

2021 Consumer Confidence Report for Public Water System CITY OF LAMESA

This is your water quality report for January 1 to December 31, 2021

CITY OF LAMESA provides surface water and ground water from OGALALA Aquifer in Robert's County).

For more information regarding this report contact:

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Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (806) 332-9036

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. 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. Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Action Level Goal (ALG): Avg:	
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 svstem.
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 whv total coliform bacteria have been found in our water svstem 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	picrouries per liter (a measure of radioactivity)

Definitions and Abbreviations

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

City of Lamesa purchases water from LUBBOCK PUBLIC WATER SYSTEM. Lubbock Public Water System provides purchase surface water from Canadian River Authority in the Ogallala Aquifer located and supplied from Roberts County.

2021 WATER QUALITY TEST RESULTS

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 Ernest L. Ojeda at the City of Lamesa at (806) 332-9036.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	#Sites over AL	Units	Violation	Likely Source of Contamination
Copper	08/14/2019	1.3	1.3	0.11	0	ppm	N	Erosion of natural deposits ; Leaching from wood preservatives; Corrosion of household plumbing systems.

2021 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
HaloaceticAcids (HAAS)	2021	16	9.7-16.7	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 HAAS sample results collected at a location over a year'

Total Trihalomethanes (TTHM)	2021	47	23-62.1	No goal for the total	80	ppb	N	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'

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2021	5	1.93	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2021	0.11	0.11-0.11	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2021	4	4-4	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2021	0.7	0.746-0.746	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and
Nitrate [measured as Nitrogen]	2021	9	1.18-8.78	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	01/15/2020	14.7	14.7 - 14.7	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.

Gross alpha excluding radon and uranium	01/15/2020	1	1-1	0	15	pCi/L	N	Erosion of natural deposits.
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Uranium	01/15/2020	11.3	11.3-11.3	0	30	ug/l	N	Erosion of natural deposits.
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Disinfectant Residual

' A blank disinfectant residual table has been **added** to the CCR template, you will need to **add data** to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).'

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2021	1.21	21-3.18	4	4	MG/L	No ppm	Water additive used to control microbes.

Violations

Chlorine			
Some people who use water containing chlorine well above the MRDL may experience irritating effects on the eyes and nose. Some people who drink water containing chlorine well above the MRDL may experience stomach upset.			
Violation Type	Violation Begins	Violation Ends	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR))	04/01/2021	06/30/2021	We failed to test our drinking water for the contaminant and period indicated. Because of the failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lead and Copper Rule			
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 drinking water mainly from corrosion of lead and copper containing plumbing materials			
Violation Type	Violation Begins	Violation Ends	Violation Explanation
Follow-Up or Routine Tap M/R (LCR)	07/01/2021	2021	We failed to test our drinking water for the contaminant period indicated. Because of this failure, we cannot be sure of the quality of our drinking during the period indicated.
Water Quality Parameter M/R(LCR)	01/01/2021	06/30/2021	We failed to test our drinking water for the contaminant period indicated. Because of this failure , we cannot be sure of the quality of our drinking during the period indicated
Water Quality Parameter M/R(LCR)	07/01/2021	12/31/2021	We failed to test our drinking water for the contaminant period indicated. Because of this failure , we cannot be sure of the quality of our drinking during the period indicated

Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://gis3.tceq.state.tx.us/ewav/Controller/Index.jsp?wtrsrc=>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.texas.gov/DWW>

Source Water Name	Type of Water	Report Status	Location
10 - MATLOCK TRACK	MATLOCK TRACK	GW	Y N 32°.49.02 W 101°.59.38
11 - MATLOCK TRACK	MATLOCK TRACK	GW	Y N 32°.48.976 W 101°.59.752
13 - MATLOCK TRACK	MATLOCK TRACK	GW	Y N 32°.49.001 W 102°.00.159
17 - MATLOCK	MATLOCK TRACK	GW	Y N 32°.48.23 W 101°.59.28
18 - TYLER	-TYLER TRACK	GW	Y N 32°.48.38 W 101°.55.53
6 - BARTLETT TRACK	BARTLETT TRACK	GW	Y N 32°.48.112 W 101°.58.32
7 - BARTLETT TRACK	BARTLETT TRACK	GW	Y N 32°.48.332 W 101°.59.103
8 - BARTLETT TRACK	BARTLETT TRACK	GW	Y N 32°.48.200 W 101°.59.234
9 - MATLOCK TRACK	MATLOCK TRACK	GW	Y N 32°.48.926 W 101°.59.993
EAST WELL FIELD - 1	LEDC FM 827	GW	Y N 32°.43.41 W 101°.55.53
EAST WELL FIELD - 2	LEDC FM 827	GW	_Y_ N 32°.43.44 W 101°.55.37
SW FROM CITY OF LUBBOCK	W/C WITH TX1520002	SW	UNKNOWN

WATER QUALITY REPORT DATA - 2021

CONTAMINANT	Year of Range	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Contaminant Sources	Violation
SUBSTANCES REGULATED AT THE TREATMENT PLANT									
BETA/PHOTON EMITTERS	2017	6.2	4.3	8.1	50 *	0	pCi/L	Decay of natural and man-made deposits	NO
ALPHA EMITTERS	2017	4.5	2	7	15	0	pCi/L	Erosion of natural deposits	NO
URANIUM	2017	4.2	3.5	4.9	30	0	ppb	Erosion of natural deposits	NO
ARSENIC	2021	1.95	1.6	2.3	10	0	ppb	Erosion of natural deposits; runoff from orchards	NO
BARIUM	2021	0.155	0.089	0.22	2	2	ppm	Erosion of natural deposits	NO
CHROMIUM	2021	3.65	2.7	4.6	100	100	ppb	Erosion of natural deposits	NO
CYANIDE	2021	67.1	N/A	N/A	200	200	ppb	Discharge from steel/metal, plastic, and fertilizer factories	NO
FLUORIDE	2021	0.866	0.682	1.05	4	4	ppm	Erosion of natural deposits	NO
NITRATE	2021	0.944	0.053	1.69	10	10	ppm	Fertilizer runoff, septic tank leachate, sewage, erosion	NO
TURBIDITY	2021	0.054	0.027	0.112	***% < 0.3 (TT)	0	NTU	Soil runoff	NO
TOTAL ORGANIC CARBON	2021	1.66	0.610	4.86	TT	TT	ppm	Naturally present in environment	NO
TOTAL CHLORINE	2021	3.73	3.10	4.60	MRDLG=4.0	MRDLG=4.0	ppm	Disinfectant used to control microbes	NO
CHLORITE	2021	0.39	0.07	0.67	1	0.8	ppm	By- product of drinking water disinfection	NO
ADDITIONAL MONITORING									
ALUMINUM	2021	0.131	0.072	0.190	0.05-0.2^^	N/A	ppm	Water Treatment Chemical	N/A
CHLORIDE	2021	297	292	301	300 ^^	N/A	ppm	Naturally occurring	N/A
SULFATE	2021	126	122	130	300 ^^	N/A	ppm	Naturally occurring	N/A
TOTAL DISSOLVED SOLIDS	2021	671	340	871	1000^^	N/A	ppm	Naturally occurring	N/A
AMMONIA	2021	0.155	0.102	0.211	Not Regulated	N/A	ppm	Water Treatment Chemical	N/A
CALCIUM	2021	47.3	36.9	57.7	Not Regulated	N/A	ppm	Naturally occurring	N/A
MAGNESIUM	2021	22	14	29	Not Regulated	N/A	ppm	Naturally occurring	N/A
POTASSIUM	2021	5.83	5.70	5.95	Not Regulated	N/A	ppm	Naturally occurring	N/A
SODIUM	2021	214	156	271	Not Regulated	N/A	ppm	Naturally occurring	N/A
HARDNESS	2021	209	150	267	Not Regulated	N/A	ppm	Naturally occurring	N/A
CONDUCTANCE	2021	1520	1480	1560	Not Regulated	N/A	µmho/cm	Naturally occurring	N/A
TOTAL ALKALINITY	2021	190	183	199	Not Regulated	N/A	ppm	Naturally occurring	N/A

The state allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently.

Some of our data, though representative, are more than one year old. Note: TT= Treatment Technique. ***100% of plant turbidity meets the <0.3 NTU MCL.

*The MCL for beta/photon emitters is 4 mrem/year. The USEPA considers 50 pCi/L to be the level of concern for beta/photon emitters.

***Note:µmhos= micromhos/cm

**Running Annual Average

^^Highest Locational Running Annual Average

^^Secondary Constituent Levels set by the Texas Commission of Environmental Quality.