

## 2022 Consumer Confidence Report for Public Water System CITY OF KERRVILLE

This is your water quality report for January 1 to December 31, 2022

CITY OF KERRVILLE provides surface water and ground water from Guadalupe River located in Kerrville, and ground water from the Lower Trinity Aquifer.

For more information regarding this report contact:

Name Public Works Specialist

Phone (830) 257-8000

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (830) 257-8000.

### Definitions and Abbreviations

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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.

Action Level Goal (ALG):

The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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)

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 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 EPA's 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 the Public Works Specialist at (830) 257-8000.

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	.079	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2022	0.	15	2.6	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

## 2020 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Haloacetic Acids (HAA5)</b>	2022	27	1 - 33.3	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<sup>1</sup>

<b>Total Trihalomethanes (TTHM)</b>	2022	85	3.8 – 119	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
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\*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<sup>1</sup>

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Arsenic</b>	2022	8.5	0 – 8.5	0	10	Ppb	N	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes.

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

<b>Barium</b>	2022	0.13	0.0285 – 0.13	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Chromium</b>	2022	18.8	0 – 18.8	100	100	ppb	N	Discharge from steel and pulp mills; erosion of natural deposits.
<b>Fluoride</b>	2022	1.1	0.18 – 1.06	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Nitrate [measured as Nitrogen]</b>	2022	0.13	0 – 0.13	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Selenium</b>	2022	28.1	0 – 28.1	50	50	ppb	N	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Beta/photon emitters</b>	2022	11.4	7.4 – 11.4	0	50	pCi/L*	N	Decay of natural and man-made deposits.

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

<b>Combined Radium 226/228</b>	2022	4	1 – 4.24	0	5	pCi/L	N	Erosion of natural deposits.
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Gross alpha excluding radon and uranium	2022	15	7 – 15	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2022	4	1.7 - 4	0	30	ug/l	N	Erosion of natural deposits.

**Disinfectant Residual**

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2022	1.76	0.3 – 3.0	4	4	ppm	N	Water additive used to control microbes.

**Turbidity**

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.14 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting limit	100%	0.3 NTU	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

**Total Organic Carbon**

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

<b>Total Trihalomethanes (TTHM)</b>			
<i>Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.</i>			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	07/01/2022	09/30/2022	* Water samples showed that the amount of this contaminate in our drinking water was above its standard (called a maximum contaminate level and abbreviated MCL) for the period indicated.

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2023, our system lost an estimated 153,622,125 gallons of water. If you have any questions about the water loss audit please the Public Works Specialist at (830) 257-8000.

***Water Loss is the amount lost through main breaks, repairs, leaks, failed water meters, hydrant flushing, theft of service, incorrect readings, and firefighting.***

**PUBLIC PARTICIPATION OPPORTUNITY:** The City of Kerrville will mail you a printed copy of this Consumer Confidence Report if requested. Please contact the Public Works Specialist at (830) 257-8000, and printed copies are also available at City Hall located at 701 Main St., Kerrville, TX.

[www.kerrvilletx.gov](http://www.kerrvilletx.gov)

An opportunity for public participation is scheduled for **Wednesday, October, 25th at 5:00 PM in the Upstairs Meeting Room of the Butts-Holdsworth Library** located at 505 Water St., Kerrville, Texas