2023 Consumer Confidence Report for Public Water System THE RANCH SUBDIVISION

This is your water quality report for January 1 to Dece	ember 31, 2023	For more information regarding this report contact:				
THE RANCH SUBDIVISION provides ground water from TI LIBERTY COUNTY, TX.	HE GULF COAST AQUIFER IN	Name T&W WATER SERVICE dba BLUE TOPAZ UTILITIES				
		Phone936-756-7400				
		Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de Ilamar al telefono 936-756-7400				
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 ex	ceeded, triggers treatment or other requirements which a water system must follow.				
Avg:	Regulatory compliance with some MCLs are base	ed on running annual average of monthly samples.				
Level 1 Assessment:	A Level 1 assessment is a study of the water system water svstem.	n to identify potential problems and determine (if possible) why total coliform bacteria have been found in our				
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the and/or why total coliform bacteria have been fo	e water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred und in our water system on multiple occasions.				
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in	n 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 bel	low 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 drinkin contaminants.	ng water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial				
Maximum residual disinfectant level goal or MRDL	5: The level of a drinking water disinfectant below wh control microbial contaminants.	ich there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to				
MFL	million fibers per liter (a measure of asbestos)					
mrem:	millirems per year (a measure of radiation absor	bed by the body)				
na:	not applicable.					
NTU	nephelometric turbidity units (a measure of turk	bidity)				
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
pqq	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

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 KARLA LANGREDER 936-756-7400

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	5	Fecal Coliform or E. Coli Maximum Contaminant Leve			Likely Source of Contamination
0	1 positive monthly sample.	2		0	Ν	Naturally present in the environment.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or

During the past year we were required to conduct 1 Level 1 assessment. 1 Level 1 assessment was completed. In addition, we were required to take 2 corrective actions and we completed 2 of these actions.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2023	1.3	1.3	0.03	0	ppm	Ν	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

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)	08/25/2021	16.7	16.7 - 16.7	No goal for the total	60	ppb	Ν	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	08/25/2021	60.4	60.4 - 60.4	No goal for the total	80	ppb	Ν	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2023	4	4 - 4	0	10	ррb	Ν	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2023	0.0517	0.0517 - 0.0517	2	2	ppm	Ν	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	12/07/2022	1.39	1.39 - 1.39	4	4.0	ppm	Ν	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels or arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Xylenes	2023	0.0033	0.0005 - 0.0033	10	10	ppm	Ν	Discharge from petroleum factories; Discharge from chemical factories.

Unregulated Contaminate Monitor Rule (UCMR)

In keeping with EPA regulations, Blue Topaz has sampled and tested water for all chemicals listed in the current UCMR 5 regulations. These tests have been performed over the last 12 months, and all sampling results have been consistently **below** EPA recommended levels. For more information concerning the UCMR5 test and/or test results please contact Blue Topaz at 936-756-7400.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2023	0.92	0.22 – 2.97	4	4	ppm	Ν	Water additive used to control microbes.

Revised Total Coliform Rule (RTCR)							
The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Humar pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children,							
Violation Type	Violation Begin	Violation End	Violation Explanation				
MONITORING, ROUTINE, MAJOR (RTCR)	05/01/2023	05/31/2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure or the quality of our drinking water during the period indicated.				