

2018 Consumer Confidence Report for Public Water System TOWN OF RANSOM CANYON

This is your water quality report for January 1 to December 31, 2018

TOWN OF RANSOM CANYON provides surface water and ground water from The City of Lubbock who blends surface water from Lake Alan Henry and Canadian River MWA with ground water from Bailey County and Roberts County Well Fields.

For more information regarding this report contact:

Name Harold Needham

Phone (806) 829-2470

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (806) 829-2470.

Definitions and Abbreviations

Definitions and Abbreviations

Action Level:

Action Level Goal (ALG):

Avg:

Level 1 Assessment:

Level 2 Assessment:

Maximum Contaminant Level or MCL:

Maximum Contaminant Level Goal or MCLG:

Maximum residual disinfectant level or MRDL:

Maximum residual disinfectant level goal or MRDLG:

MFL

mrem:

na:

NTU

pCi/L

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

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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.

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.

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.

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.

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.

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.

million fibers per liter (a measure of asbestos)

millirems per year (a measure of radiation absorbed by the body)

not applicable.

nephelometric turbidity units (a measure of turbidity)

picouries 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 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.

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).

WATER QUALITY REPORT DATA, 2018

SUBSTANCE	MONITORING DATE	MCL	HIGHEST LEVEL DETECTED	SUBSTANCES REGULATED AT THE TREATMENT PLANT			SOURCES OF CONTAMINATION	VIOLATION
				MCL	MCL	MCL		
BETA/PHOTON EMITTERS	2017	50 pCi/L*	8.1 pCi/L	0	4.3 - 8.1 pCi/L	Decay of natural and man-made deposits	NO	
ALPHA EMITTERS	2017	15 pCi/L	7 pCi/L	0	2-7 pCi/L	Erosion of natural deposits	NO	
URANIUM	2017	30 ppb	4.9 ppb	0	3.5 - 4.9 ppb	Erosion of natural deposits	NO	
ARSENIC	2016 - 2018	10 ppb	4 ppb	0	1.4 - 4 ppb	Erosion of natural deposits; runoff from orchards	NO	
BARIUM	2016 - 2018	2 ppm	0.19 ppm	2 ppm	0.098 - 0.19 ppm	Erosion of natural deposits	NO	
CHROMIUM	2016 - 2018	100 ppb	2 ppb	100 ppb	0 - 2 ppb	Erosion of natural deposits	NO	
SELENIUM	2016 - 2018	50 ppb	2.7 ppb	50 ppb	0 - 2.7 ppb	Erosion of natural deposits	NO	
CYANIDE	2016 - 2018	200 ppb	163 ppb	200 ppb	0 - 163 ppb	Discharge from steel/metal, plastic, and fertilizer factories	NO	
FLUORIDE	2017 - 2018	4 ppm	1.46 ppm	4 ppm	0.65 - 1.46 ppm	Erosion of natural deposits	NO	
NITRATE	2018	10 ppm	1.38 ppm	10 ppm	0.08 - 1.38 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion	NO	
TURBIDITY	2018	IT = 5 NTU IT = % of samples <0.3 NTU	0.22 100%	0	0.01 - 0.22 NTU	Soil runoff	NO	
CHLORITE	2018	1 ppm	0.514 ppm	0.8 ppm	0 - 0.514 ppm	By-product of drinking water disinfection	N/A	
ADDITIONAL MONITORING								
ALUMINUM	2016 - 2018	0.05-0.2ppm**	0.14 ppm	N/A	N/A	Water Treatment Chemical		
CHLORIDE	2018	300 ppm **	294 ppm	N/A	N/A	Naturally occurring		
SULFATE	2018	300 ppm **	140 ppm	N/A	N/A	Naturally occurring		
TOTAL DISSOLVED SOLIDS	2018	1000 ppm**	850 ppm	N/A	N/A	Naturally occurring		
AMMONIA	2018	Not Regulated	0.420 ppm	N/A	N/A	Water Treatment Chemical		
CALCIUM	2018	Not Regulated	53.4 ppm	N/A	N/A	Naturally occurring		
MAGNESIUM	2018	Not Regulated	27.7 ppm	N/A	N/A	Naturally occurring		
POTASSIUM	2016 - 2018	Not Regulated	5.6 ppm	N/A	N/A	Naturally occurring		
SODIUM	2018	Not Regulated	257 ppm	N/A	N/A	Naturally occurring		
ZINC	2016 - 2018	5 ppm**	0.003 ppm	N/A	N/A	Naturally occurring		
HARDNESS	2018	Not Regulated	235 ppm	N/A	N/A	Naturally occurring		
CONDUCTANCE	2018	Not Regulated	1510 micromhos/cm	N/A	N/A	Naturally occurring		
TOTAL ALKALINITY	2018	Not Regulated	180 ppm	N/A	N/A	Naturally occurring		

The state allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, are more than one year old.

*The MCL for beta/photon emitters is 4 mrem/year. The USEPA considers 50 pCi/L to be the level of concern for beta/photon emitters.

**Secondary Constituent Levels set by the Texas Commission of Environmental Quality

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

TOWN OF RANSOM CANYON purchases water from LUBBOCK PUBLIC WATER SYSTEM. LUBBOCK PUBLIC WATER SYSTEM provides purchase surface water from Canadian River MWA located in Roberts County, Tx.

No Source Water Assessment for your drinking water source(s) has been conducted by the TCEQ for your water system. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment allows us to focus our source water protection strategies.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2018	1.3	1.3	0.052	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing fixtures.

2018 Water Quality Test Results

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

Halooacetic Acids (HAA5)	2018	14	11.6 - 18	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)	2018	21	8.41 - 25.4	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]	2018	1	0.914 - 1.12	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Total Chlorine	2018	2.35	1.38-3.09	4	4	ppm	ppm	Water additive used to control microbes.