2019 Consumer Confidence Report for Public Water System B & B WSC

This is your water quality report for January 1 to December 31, 2019

B & B WSC provides surface water from **Navarro Mills Lake/Lake Halbert** located in Navarro County.

For more information regarding this report contact:

Name ___Bobby Armstrong_____

Phone ____903-654-0054_____

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

Definitions and Abbreviations

Definitions and Abbreviations	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)

Definitions and Abbreviations

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.
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information about your 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 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

B & B WSC purchases water from CITY OF CORSICANA. CITY OF CORSICANA provides purchase surface water from <style isBold='true'>[insert source name of aquifer, reservoir, and/or river]</style> located in <style isBold='true'>[insert name of County or City]</style>.
'<style isBold='true' >[insert a table containing any contaminant that was detected in the provider's water for this calendar year, unless that contaminant has been separately monitored in your water system (i.e. TTHM, HAA5, Lead and Copper, Coliforms)].</style>'

'TCEQ 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 **Bobby Armstrong. (903)654-0054**

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/23/2017	1.3	1.3	0.0412	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/23/2017	0	15	1.12	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2019 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination

Haloacetic Acids (HAA5)	2019	15	11.8 - 18.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

'* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year'

Total Trihalomethanes (TTHM)	2019	54	36.8 - 81.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

'* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year'

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2019	1	0.394 - 0.622	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

' A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).'

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramine	2019	1.6	0.5-2.6	4	4	PPM	N	Water additive used to control microbes.

Violations

Consumer Confidence Rule

The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2018	02/04/2019	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

Turbidity and TOC 2019

Navarro Mills								Lake Halbert							
	NTU			TOC					NTU			TOC			
Month	Average	Highest	% Compliance	Raw TOC	Tap TOC	% Removal	% Compliance	Month	Average	Highest	% Compliance	Raw TOC	Tap TOC	% Removal	% Compliance
Jan	0.08	0.17	100	4.79	3.25	32.2	129	Jan	0.06	0.16	100	4.6	3.11	32.4	129
Feb	0.08	0.11	100	3.87	2.48	35.9	239	Feb	0.06	0.13	100	4.86	2.86	41.2	118
Mar	0.10	0.14	100	3.54	2.66	24.9	166	Mar	0.06	0.16	100	4.89	3.12	36.2	103
Apr	0.1	0.15	100	3.59	2.86	20.3	136	Apr	0.08	0.20	100	4.78	3.05	36.2	103
May	0.12	0.25	100	4.14	2.99	27.8	111	May	0.07	0.17	100	4.89	3.16	35.4	99
Jun	0.11	0.22	100	4.14	2.82	31.9	116	Jun	0.07	0.45	100	4.98	2.94	41.0	117
Jul	0.11	0.20	100	4.21	2.94	30.2	105	Jul	0.06	0.11	100	4.87	3.27	32.9	105
Aug	0.1	0.15	100	3.85	2.73	29.1	116	Aug	0.04	0.11	100	4.20	2.54	39.5	113
Sep	0.08	0.16	100	3.56	2.84	20.2	116	Sep	0.04	0.10	100	3.59	2.33	35.1	140
Oct	0.08	0.14	100	3.96	2.94	25.8	103	Oct	0.04	0.09	100	3.73	2.40	35.7	143
Nov	0.06	0.11	100	3.86	2.94	23.8	136	Nov	0.04	0.09	100	3.75	2.52	32.8	131
Dec	0.07	0.13	100	3.65	2.87	21.4	122	Dec	0.04	0.08	100	3.44	2.41	29.9	120
Average	0.09			3.93	2.86	26.9	132.9		0.06			4.38	2.81	35.7	118.4

	NTU	Raw TOC	Tap TOC	% Removal
Average Both Plants	0.07	4.16	2.83	31.3

TOC % compliance is based on compliance with the TCEQ rules on TOC removal. Plants must meet or exceed 100% compliance based on a running quarterly average.

CITY OF CORSICANA, TEXAS

TTHM's 2019

Date of Samples	1/10/2019	4/4/2019	7/29/2019	10/14/2019	
Address of Sample	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Average of Quarte
4501 E HWY 31	49.3	54.6	80.4	48.1	58.1
2103 W 15th Ave	50.6	50.6	70.9	49.1	55.3
3500 Northpark	48.9	51.4	71.7	50.0	55.5
700 E 16th Ave	49.4	53.0	73.8	51.3	56.9
Average for each quarter	49.6	52.4	74.2	49.6	56.4

Haa5's 2019

Date of Samples	1/10/2019	4/4/2019	7/29/2019	10/14/2019	
Address of Sample	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Average of Quarte
4501 E HWY 31	34.6	23.3	36.9	24.9	29.9
2103 W 15th Ave	34.7	24.1	32.3	22.1	28.3
3500 Northpark	34.2	25.4	28.8	20.6	27.3
700 E 16th Ave	22.5	25.2	32.9	21.8	25.6
Average for each quarter	31.5	24.5	32.7	22.4	27.8

Average Chlorine Residual

2019

Month	Average Residual (mg/L)
January	2.41
February	2.58
March	2.65
April	2.25
May	2.22
June	1.79
July	1.66
August	2.27
September	2.35
October	2.25
November	2.23
December	2.13
2019 Yearly Average	2.23 mg/L

Min reading	0.6 mg/l
Max Reading	3.4 mg/l

Detected Regulated Contaminates for 2019

EP2 Lake Halbert				
SOC Pesticide	Detected Quantity	MCL	Date Collected	Analytical Meth
Atrazine	0.2 ug/l	N/A	1/10/2019	E525.2 GC/MS
VOC's	Detected Quantity	MC/L	Date Collected	Analytical Meth
Cholroform	39.5 ug/l	N/A	7/29/2019	E524.2 GC/MS
Bromodichloromethane	11.8 ug/l	N/A	7/29/2019	E524.2 GC/MS
Dibromochloromethane	1.44 ug/l	N/A	7/29/2019	E524.2 GC/MS
Inorganics				
Chloride	10.5 mg/l	300.0 mg/l	1/10/2019	E300.0 Anion
Fluoride	0.463 mg/l	4.0 mg/l	1/10/2019	E300.0 Anion
Nitrate (as N)	0.526 mg/l	10.0 mg/l	1/10/2019	E300.0 Anion
Sulfate	41.6 mg/l	300.0 mg/l	1/10/2019	E300.0 Anion
Total Dissolved Solids	168 mg/l	1000.0 mg/l	1/10/2019	SM2540C
Inorganics				
Metals Trace Elements				
Calcium Total	33.3 mg/l	N/A	1/10/2019	E200.7 Metals,
Potassium Total	4.07 mg/l	N/A	1/10/2019	E200.7 Metals,
Magnesium Total	2.56 mg/l	N/A	1/10/2019	E200.7 Metals,
Sodium Total	15.5 mg/l	N/A	1/10/2019	E200.7 Metals,
E200.8 ICP-MS				
Aluminum Total	0.027 mg/l	0.2 mg/l	1/10/2019	E200.8 IC-M
Barium Total	0.047 mg/l	2.0 mg/l	1/10/2019	E200.8 IC-M
Copper Total	.0029 mg/l	1.3 mg/l	1/10/2019	E200.8 IC-M
Cyanide Total	0.0530 mg/l	0.2 mg/l	1/10/2019	E355.4 CN

DEFINITIONS

ug/l	parts per billion or micrograms per liter
mg/l	parts per million or milligrams per liter

Detected Regulated Contaminates for 2019

EP 1 Navarro Mills

SOC Pesticide	Detected Quantity	MCL	Date Collected	Analytical I
Atrazine	0.1 ug/l	N/A	1/10/2019	E525.2 G
VOC's				
Cholroform	26.4 ug/l	N/A	9/25/2019	E524.2 G
Bromodichloromethane	19.4 ug/l	N/A	9/25/2019	E524.2 G
Dibromochloromethane	7.44ug/l	N/A	9/25/2019	E524.2 G
Inorganics				
Chloride	10.3 mg/l	300.0 mg/l	1/10/2019	E300.0 A
Fluoride	0.542 mg/l	4.0 mg/l	1/10/2019	E300.0 A
Nitrate (as N)	0.629 mg/l	10.0 mg/l	1/10/2019	E300.0 A
Sulfate	42.0 mg/l	300.0 mg/l	1/10/2019	E300.0 A
Total Dissolved Solids	233 mg/l	1000.0 mg/l	1/10/2019	SM254
Inorganics				
Metals Trace Elements				
Calcium	45.2 mg/l	20,000.0 mg/l	1/10/2019	E200.7 Meta
Magnesium	2.46 mg/l	20,000.0 mg/l	1/10/2019	E200.7 Meta
Potassium	3.51 mg/l	20,000.0 mg/l	1/10/2019	E200.7 Meta
Sodium Total	15.6 mg/l	20,000.0 mg/l	1/10/2019	E200.7 Meta
E200.8 ICP-MS				
Aluminum Total	0.033 mg/l	0.2 mg/l	1/10/2019	E200.8 IC
Barium Total	0.041 mg/l	2.0 mg/l	1/10/2019	E200.8 IC
Copper Total	.0025 mg/l	1.3 mg/l AL	1/10/2019	E200.8 IC
Manganese Total	.0028 mg/l	0.05 mg/l	1/10/2019	E200.8 IC
Nickel Total	.0012 mg/l	.1 mg/l	1/10/2019	E200.8 IC

DEFINITIONS

ug/l	parts per billion or micrograms per liter
mg/l	parts per million or milligrams per liter