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

This report is intended to provide you with important information about your drinking water and the efforts by the water system to provide safe drinking water.

For more information regarding this report contact:

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Este reporte incluye infromacion sobre el agua para tomar.

Para asistencia en español, favor de llamar al telefono

(806)747-3353

## Definitions and Abbreviations

Definitions and Abbreviations Action Level:

Avg:

Level 1 Assessment:

Level 2 Assessment:

Maximum Containment Level or MCL:

The following tables contain scientific terms and measures, some of which may require explanation.

The concentration of a containment which, if exceeded, triggers treatment or other requirements which a water system must follow.

Regulatory Compliance with some MCLs are based on running annual average of monthly samples.

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform have been found in our water system.

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.

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
Containment Level
Goal or MCLG:

Maximum Residual
Disinfectant Level or
MRDL:

Maximum Residual Disinfectant Level Goal or MRDLG:

**MFL** 

MREM:

NA:

NTU:

pCi/L:

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.

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.

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.

Million Fibers per Liter (a measure of asbestos)

Millirems per year (a measure of radiation absorbed by the body)

Not Applicable

Nephelometric Turbidity Units (a measure of turbidity)

Picocuries per Liter (a measure of radioactivity)

ppb:

Micrograms per liter or parts per billion

ppm:

Milligrams per liter or parts per million

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 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 ground 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, testingmethods, 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**

Lubbock County WCID 1 purchases water from Lubbock Public Water System.

No Source Water Assessment for your drinking water source(s) has been conducted by the TCEQ for your water system. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment allows us to focus our source water protection strategies.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL
Copper	09/14/2020	1.3	1.3	0.035	0

Units	Violation	Likely Source of Contamination
ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

### **2022** Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL
Haloacetic Acids (HAA5)	2022	3	3.3-3.3	No goal for the total	60

Units	Violation	Likely Source of Contamination
ppb	N	By-product of drinking water disinfection.

<sup>\*</sup>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

Disinfection By- Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL
Total Trihalomethanes (TTHM)	2022	11	10.8-10.8	No goal for the total	80

Units	Violation	Likely Source of Contamination
ppb	N	By-product of drinking water disinfection.

<sup>\*</sup>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
Nitrate (measured as Nitrogen)	2022	1	1.19-1.19	10	10

Units	Violation	Likely Source of Contamination
ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

### Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Individual Detected	MRDL	MRDLG
	2022			4	4

Units of Measure	Violation (Y/N)	Likely Source of Contamination
	ppm	Water additive used to control microbes.

### **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	12/19/2021	02/10/2022	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

### Water Quality Report Data- 2022

### **Substances Regulated at the Treatment Plant**

Containment	Year of Range	Average Level	Minimum Level	Maximum Level
Beta/Photon Emitters	2020	5.6	5.6	5.6
Alpha Emitters	2017	4.5	2	7
Uranium	2020	2.0	2.0	2.0

MCL	MCLG	Unit of Measure	Containment Sources	Violation
50*	0	pCi/L	Decay of natural and man- made deposits	No
15	0	pCi/L	Erosion of natural deposits	No
30	0	ppb	Erosion of natural deposits	No ·

Containment	Year of Range	Average Level	Minimum Level	Maximum Level
Arsenic	2022	2.23	1.40	3.6
Barium	2022	0.137	0.100	0.20
Chromium	2022	3.17	0	5.5

MCL	MCLG	Unit of Measure	Containment Sources	Violation
10	0	ppb	Erosion of natural deposits; runoff from orchards	No
2	2	ppm	Erosion of natural deposits	No
100	100	ppb	Erosion of natural deposits	No

Containment	Year of Range	Average Level	Minimum Level	Maximum Level
Cyanide	2022	123	N/A	N/A
Fluoride	2022	0.772	0.655	0.889
Nitrate	2022	0.954	0.124	1.43

MCL	MCLG	Unit of Measure	Containment Sources	Violation
200	200	ppb	Discharge from steel/metal, plastic, and fertilizer factories	No
4	4	ppm	Erosion of natural deposits	No
10	10	ppm	Fertilizer runoff, septic tank leachate, sewage, erosion	No

Containment	Year of Range	Average Level	Minimum Level	Maximum Level
Turbidity	2022	0.052	0.037	0.073
Total Organic Carbon	2022	1.66	1.30	2.50
Total Chlorine	2022	3.60	3.30	3.90
Chlorite	2022	0.430	0.270	0.650

MCL	MCLG	Unit of Measure	Containment Sources	Violation
***% <0.3(TT)	0	NTU	Soil Runoff	No
π	π	ppm	Naturally present in environment	No
MRDLG =4.0	MRDLG=4.	ppm	Disinfectant used to control microbes	No
1	0.8	ppm	By-product of drinking water disinfection	No

### **Additional Monitoring**

Containment	Year of Range	Average Level	Minimum Level	Maximum Level
Aluminum	2022	0.058	0.009	0.130
Chloride	2022	236	213	258
Sulfate	2022	107	102	112
Total Dissolved Solids	2022	698	654	742

MCL	MCLG	Unit of Measure	Containment Sources	Violation
0.05-0.2^^	N/A	ppm	Water Treatment Chemical	N/A
300^^	N/A	ppm	Naturally Occurring	N/A
300^^	N/A	ppm	Naturally Occurring	N/A
1000^^	N/A	ppm	Naturally Occurring	N/A

Containment	Year of Range	Average Level	Minimum Level	Maximum Level
Ammonia	2022	0.179	0.110	0.260
Calcium	2022	49.4	30.3	62
Magnesium	2022	18.9	11.4	27.4
Potassium	2022	5.52	5.15	6.04

MCL	MCLG	Unit of Measure	Containment Sources	Violation
Not Regulated	N/A	ppm	Water Treatment Chemical	N/A
Not Regulated	N/A	ppm	Naturally Occurring	N/A
Not Regulated	N/A	ppm	Naturally Occurring	N/A
Not Regulated	N/A	ppm	Naturally Occurring	N/A

Containment	Year of Range	Average Level	Minimum Level	Maximum Level
Sodium	2022	135	40.8	206
Hardness	2022	201	123	252
Conductance	2022	1270	1210	1330
	2022	180	172	187
Total Alkalinity				

MCL ·	MCLG	Unit of Measure	Containment Sources	Violation
Not Regulated	N/A	ppm	Naturally Occurring	N/A
Not Regulated	N/A	ppm	Naturally Occurring	N/A
Not Regulated	N/A	μmho/cm	Naturally Occurring	N/A
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/cm= micromhos/cm. \*\*Running Annual Average. ^Highest Locational Running Average. 
^Secondary Constituent Levels set by the Texas Commission of Environmental Quality.