



# 2021 Annual Drinking Water Quality Report

AVAILABLE ONLINE AT [WWW.CITYOFKENNEDALE.COM/WATER](http://WWW.CITYOFKENNEDALE.COM/WATER)

Kennedale drinking water during 2021 consisted of both groundwater and surface water. Kennedale has five wells that pull groundwater from the underground Trinity aquifer (TWIN MTS, TRAVIS PEAK and PALUXY). The City also purchased treated surface water from the City of Fort Worth and the City of Arlington. Those cities obtain from Lake Bridgeport, Eagle Mountain Lake, Lake Worth, Benbrook Lake, Cedar Creek Reservoir, and Richland-Chambers Reservoir. Arlington Water Utilities began operating and maintaining the City of Kennedale water system in April 2019. For answers to common questions about the collaboration between the two cities, please visit [www.cityofkennedale.com/collaboration](http://www.cityofkennedale.com/collaboration).

## Annual Water Quality Report for the period of January 1 to December 31, 2021

For more information regarding this report, call the Arlington Water Utilities laboratory at 817-575-8984.

Este reporte incluye informacion importante sobre el agua potable. Para asistencia en español, favor de llamar al teléfono 817-575-8984.

**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 provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791 or [www.epa.gov/safewater](http://www.epa.gov/safewater).

## Source Water Assessment Protection

The 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, contact the Arlington Water Utilities laboratory at 817-575-8984. More information about the source-water assessments is available online in TCEQ's Drinking Water Watch at <https://dww2.tceq.texas.gov/DWW/>.

**Chloramines:** The addition of chloramines may cause problems to persons dependent on dialysis machines. A condition known as hemolytic anemia can occur if the disinfectant is not completely removed from the water that is used for the dialysate. Consequently, the pretreatment scheme used for the dialysis units must include some means, such as charcoal filtering, for the removal of chloramines. If you are utilizing a dialysis machine, please contact the manufacturer for information concerning this matter. In addition, chloramines in certain concentrations may be toxic to fish. If you have a fish tank, please make sure that the chemicals or filters you are using are designed for use in water that has been treated with chloramines. Your local pet store is a good source of information on this topic along with the appropriate reagents for neutralizing chloramines.



This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. 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 Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791 or [www.epa.gov/safewater](http://www.epa.gov/safewater).

## CITY OF KENNEDALE

# Groundwater Analysis Results

## Regulated Contaminants

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Unit of Measure	Violation	Common Sources of Substance
2021	Haloacetic Acids (HAA5)	4	1-8.2	60	NA	ppb	NO	Byproduct of drinking water disinfection.
2021	Total Trihalomethanes (TTHM)	4	0-5.47	80	NA	ppb	NO	Byproduct of drinking water disinfection.
2020	Fluoride	1.63	1.3-1.63	4	4	ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2020	Arsenic	1.4	1.4-1.4	10	0	ppb	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes.
2020	Barium	0.03	0.03-0.03	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2020	Chromium	3.9	3.9-3.9	100	100	ppb	NO	Discharge from steel and pulp mills; erosion of natural deposits.
2020	Cyanide	32	0-32	200	200	ppb	NO	Discharge from plastic and fertilizer factories; discharge from steel/metal factories.
1/13/2016	Alpha Particles	3.8	0-3.8	15	0	pCi/L	NO	Erosion of natural deposits.
2021	Nitrate (measured as Nitrogen)	1	0.0122-0.758	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2021	Atrazine	0.1	0-0.1	3	3	ppb	NO	Runoff from herbicide used on row crops.
2021	Simazine	0.08	0-0.08	4	4	ppb	NO	Herbicide runoff.

## Secondary and Other Constituents Not Regulated

Year	Constituent	Average	Minimum	Maximum	Unit of Measure	Common Sources of Substance
2021	Sodium	85.8	ND	257	ppm	Erosion of natural deposits
2021	pH	8.49	8.11	8.96	units	Measure of corrosivity of water
2021	Alkalinity, Total	328	236	412	ppm	Naturally occurring soluble mineral salts
2021	Total Dissolved Solids	614	463	909	ppm	Total dissolved mineral constituents in water
2021	Calcium	10.9	1.56	21.7	ppm	Erosion of natural deposits

## Lead and Copper

Date Sampled	Contaminant	MCLG	90th percentile	Number of Sites over AL	Action Level (AL)	Unit of Measure	Violation	Common Sources of Substance
2021	Lead	0	ND	0	15	ppb	NO	Corrosion of household plumbing systems; erosion of natural deposits.
2021	Copper	1.3	0.107	0	1.3	ppm	NO	

## Distribution Residual Disinfectant Levels

Year (Range)	Disinfectant	Average	Minimum	Maximum	MRDL	MRDLG	Unit of Measure	Source of Chemical
2021	Chloramine	3.06	0.7	4.2	4	4	ppm	Disinfectant used for microbes.

# CITY OF FORT WORTH

## Surface Water Analysis Results

Compound	Measure	MCLG	MCL	Your water	Range	Violation	Common Source
Beta/photon emitters	pCi/L	0	50	7	7-7	No	Decay of natural and man-made deposits
Arsenic	ppb	0	10	1.5	0 to 1.5	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine	ppb	3	3	0.1	0 to 0.2	No	Runoff from herbicide used on row crops
Barium	ppm	2	2	0.07	0.05 to 0.07	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	100	100	1.8	0 to 1.8	No	Erosion of natural deposits; discharge from steel and pulp mills
Cyanide	ppb	200	200	197	66.2-197	N	Discharge from plastic and fertilizer factories; discharge from steel and metal factories
Fluoride	ppm	4	4	0.68	0.18 to 0.67	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Uranium	ppb	0	30	1.1	1.1-1.1	No	Erosion of natural deposits.
Bromate	ppb	0	10	4.23	0 to 13.6	No	By-product of drinking water disinfection

Contaminant	High	Low	Average	MCL	MCLG	Common Sources of Substance
Total Organic Carbon	1	1	1	TT=% removal	N/A	Naturally occurring

Used to determine disinfection byproduct precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.

Contaminant	Measure	MCL	MCLG	Fort Worth Water	Violation	Common Sources
Turbidity	NTU	TT=1 TT=Lowest monthly % of samples $\leq$ 0.3 NTU	NA	0.7 99.3%	No	Soil runoff

Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of filtration.

For additional Fort Worth water quality information or to request a paper copy of this report, contact Mary Gugliuzza at 817-392-8253 or visit [www.fortworthtexas.gov/tapwater](http://www.fortworthtexas.gov/tapwater).

## Definitions and Abbreviations

Scientific Terms and Measures, Some of Which May Require Explanation **Maximum Contaminant Level (MCL):** The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. • **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety. • **Maximum Residual Disinfectant Level (MRDL):** The highest level of 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 (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 contamination. • **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in water. • **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. • **AVG:** Regulatory compliance with some MCLs are based on running annual average of monthly samples. ABBREVIATIONS: **NA:** not applicable • **ND:** non-detect • **NTU:** nephelometric turbidity units (a measure of turbidity) • **pCi/L:** picocuries per liter (a measure of radioactivity) • **ppm:** parts per million, or milligrams per liter (mg/L) **ppb:** parts per billion, or micrograms per liter ( $\mu$ g/L)

## CITY OF ARLINGTON

# Surface Water Analysis Results

These substances are regulated or are required to be monitored and were detected in Arlington tap water in 2021. For more information or to receive a paper copy of these results, please call 817-575-8984.

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Atrazine	ppb	0.05	ND	0.10	3	3	Runoff from use as a common herbicide and pesticide.
Barium	ppm	0.041	0.041	0.041	2	2	Discharge from metal and chemical factories; well drilling operations
Cyanide	ppb	125.5	111	140	200	200	Discharge from metal and fertilizer factories.
Bromate	ppb	<5	<5	<5	10	10	Byproduct of water disinfection (Compliance is based on calculated running average of the quarterly averages.)
Fluoride	ppm	0.228	0.112	0.564	4	4	Water additive promoting strong teeth
Nitrate	ppm	0.455	0.155	0.883	10	10	Runoff from fertilizer or livestock feedlots
Nitrite	ppm	<0.05	ND	0.219	1	1	Runoff from fertilizer or livestock feedlots
Turbidity for both water treatment plants	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Highest Single Measurement	NTU	0.09	0.03	.95	TT=1.0	0	Soil runoff
% of samples <0.3 NTU	%	99.01	97.77	100	TT=95%	n/a	
Total Organic Carbon (TOC) removal for both water treatment plants	Units	Avg.	Min.	Max.	Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. Compliance is based on a running annual average of ratios. If the annual average removal ratio is greater than or equal to 1.0, the system is in compliance.		
	ratio	1.25	1.0	1.5			
Radioactive Substances	Units	PB Plant 2017		JK Plant 2021	MCL	MCLG	Possible Source
Radium 228	pCi/L	1.43		<1	5	n/a	Decay of natural and man-made deposits.
Beta/Photon Emitters	pCi/L	4.8		5.2	50	n/a	

## 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.

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.

Contaminants that may be present in source water before treatment 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.

# VIOLATIONS

Type	Begin	End	Explanation
<b>WATER QUALITY PARAMETER MONITORING/ REPORTING (LEAD AND COPPER RULE)</b> - 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 the drinking water system from corrosion of lead and copper containing plumbing materials.	7/1/2021	12/31/2021	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.
<b>BELOW MINIMUM DISINFECTANT RESIDUAL (CHL./ CHLAMINE)</b> - Chlorine: Public water systems are required to properly disinfect water before distribution, maintain acceptable disinfection residuals within the distribution system, monitor the disinfectant residual at various locations throughout the distribution system, and report the results of that monitoring to the TCEQ on a quarterly basis.	7/1/2021	9/30/2021	During JULY, AUGUST AND SEPTEMBER 2021, sufficient levels of chlorine residual were not met in more than five percent (5%) of monthly samples.

## LEARN MORE ABOUT LEAD AND COPPER

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. The City of Kennedale is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components.

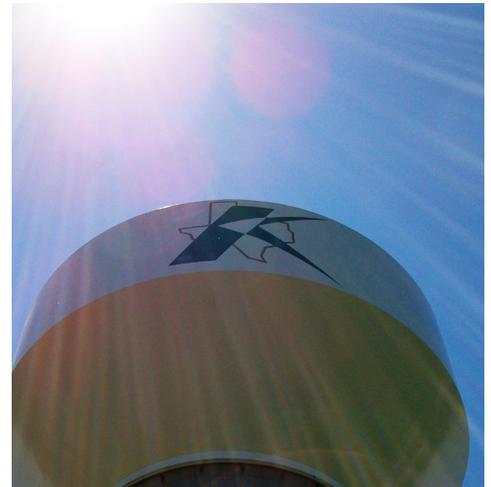
When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested.

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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## PUBLIC PARTICIPATION OPPORTUNITIES

Public participation at advisory board and council meetings is welcome and encouraged. City Council typically meets the third Tuesday of each month at 7 p.m. at Kennedale City Hall (405 Municipal Drive).

Upcoming meeting dates are available online at [www.cityofkennedale.com/cal](http://www.cityofkennedale.com/cal).



## BE WATER WISE!

Find useful water-saving tips at [www.WaterIsAwesome.com](http://www.WaterIsAwesome.com). Year-round irrigation restrictions are in effect which prohibit lawn watering between 10 a.m. and 6 p.m. and require customers to irrigate twice a week on designated days only. Get information on watering restrictions at [www.cityofkennedale.com/lawn](http://www.cityofkennedale.com/lawn).

