2022 CONSUMER CONFIDENCE REPORT FOR THE PUBLIC WATER SYSTEM
CITY OF WILLOW PARK
TX1840027

Annual Water Quality Report for the period of January 1 to December 31, 2022.

CITY OF WILLOW PARK provides Ground Water from the Trinity and Paluxy Aquifer in Parker County. Water is also purchased from the City of Fort Worth.

For more information regarding this report contact:

Michelle Guelker
Phone: (817) 441-7708

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (817) 441-7708.

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 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 contaminant in drinking water.

Sources of 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 contact Michelle Guelker at (817) 441-7708.

Source Water Name	Well Name	Type of Water	Report Status	Location	Aquifer Name
Ground Storage	#1	Groundwater	Active	Indian Camp Rd.	Paluxy
Ground Storage	#2	Groundwater	Active	Indian Camp Rd.	Paluxy
Ground Storage	#3	Groundwater	Active	Indian Camp Rd.	Paluxy
Ground Storage	#4	Groundwater	Active	Indian Camp Rd.	Paluxy
Ground Storage	#5	Groundwater	Active	Indian Camp Rd.	Paluxy
Ground Storage	#6T	Groundwater	Active	Indian Camp Rd.	Trinity
Ground Storage	#6P	Groundwater	Active	Indian Camp Rd.	Paluxy
Ground Storage	#7	Groundwater	Active	Indian Camp Rd.	Trinity
Ranch House Road	#9T	Groundwater	Active	Ranch House Rd.	Trinity
Ranch House Road	#9P	Groundwater	Active	Ranch House Rd.	Paluxy
Surrey	#10T	Groundwater	Active	Surrey Ln.	Trinity
Surrey	#10P	Groundwater	Active	Surrey Ln.	Paluxy
Willow Wood	#11P	Groundwater	Active	Squaw Creek	Paluxy
El Chico	El Chico T	Groundwater	Active	El Chico	Trinity
El Chico	El Chico P	Groundwater	Active	El Chico	Paluxy
Ground Storage	#14	Groundwater	Active	Indian Camp Rd.	Trinity
Ground Storage	#15	Groundwater	Active	Indian Camp Rd.	Paluxy
Fox Hunt	#16T	Groundwater	Active	Fox Hunt Trl.	Trinity
Fox Hunt	#16P	Groundwater	Active	Fox Hunt Trl.	Paluxy
Willow Wood	#12 WWN	Groundwater	Active	Forest Cr.	Paluxy
Willow Wood	#13 WWS	Groundwater	Active	Forest Cr.	Paluxy
Willow Springs Oaks	WSO T	Groundwater	Active	Circle Ct.	Trinity
Willow Springs Oaks	#20 WSO P	Groundwater	Active	Circle Ct.	Paluxy
Willow Springs	#17 WSS	Groundwater	Active	Quail Crest Dr.	Paluxy
Willow Springs	#18 WSN	Groundwater	Active	Quail Crest Dr.	Paluxy

2022 Disinfectant Residual Table

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Like Source of Contamination
Chlorine, Gas	2022	1.63	.29	2.5	4	4	ppm	No	Water additive used to control Microbes.

Coliform Bacteria

Maximum contaminant Level Goal	Total Coliform Maximum contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	0	3	Fecal Coliforn or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	0	N	Naturally present in the environment.

2022 Water Loss Audit Information

Time Period Covered by Audit	Estimated Gallons of Water Lost	Comments and/or Explanations
January to December 2022	23,800,744*	Loss is due to leaks, meter errors, and flushing of water system to maintain water quality.

* Does not include calculation of water in the system at any given time.

2022 Water Use Survey Information

Water Use Survey is required yearly by the Texas Water Development Board

Time Period: Jan. to Dec. 2022	Produced Water:
Usage	**Volume Used**
Residential	223,825,164
Commercial	31,584,535
Institutional	13,432,251
Agriculture (Irrigation)	37,905,333

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2022	1.3	1.3	0.148	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2022	0	15	3.45	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2022 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)	2022	6	2.8 - 5.7	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)	2022	17	9.76 - 16.8	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
Barium	2022	0.086	0.029 – 0.086	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2022	4.8	0 – 4.8	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	02/07/2020	33.7	0-33.7	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2022	0.718	0.472 – 0.718	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]	2022	0.402	0.0765 - 0.402	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2022	1.67	0 – 1.67	0	5	pCi/L*	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2022	5.6	4.2 – 5.6	0	15	pCi/L	N	Erosion of natural deposits.

* EPA considers 50 pCi/L to be the level of concern for beta particles.

2022 Fort Worth Water Quality Test Results

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Like Source of Contamination
Chloramines	2022	3.4	1.4	4.3	4	4	ppm	No	Water additive used to control Microbes.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2022	7.98	2.2 – 7.4	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)	2022	13.9	0 – 17.3	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
Arsenic	2022	1.7	0 – 1.7	10	0	ppb	N	Erosion of natural deposits; runoff from orchards: runoff from glass and electronics production wastes
Atrazine	2022	0.1	0 – 0.1	3	3	ppb	N	Runoff from herbicide used on row crops
Barium	2022	0.08	0.04 – 0.08	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2022	2.8	0 – 2.8	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2022	51	0 - 51	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2022	0.64	0.18 – 0.64	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]	2022	0.57	0.13 - 0.57	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Bromate	2022	5.81	0 – 137	10	0	ppb	N	By-product of drinking water disinfection.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/ photon emitters	2021	7	7 – 7	0	50	pCi/L*	N	Decay of natural and man-made deposits.
Uranium	2021	1.1	1.1 – 1.1		30	ppb	N	Erosion of natural deposits.

* EPA considers 50 pCi/L to be the level of concern for beta particles.

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The following items are all disinfection by-products that are not regulated individually, but as two groups - Total Trihalomethanes and Haloacetic Acids.

Compound	Year	MRDL	Public Health Goal	Average	Range of Detect	Units	Common Sources of Substance
Bromoform	2022	Not Regulated	0	0.62	0 – 3.24	ppb	By-products of drinking water disinfection; regulated as a group called Total Trihalomethanes
Bromodichloromethane	2022	Not Regulated	0	2.93	0 – 5.43	ppb	
Chloroform	2022	Not Regulated	70	2.45	0 – 5.71	ppb	
Dibromochloromethane	2022	Not Regulated	60	2.41	0 – 5.90	ppb	
Dibromoacetic Acid	2022	Not Regulated	N/A	1.24	0 – 2.90	ppb	By-products of drinking water disinfection; regulated as a group called Haloacetic Acids.
Dichloroacetic Acid	2022	Not Regulated	0	3.47	1.80 – 5.60	ppb	
Monobronoacetic Acid	2022	Not Regulated	N/A	0	0 – 0	ppb	
Monochloroacetic Acid	2022	Not Regulated	70	0.02	0 – 1	ppb	
Trichloroacetic Acid	2022	Not Regulated	20	0	0 - 0	ppb	

Violations

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	03/21/2022	2022	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. City failed to take Lead and Copper samples during 2020 and did not properly notify you, the customer, that the violation occurred.

PUBLIC PARTICIPATION OPPORTUNITIES

City Council Meeting

Date: Second Tuesday of each month

Time: 7 P.M.

Location: 120 El Chico, Suite A, Willow Park, TX 76087

Phone Number: 817-441-7108