2017 Consumer Confidence Report for Public Water System CITY OF BLANCO

This is your water quality report for January 1 to December 31, 2017

CITY OF BLANCO provides surface water from: SOURCE 1 - Blanco River, Blanco, Texas
SOURCE 2 - Canyon Lake Water Supply Company, Comal County, Texas

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)
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 s torm 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

CITY OF BLANCO purchases water from CLWSC CANYON LAKE SHORES. CLWSC CANYON LAKE SHORES provides purchase surface water from Canyon Lake Reservior located in Comal County, Canyon Lake, Texas.

Please find the Canyon Lake Water Supply Company CCR Data at the end of this report.

'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 **[insert water system contact][insert phone number]**'

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.0283	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	0.351	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2017 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2017	32	18.1 - 42.6	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)	2017	85	49.9 - 89.4	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
Inorganic Contaminants	**Collection Date**	**Highest Level or Average Detected**	**Range of Individual Samples**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
	12/20/2012	0.9935	0.9935 - 0.9935	7	7	MFL	N	Decay of asbestos cement water mains; Erosion of natural deposits.
Barium	2017	0.0274	0.0274 - 0.0274	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	0.5	0.53 - 0.53	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]	2017	0.18	0.1 - 0.18	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

'* 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'

Radioactive Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	04/18/2012	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2017	0.16	0.16 - 0.16	3	3	ppb	N	Runoff from herbicide used on row crops.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2017	0.91	0.23 - 2.43	4	4	Mg/L	N	Water additive used to control microbes.

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.5 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting limit	100%	0.3 NTU	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 system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Monthly samples of Total Organic Carbon showed that the City of Blanco met all of the TCEQ and EPA requirements for the year.

CLWSC

January 12, 2018

City of Blanco
Ronnie Rodriguez, Water Operations
P.O. Box 750
Blanco, Texas 78606

Certified Mail:
7016 2140 0000 6879 3167

RE: Wholesale Provider Requirements: Consumer Confidence Report (CCR) 2017 Data

Dear Mr. Rodriguez,

We are required by the TCEQ to provide our wholesale customers a copy of the Canyon Lake Shores Surface Water Treatment Plant laboratory data for your CCR. Enclosed you will find a copy of the water quality data for Canyon Lake Shores Surface Water Treatment Plant, Entry Point EP011. The turbidity data can be found below:

Year	Contaminant	Highest Single Measurement	Lowest monthly % of samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2017	Turbidity	0.11	100%	0.01	NTU	Soil Runoff

If you have any questions or concerns, please contact me at (830) 312-4600, or by e-mail to Aubry.Warfel@clwsc.com.

Sincerely,

Aubry Warfel

Aubry Warfel
Water Quality Specialist

Canyon Lake Water Service Company
P.O. Box 1742 • Canyon Lake, Texas 78133
(830) 964-3854 / Fax (830) 964-2779
www.clwsc.com

CLWSC Canyon Lake Shores Lab Sample Results for the CCR

1/12/2018

Lab Sample ID	Date Collected	Constituents	Results	Unit
AD66649				
PS-EP011				
	1/25/2017	Alkalinity, Bicarbonate (As CaCO3)	203	mg/L
	1/25/2017	Alkalinity, Total (As CaCO3)	166	mg/L
	1/25/2017	Chloride	33	mg/L
	1/25/2017	Diluted Conductance	525	umho/cm
	1/25/2017	Fluoride	0.2	mg/L
	1/25/2017	Nitrate as N	0.3	mg/L
	1/25/2017	Sulfate	32	mg/L
	1/25/2017	Total Dissolved Solids	286	mg/L
AD66668				
PS-EP011				
	1/25/2017	Cyanide	0.02	mg/L
AD66714				
PS-EP011				
	1/25/2017	Aluminum	0.0509	mg/L
	1/25/2017	Barium	0.028	mg/L
	1/25/2017	Calcium	54.3	mg/L
	1/25/2017	Magnesium	16.9	mg/L
	1/25/2017	Nickel	0.0016	mg/L
	1/25/2017	Potassium	2.01	mg/L
	1/25/2017	Sodium	20.7	mg/L
	1/25/2017	Total Hardness as CaCO3	205	mg/L
AD90374				
PS-EP011				
	7/24/2017	Bromodichloromethane	5.7	ug/L
	7/24/2017	Bromoform	2.4	ug/L
	7/24/2017	Chloroform	2.6	ug/L
	7/24/2017	Dibromochloromethane	8.8	ug/L

Violations

Interim Enhanced SWTR

The Interim Enhanced Surface Water Treatment Rule improves control of microbial contaminants, particularly Cryptosporidium, in systems using surface water, or ground water under the direct influence of surface water. The rule builds upon the treatment technique requirements of the Surface Water Treatment Rule.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (IESWTR/LT1), MAJOR	01/01/2017	01/31/2017	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/2017	2017	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	01/23/2017	01/23/2017	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations

Violations

PUBLIC NOTICE RULE LINKED TO VIOLATION	03/13/2017	2017	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	06/12/2017	2017	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	06/23/2017	2017	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	08/03/2017	2017	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

Surface Water Treatment Rule (SWTR)

The Surface Water Treatment Rule seeks to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires that water systems filter and disinfect water from surface water sources to reduce the occurrence of unsafe levels of these microbes.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, RTN/RPT MAJOR (SWTR-FILTER)	05/01/2017	05/31/2017	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Total Trihalomethanes (TTHM)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	01/01/2017	03/31/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	04/01/2017	06/30/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

The following pages were added to this CCR in efforts to return any other open public notices to compliance by the TCEQ.

Important Information About Your Drinking Water

Public water systems must routinely monitor for drinking water contaminants. CITY OF BLANCO, TX0160002 failed to monitor for or meet drinking water standards. The table below lists each violation, the time period(s), potential health effects, and associated analytical results (if applicable).

Violation	Violation Number	Time Period(s) of Violation(s)		Potential Health Effects	Analytical Results
A Monitoring/Reporting (M/R) violation for CYANIDE	2017 90064659	01/01/2015	12/31/2015	Required samples for contaminant or contaminant group were not collected, or samples were not reported to TCEQ, for the specified monitoring period.	No Analytical Result(s) Associated
A Monitoring/Reporting (M/R) violation for SOC METHOD 515.4	2017 90064660	01/01/2015	12/31/2015	Required samples for contaminant or contaminant group were not collected, or samples were not reported to TCEQ, for the specified monitoring period.	No Analytical Result(s) Associated
A Monitoring/Reporting (M/R) violation for VOLATILE ORGANICS	2017 90064661	01/01/2015	12/31/2015	Required samples for contaminant or contaminant group were not collected, or samples were not reported to TCEQ, for the specified monitoring period.	No Analytical Result(s) Associated
A Monitoring/Reporting (M/R) violation for METALS	2017 90064662	01/01/2015	12/31/2015	Required samples for contaminant or contaminant group were not collected, or samples were not reported to TCEQ, for the specified monitoring period.	No Analytical Result(s) Associated
A Monitoring/Reporting (M/R) violation for NITRATE	2017 90064663	01/01/2015	12/31/2015	Required samples for contaminant or contaminant group were not collected, or samples were not reported to TCEQ, for the specified monitoring period.	No Analytical Result(s) Associated
A Monitoring/Reporting (M/R) violation for MINERALS	2017 90064664	01/01/2015	12/31/2015	Required samples for contaminant or contaminant group were not collected, or samples were not reported to TCEQ, for the specified monitoring period.	No Analytical Result(s) Associated
A Monitoring/Reporting (M/R) violation for SYNTHETIC ORGANICS	2017 90064671	01/01/2015	12/31/2015	Required samples for contaminant or contaminant group were not collected, or samples were not reported to TCEQ, for the specified monitoring period.	No Analytical Result(s) Associated

Violation	Violation Number	Time Period(s) of Violation(s)		Potential Health Effects	Analytical Results
A Surface Water Treatment Rule (SWTR) Treatment Technique (TT) violation – OR – Combined filter effluent (CFE) exceeded 0.3 nephelometric turbidity unit (NTU) in 5.0% of readings	2017 90064672	02/01/2012	02/29/2012	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.	No Analytical Result(s) Associated
A Surface Water Treatment Rule (SWTR) Monitoring/Reporting (M/R) violation in -- OR -- Failure to Monitor/Report (M/R) required turbidity readings	2017 90064676	01/01/2017	01/31/2017	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.	No Analytical Result(s) Associated
Exceeding the Maximum Contaminant level (MCL) for TTHM	2017 90064678	01/01/2017	03/31/2017	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.	TTHM 0.085 MG/L DS01
Exceeding the Maximum Contaminant level (MCL) for TTHM	2017 90064679	04/01/2017	06/30/2017	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.	TTHM 0.081 MG/L DS01

You do not need to boil your water or obtain alternative water supply (e.g. bottle water) at this time. However, if you have specific health concerns, consult your doctor

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. General guidelines on ways to lessen the risk of drinking water contaminants are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Corrective Action:

CITY OF BLANCO has taken the following action(s) to return the system to compliance:

ALL RELATIVE SAMPLES WERE COLLECTED AND FOUND WITHIN LIMITS. HAVE UPDATED NOTICE PROTOCOL TO ENSURE THAT TCEQ IS NOTIFIED OF RESULTS.

For more information, or to learn more about protecting your drinking water, please contact CITY OF BLANCO TX0160002 representative RONNIE RODRIGUEZ at (830) 833-4525.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

City of Blanco - Violation Explanations

Monitoring, Routine (IESWTR/LT1) :
The City of Blanco Water Treatment Plant was offline during the scheduled sampling period. The samples are conducted through a State agency and could not be re-scheduled before end-of-month.

Lead Consumer Notice (LCR) :
Lead samples were taken and found within normal limits. Homeowners were notified when sample results returned from lab. The City of Blanco failed to notify TCEQ within the 30 days that results were distributed.

Public Notice Linked to Violation (1/23/2017):
The City of Blanco Water Treatment Plant was offline during this time, but water was pulled from the Blanco River for filter backwashing. The TCEQ requires that "finished" water samples are taken whenever raw, or source, water is pulled. The City of Blanco had no "finished" water during the backwash process, therefore, no samples were taken, and no public notice was given.

Public Notice Linked to Violation (3/13/2017):
The City of Blanco Water Treatment Plant only pulled 0.006 MG from the Blanco River, but sent out 0.213 MG of treated water from our reserve tank. This regular process, with having 2 sources, set a violation for not meeting the required chlorine disinfection log from the TCEQ. Our low "inflow" water versus our "output" water made it impossible to meet these requirements.

Public Notice Linked to Violation (6/12/2017):
On this day, the Water Treatment Plant depleted both Chlorine cylinders in use and our chlorine residual for treating raw water was under the normal treatment process limit. The cylinders were changed forthwith upon awareness of the problem, and any and all issues were remediated before water quality issues arose.

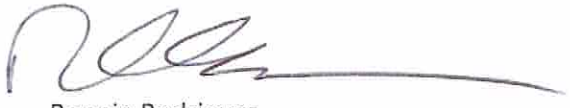
Public Notice Linked to Violation (6/23/2017):
The City of Blanco has NO record of any violation on this date.

Public Notice Linked to Violation (8/3/2017):
The City of Blanco has NO record of any violation on this date.

Monitoring, RTN/RPT Major (SWTR-FILTER):
The Raw Water Meter at the Water Treatment Plant was down for a (4) day period and needed repairs. During this time we could not correctly calculate the "inflow" of raw water for the purpose of the daily Chlorine Concentration Time study.

Careful planning and strategic monitoring have been in effect to resolve any and all public notice issues with the TCEQ, and some are still in the works. Please know that your Public Works Department strives daily to distribute water that meets or exceeds State requirements for all contaminants and by-products.

We thank you for all of your support and cooperation!



Ronnie Rodriguez