2023 Consumer Confidence Report for Public Water System TOWN OF RANSOM CANYON

This is your water quality report for January 1 to December 31, 2023. This Report will be a Discussion Item in the July City Council Meeting

TOWN OF RANSOM CANYON provides Purchased Surface Water from **Canadian River MWA and Lake Alan Henry as well as ground water from Bailey and Roberts County Well Fields.**

For more information regarding this report contact:

Name Cory Needham

Phone (806)829-2470

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

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.
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
ppm:	milligrams per liter or parts per million
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

TOWN OF RANSOM CANYON purchases water from LUBBOCK PUBLIC WATER SYSTEM. LUBBOCK PUBLIC WATER SYSTEM provides purchase surface water from **Canadian River Municipal Water Authority and Lake Alan Henry, and ground water from Roberts and Bailey County Well Fields.**

WATER QUALITY REPORT DATA - 2023

CONTAMINANT	Year of Range	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Contaminant Sources	Violation
SUBSTANCES REGULATED AT THE TREATMENT PLANT									
BETA/PHOTON EMITTERS	2023	7.0	5.3	8.6	50 *	0	pCi/L	Decay of natural and man-made deposits	NO
ALPHA EMITTERS	2023	5.7	3.9	7.5	15	0	pCi/L	Erosion of natural deposits	NO
URANIUM	2023	0.004	0.003	0.005	30	0	ppm	Erosion of natural deposits	NO
ARSENIC	2023	1.50	1.40	1.70	10	0	ppb	Erosion of natural deposits; runoff from orchards	NO
BARIUM	2023	0.23	0.11	0.23	2	2	ppm	Erosion of natural deposits	NO
CHROMIUM	2023	1.80	0	1.80	100	100	ppb	Erosion of natural deposits	NO
CYANIDE	2023	92	22.8	172	200	200	ppb	Discharge from steel/metal, plastic, and fertilizer factories	NO
FLUORIDE	2023	0.972	0.631	1.31	4	4	ppm	Erosion of natural deposits	NO
NITRATE	2023	0.998	0.115	1.68	10	10	ppm	Fertilizer runoff, septic tank leachate, sewage, erosion	NO
TURBIDITY	2023	0.049	0.042	0.056	***% < 0.3 (TT)	0	NTU	Soil runoff	NO
TOTAL ORGANIC CARBON	2023	1.67	1.47	1.83	TT	TT	ppm	Naturally present in environment	NO
TOTAL CHLORINE	2023	3.68	3.40	3.90	MRDLG=4.0	MRDLG=4.0	ppm	Disinfectant used to control microbes	NO
CHLORITE	2023	0.372	0.033	0.744	1	0.8	ppm	By- product of drinking water disinfection	NO
ADDITIONAL MONITORING									
ALUMINUM	2023	0.082	0.043	0.120	0.05-0.2^^	N/A	ppm	Water Treatment Chemical	N/A
CHLORIDE	2023	192	17.6	283	300 ^^	N/A	ppm	Naturally occurring	N/A
SULFATE	2023	101	49	36	300 ^^	N/A	ppm	Naturally occurring	N/A
TOTAL DISSOLVED SOLIDS	2023	675	362	858	1000^^	N/A	ppm	Naturally occurring	N/A
AMMONIA	2023	0.130	0.016	0.171	Not Regulated	N/A	ppm	Water Treatment Chemical	N/A
CALCIUM	2023	44.8	35.3	54.3	Not Regulated	N/A	ppm	Naturally occurring	N/A
MAGNESIUM	2023	21.4	12.8	30	Not Regulated	N/A	ppm	Naturally occurring	N/A
POTASSIUM	2023	6.36	5.80	6.91	Not Regulated	N/A	ppm	Naturally occurring	N/A
SODIUM	2023	235	222	247	Not Regulated	N/A	ppm	Naturally occurring	N/A
HARDNESS	2023	200	141	259	Not Regulated	N/A	ppm	Naturally occurring	N/A
CONDUCTANCE	2023	1236	589	1580	Not Regulated	N/A	µmho/cm	Naturally occurring	N/A
TOTAL ALKALINITY	2023	206	187	234	Not Regulated	N/A	ppm	Naturally occurring	N/A

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. Note: TT= Treatment Technique. ***100% of plant turbidity meets the <0.3 NTU MCL.

*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. ***Note:µmhos= micromhos/cm

**Running Annual Average ^Highest Locational Running Annual Average ^^Secondary Constituent Levels set by the Texas Commission of Environmental Quality.

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	09/21/2021	1.3	1.3	0.042	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/21/2021	0	15	1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2023 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)	2023	10	8.1 - 11.5	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)	2023	13	8.33 - 14.5	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]	2023	1	0.99 - 1.29	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
Total Chlorine	2023	2.28	1.40-2.82	4	4	ppm	N	Water additive used to control microbes.