosion of carbonate rocks such as limestone.
2008	Calcium	42	42	42	NA	ppm	Abundant naturally occurring element.
2011	Chloride	8.69	23	24	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2008	Copper	0.004	0.004	0.004	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2008	Hardness as Ca/Mg	127	115	132	NA	ppm	Naturally occurring calcium and magnesium.
2008	Iron	0.076	0.076	0.076	.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2008	Magnesium	6.1	6.1	6.1	NA	ppm	Abundant naturally occurring element.
2008	Manganese	0.0012	0.0012	0.0012	.05	ppm	Abundant naturally occurring element.
2008	Nickel	0.002	0.002	0.002	NA	ppm	Erosion of natural deposits.
2012	pH	7.7	8.1	8.5	>7.0	units	Measure of corrosivity of water.
2012	Sodium	20.4	12		NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2012	Sulfate	48.5		48.5	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2012	Total Alkalinity as CaCOS	82	94	82	NA	ppm	Naturally occurring soluble mineral salts.
2012	Total Dissolved Solids	189	189	25.2	1000	ppm	Total dissolved mineral constituents in water.
2008	Zinc	0.006	0.006	0.006	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.

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)*	2013	31	11.6 - 36.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2013	43	0 - 54.7	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**
Arsenic	2013	2	1.46 - 2.29	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2013	0.0547	0.0519 - 0.0547	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2013	0.948	0.533 - 0.948	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2013	0.7	0.55 - 0.7	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]	2013	0.34	0.0275 - 0.34	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2013	2.65	1.73 - 2.65	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**
Beta/photon emitters	01/26/2011	4.7	0 - 4.7	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	01/26/2011	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2013	1	0 - 0.55	3	3	ppb	N	Runoff from herbicide used on row crops.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.37 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	99.38%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

CITY OF CORSICANA, TEXAS

Turbidity and TOC 2013

Navarro Mills

	NTU			TOC			
Month	Average	Highest	% Compliance	Raw TOC	Tap TOC	% Removal	% Compliance
Jan	0.08	0.15	100	4.47	3.16	29.3	117
Feb	0.09	0.12	100	4.22	3.08	27.0	114
Mar	0.09	0.12	100	4.22	3.26	22.7	100
Apr	0.06	0.11	100	4.13	3.34	19.1	100
May	0.07	0.10	100	4.04	3.38	16.3	100
Jun	0.09	0.14	100	3.60	3.61	-0.3	100
Jul	0.08	0.16	100	4.14	3.72	10.1	100
Aug	0.08	0.18	100	4.58	3.76	17.9	100
Sep	0.09	0.16	100	4.62	3.57	22.7	100
Oct	0.07	0.13	100	4.63	3.67	20.7	100
Nov	0.08	0.15	100	4.57	3.54	22.5	100
Dec	0.08	0.13	100	4.77	3.63	23.9	100
Average	0.08			4.33	3.48	19.3	

	NTU	Raw TOC	Tap TOC	% Removal
Average Both Plants	0.09	5.09	3.84	23.5
Lowest % of compliance for NTU	99.4			

Lake Halbert

	NTU			TOC			
Month	Average	Highest	% Compliance	Raw TOC	Tap TOC	% Removal	% Compliance
Jan	0.12	0.29	100	5.55	3.82	31.2	100
Feb	0.11	0.21	100	5.67	4.03	28.9	183
Mar	0.09	0.28	100	5.53	4.24	23.3	100
Apr	0.11	0.20	100	5.94	4.32	27.3	100
May	0.09	0.24	100	5.26	4.10	22.1	100
Jun	0.08	0.11	100	5.55	4.45	19.8	100
Jul	0.07	0.34	100	5.77	4.49	22.2	100
Aug	0.08	0.37	99.4	4.85	3.46	28.7	100
Sep	0.10	0.27	100	5.91	4.41	25.4	100
Oct	0.10	0.19	100	6.12	4.30	29.7	100
Nov	0.09	0.17	100	6.90	4.48	35.1	100
Dec	0.09	0.25	100	7.06	4.28	39.4	113
	0.09			5.84	4.20	27.8	

CITY OF CORSICANA, TEXAS