



2022 Annual Drinking Water Quality Report

AVAILABLE ONLINE AT WWW.CITYOFKENNEDALE.COM/WATERCCR

Kennedale drinking water during 2022 consisted of both groundwater and surface water. Kennedale has four 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 water 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.

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

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

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

Award-Winning Water on Tap



The City of Kennedale was recognized in May 2022 for having the Best Tasting Groundwater in the North Central Texas Region. The award was given at the North Texas Regional School of the Texas Water Utilities Association. The event is a gathering of utility professionals held at the University of Texas at Arlington.

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/>.

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.



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.

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
2022	Haloacetic Acids (HAA5)	4	0-3.7	60	NA	ppb	NO	Byproduct of drinking water disinfection.
2022	Total Trihalomethanes (TTHM)	4	0-8.68	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.
2022	Barium	0.038	0.01-0.038	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2020	Cyanide	32	0-32	200	200	ppb	NO	Discharge from plastic and fertilizer factories; discharge from steel/metal factories.
2022	Nitrate (measured as Nitrogen)	0.212	0.0199-0.212	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Secondary and Other Constituents Not Regulated

Year	Constituent	Average	Minimum	Maximum	Unit of Measure	Common Sources of Substance
2022	Sodium	236	26.5	356	ppm	Erosion of natural deposits
2022	pH	8.47	8.3	8.68	units	Measure of corrosivity of water
2022	Alkalinity, Total	330	79.2	416	ppm	Naturally occurring soluble mineral salts
2022	Total Dissolved Solids	672	187	990	ppm	Total dissolved mineral constituents in water
2022	Calcium	10.0	1.63	26.5	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
2022	Lead	0	0.95	0	15	ppb	NO	Corrosion of household plumbing systems; erosion of natural deposits.
2022	Copper	1.3	0.087	0	1.3	ppm	NO	

Distribution Residual Disinfectant Levels

Year (Range)	Disinfectant	Average	Minimum	Maximum	MRDL	MRDLG	Unit of Measure	Source of Chemical
2022	Chloramine	3.33	0.54	4.1	4	4	ppm	Disinfectant used for microbes.

CITY OF FORT WORTH

Surface Water Analysis Results

Compound	Measure	Public Health Goal	MCL	Your water	Range	Violation	Common Source
Beta/photon emitters (2021)	pCi/L	0	50	7	7-7	No	Decay of natural and man-made deposits
Arsenic	ppb	0	10	1.7	0 to 1.7	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine	ppb	3	3	0.1	0 to 0.1	No	Runoff from herbicide used on row crops
Barium	ppm	2	2	0.08	0.04 to 0.08	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	100	100	2.8	0 to 2.8	No	Erosion of natural deposits; discharge from steel and pulp mills
Cyanide	ppb	200	200	51	0-51	No	Discharge from plastic and fertilizer factories; discharge from steel and metal factories
Fluoride	ppm	4	4	0.64	0.18 to 0.64	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Uranium (2021)	ppb	0	30	1.1	1.1-1.1	No	Erosion of natural deposits.
Bromate	ppb	0	10	5.81	0 to 137	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 ≤0.3 NTU	NA	0.7 99.9%	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.

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 (µg/L)

CITY OF ARLINGTON

Surface Water Analysis Results

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Arsenic	ppb	1.50	1.10	1.80	10	NA	Naturally present or byproduct of agricultural and industrial activities.
Barium	ppm	0.052	0.046	0.058	2	2	Discharge from metal and chemical factories; well drilling operations
Bromate	ppb	<5	<5	<5	10	10	Byproduct of water disinfection (Compliance is based on calculated running average of the quarterly averages.)
Chromium	ppb	1.8	1.70	1.90	100	100	Discharge from metal and chemical factories
Cyanide	ppb	16.8	ND	33.5	200	200	Discharge from metal and chemical factories.
Fluoride	ppm	0.27	0.104	0.691	4	4	Water additive promoting strong teeth
Nitrate	ppm	0.382	0.067	0.672	10	10	Runoff from fertilizer or livestock feedlots
Nitrite	ppm	<0.05	ND	0.149	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	0.1	0	0.32	TT=1.0	0	Soil runoff
% of samples <0.3 NTU	%	98.73	97.05	99.94	TT=95%	NA	
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	1.2/1.1	1/1	1.3/1.5			
Radioactive Substances	Units	PB Plant 2017		JK Plant 2021	MCL	MCLG	Possible Source
Radium 228	pCi/L	1.43		<1	5	NA	Decay of natural and man-made deposits.
Beta/Photon Emitters	pCi/L	4.8		5.2	50	NA	
Gross Alpha Partical Activity	pCi/L	<2.0		<3.0	15	NA	

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.

INFORMATION ABOUT 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.

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.

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.

BE WATER WISE!

Find useful water-saving tips at 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.



Spruce Up Your Sprinkler System



Inspect

sprinkler heads.

A broken one can waste **25,000** gallons of water in six months!

Connect

hoses and pipes well. A leak as small as the tip of a pen can waste **6,300** gallons of water per month!

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a WaterSense® labeled irrigation controller and water smarter.

Direct

spray on landscapes, not pavement!

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EPA COLLECTS DATA TO DECIDE FUTURE REGULATIONS

Water utilities in the United States monitor for more than 100 contaminants and must meet numerous regulations for water safety and quality. But should other contaminants be regulated? Every five years, the EPA is required to issue a list of no more than 30 unregulated contaminants to be monitored by public water systems. This action is taken as part of the Unregulated Contaminant Monitoring Rule (UCMR) under the 1996 Safe Water Drinking Act. Monitoring for these contaminants helps EPA decide whether the contaminants should have a standard set to protect public health. UCMR testing provides scientifically valid data on the occurrence of these contaminants in drinking water. Health research is necessary to know whether these contaminants pose a health risk. For the Fifth Unregulated Contaminant Rule, (UCMR5), public water systems must sample 30 contaminants for four consecutive quarters from 2023 to 2025. Fort Worth's sampling occurs from January 2023 through January 2024. Fort Worth Water is posting the sampling results on its website at www.fortworthtexas.gov/departments/water/drinking-water/ucmr.

In January 2023, Arlington Water Utilities conducted the first round of UCMR 5 sampling for the City of Kennedale. Samples were taken from three of Kennedale's groundwater well sites. The results are listed on this page. The results are shown in parts per billion or micrograms per liter. In UCMR 5, EPA selected 29 per- and polyfluoralkyl substances (PFAS) and one metal/pharmaceutical — lithium. PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications. These include non-stick cookware, water-repellent clothing, stain resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil.

PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and the world. Lithium is a naturally occurring metal that may concentrate in brine waters. Lithium salts are used as pharmaceuticals, in electrochemical cells, batteries and organic syntheses.

Kennedale Lithium Testing Results for UCMR5

Collection Site	Testing Method	Collection Date	Reported Value (µg/L)
Site 1 - 518 CRESTVIEW DR	EPA 200.7	1/25/2023	74.1
Site 2 - 923 KENNEDALE PKWY	EPA 200.7	1/25/2023	88
Site 3 - 500 GAIL ST	EPA 200.7	1/25/2023	41.5

Kennedale PFAS Testing Results for UCMR5

Testing Method	Analyte Name	Collection Date	Reported Value(µg/L)
EPA 537.1	PFTA	1/25/2023	<0.008
EPA 537.1	PFTrDA	1/25/2023	<0.007
EPA 537.1	NEtFOSAA	1/25/2023	<0.005
EPA 537.1	NMeFOSAA	1/25/2023	<0.006
EPA 533	PFBS	1/25/2023	<0.003
EPA 533	PFHpA	1/25/2023	<0.003
EPA 533	PFHxS	1/25/2023	<0.003
EPA 533	PFNA	1/25/2023	<0.004
EPA 533	PFOS	1/25/2023	<0.004
EPA 533	PFOA	1/25/2023	<0.004
EPA 533	PFDA	1/25/2023	<0.003
EPA 533	PFDoA	1/25/2023	<0.003
EPA 533	PFHxA	1/25/2023	<0.003
EPA 533	PFUnA	1/25/2023	<0.002
EPA 533	11Cl-PF3OUdS	1/25/2023	<0.005
EPA 533	9Cl-PF3ONS	1/25/2023	<0.002
EPA 533	ADONA	1/25/2023	<0.003
EPA 533	HFPO-DA	1/25/2023	<0.005
EPA 533	PFBA	1/25/2023	<0.005
EPA 533	6:2 FTS	1/25/2023	<0.005
EPA 533	4:2 FTS	1/25/2023	<0.003
EPA 533	8:2 FTS	1/25/2023	<0.005
EPA 533	PFMPA	1/25/2023	<0.004
EPA 533	PFPeA	1/25/2023	<0.003
EPA 533	PFMBA	1/25/2023	<0.003
EPA 533	PFEESA	1/25/2023	<0.003
EPA 533	NFDHA	1/25/2023	<0.02
EPA 533	PFPeS	1/25/2023	<0.004

WANT TO LEARN MORE?

To find out more about the EPA's monitoring of unregulated contaminants and the UCMR5, please visit www.epa.gov/dwucmr/