# 2010 Annual Drinking Water Quality Report

(Consumer Confidence Report)



CITY OF LAMESA Phone Number: (806) 872-2124

#### **SPECIAL NOTICE**

# Required language for ALL community public water supplies:

"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 ; those 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 infections. You should seek advice about drinking water your physician or health care provider. Additional guidelines appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (806) 426-4791."

## Public Participation Opportunities

Date:

Monday - Friday

Time:

8:00 a.m. - 5:00 p.m.

Location:

Utility Building 302 S Austin

Phone Number:

(806) 872-4327 or

(806) 332-9036

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

#### **Our Drinking Water**

### Is Regulated

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgably about what's in your drinking water.

#### Source 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 can pick up substances resulting from the presence of animals or from human activity. 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.

Organic chemical contaminants, including synthetic, 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.

#### En Espanol

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (806) 872-4327 or (806) 332 9036 para hablar con una persona bilingile español.

## Where do we get our drinking water?

Our drinking water is obtained from surface and ground water sources. Our surface water is from Lake Meredith located near Amarillo. Texas. The water is received and treated by the City of Lubbock and then pumped through a pipeline owned by Canadian River Municipal water Authority Our ground water is supplied by 8 acrive wells located NW of the city. In 2008 the blend ration was 86% treated water and 14% ground water. Ogallala Aquifer Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on This information Environmental Quality. describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. information contained in the assessment allows us to focus our source water protection Some of this source water strategies. assessment information will be available later this year on Texas Drinking Water Watch at http://dww.tceg.state.tx.us/dWW/. For more information on source water assessments and protection efforts at our system, please contact us. Our surface water is from Lake Meredith located near Amarillo, Texas. The water is received and treated by the City of Lubbock and then pumped through a pipeline owned by Canadian River Municipal water Authority Our ground water is supplied by 8 active wells located NW of the city. In 2010 the blend ration was 86% treated water and 14% ground water.

## City of Lamesa Notice of Violations in 2010

January 2010-The City of Lamesa was issued a routine Monitoring Violation (TCR 23/24/) due to failure to collect the required number of samples in our distribution system. The City of Lamesa is required to collect 10 samples each month. A documentation error on (1) of our sample forms invalidated the sample which caused the violation. A public notice was issued informing our customers of the violation. All corrections were made to clear the violation issued.

September 2010 The City of Lamesa was issued a GWR Monitoring Violation. This violation was issued due to one of our coliform contained samples distribution bacteria could indicate a potential problem with our water system's ground water source, or in our distribution system. Repeat samples were immediately taken and submitted as per the Texas Commission on Environmental Quality's requirements, and all repeat samples were returned as negative for coliform bacteria. A public notice was issued for this violation. After notification to TCEQ was made, the violation was cleared.

# ALL drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

## **Secondary Constituents**

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concerns. Therefore secondary's are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

# Required Additional Health Information for Lead

If present, elevated levels of lead can cause problems. especially serious health pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply 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 Water Hotline Drinking or http://www.epa.gov/safewater//lead.

#### **ABBREVIATIONS**

NTU - Nephelometric Turbidity Units

MFL - million fibers per liter ( a measure of aspestos)

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 (ugl)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or pictograms per liter

#### **DEFINITIONS**

#### Maximum Contaminant Level (MCL)

The highest permissible level of contaminant in drinking ware. MCL's 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 of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Ppm:** milligrams per liter or parts per million- or one ounce in 7,350 gallons of water.

**Ppb:** micrograms per liter or parts per billionor one ounce in 7,350,000 gallons of water.

Na: not applicable.

#### Regulated Contaminants Detected 2010

## Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of J>ositive E. Coli or Fecal Coliform Samples	200	Likely Source of Contamination
0	1 positive monthly sample.	0	0	0	N	Naturally present in the environment.

Maximum Residual Disinfectant Level

MINITARY	1 IXCSIGGAI	10111110					-
Disinfectant Type	Average Level	Min Level	Max Level	MRDL	MRDLG	Unit	Source
CHLORINE	0.455	0.20	2.20	4	4	ppm	Disinfectant used to control
					\$ 101	1. j	microbes

## Lead and Copper

Definitions:

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.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	#Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2010	1,3	1.3	0.231	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
					7.9 10)		K mile	2_

Lead	2010	0	15	2.92	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
		L					-	

## Lead Copper Rule (LCR) mandatory language

"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. This water supply 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 http://www.epa.gov/safewater/lead."

## R-egulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected		WCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAAS)*	2010	7.5	7.5 - 7.5	No goal for the total		ppb	N	By-product of drinking water chlorination.
*							10	31

Total Tribalomethanes (TTbm)*	2010	37.7	37.7 - 37.7	No goal	80	ppb	» N	By-product of drinking water
		8	3 3	for the total		Wag e	f	chlorination.
				Locas	527	7/4	1	4:
		3						3 (96)

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected		MCL	Units	Violation	Likely Source of contamination
Arsenic	02/07/2006	3.12	3.12 - 3.12	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Arsenic	02/07/2006	3.12 4	3.12 - 3.12		10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	01/25/2005	0.0937	0.0937 - 0.0937	2	2	мдд	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Chromium	01/25/2005	3.25,	3.25 <b>-</b> 3.25	100	100	ppb	N	Discharge from steel and pulp
	-		en acid			=1.00	1 4	mills; Erosion of natural deposits.
						G	1.5	inner
			1 × 1		: +	. Sin		Plantage Fred States
Fluoride	01/14/2009	0.71	0.71 - 0.71 -	4	4.0	ppm	N. 1	Erosion of natura deposits; water additive which promotes strong
7	10 k (p)				2			teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen[	2010	10.5	1.02 -	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion on natural deposits.
			-7	3 11	ž va			
Selenium	01/25/2005	12.6	12.6	50	50	ppb	Z	Discharge from petroleum and metal refineries; Erosion of natura deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	2	MCL	Units	Violation	Likely Source of Contamination
N	Y = Y	38 K	Levily.	). 	扩	2 14		
Beta/photon emitters	2010	25.7	25.7 - 25.7	0	50	pCi/L	Z.	Decay of natural and man-made deposits.
SC 20								
Pross alpha excluding adon and uranium	2010	13.5	13.5	0	15	pCi/L	N ÷	Erosion of natura deposits.

<sup>&</sup>lt;sup>1</sup> "The MCL for beta particles is 4 mrem/yr. EPA considers 50 pCi/L to be the level of concern for beta particles."

# CITY OF LUBBOCK PUBLIC WATER SYSTEM WATER QUALITY REPORT DATA, 2010

BETAPHOTON EMITTERS 2005 ALPHA EMITTERS 2005 ALPHA EMITTERS 2005 RADIUM 228 & 228 COMBINED 2004 2005 BARIUM 2004 2006 BARIUM 2004 2005 BARIUM 2005 BAR	SO PCM"   6.5 PCM   0   0   0   0   0   0   0   0   0	REATMENT PIGA 6.5 pc/l. 5 pc/l. 0.7 pc/l.			
EMITTERS RS 228 COMBINED	50 pc/l. 15 pc/l. 5 pc/l. 10 ppb** 2 ppm 4 ppm 0.2 ppm	6.5 pc/l. 5 pc/l. 0.7 pc/l.	THE RESERVE OF THE PARTY OF		CONTRACTOR
	15 pct/L 5 pct/L 10 ppb** 2 ppm 4 ppm 0.2 ppm	5 pC/IL. 0.7 pC/IL. 3.9 ppb	0	N/A	Decay of natural and man-made deposits
COMBINED	5 pci/L 10 ppb** 2 ppm 4 ppm 0.2 ppm	0.7 pC//.	0	NA	Eroslon of natural deposits
	10 ppb** 2 ppm 4 ppm 0.2 ppm	3.9 ppb	0	NA	Erosion of natural deposits
٠	2 ppm 4 ppm 0.2 ppm	17.5	0	2.1 - 3.9 ppb	2.1 - 3.9 ppb runoff from orchards
E E E E E E E E E E E E E E E E E E E	4 ppm 0.2 ppm	U.13 ppm	2 ррш	0-0.15 ppm	0 - 0.15 ppm   Erosion of natural deposits
\\	0.2 ppm	1.46 ppm	4 ррт	шdd .	Erosion of natural deposits
\\	2	0.07 ppm	0.2 ppm	70.03 - 0.07 mdq	Discharge from steet/metal, plastic and fertilizer factories
	2	1.65 ppm	10	0.86 - 1.65 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion
	mqq.1	0,13 ppm	ndd I	0.01 - 0.13 ppm	Runolf from fertilizer use; leaching from septic tanks, sewage; erosion
	TT=5NTU	0.13 NTU		0.03.043	The state of the s
	TT = % of samples <0.3	100%	0	NTU .	Soil runoff
T	ADDITIONAL	* ABDITIONAL MONITORING	Service Service		の の ない の の の の の の の の の の の の の の の の の
ALTIMINI IM	0.05-0.2ppm^A	0.07 ppm	N/A	¥	Water Treatment Chemical
	300 ppm A	378 ppm	NA	NA	Naturally occurring
SOLVED SOLIDS	1000 ppm^	1180 ppm	N/A	NA	Naturally occurring
	Not Regulated	0.23 ppm	N/A	NA	Water Treatment Chemical
CALCIUM 2004 - 2005	Not Regulated	62.4 ppm	N/A	59 - 62 ppm	Naturally occurring
NI NI	Not Regulated	35 ppm	N/A	14.1 - 35 ppm	Naturally occurring
	Not Regulated	290 ppm	N/A	NA	Naturally occurring
20	Not Regulated	0.002 ppm	NA	0.002 ppm	Erosion of natural deposits
	5 ppm <sup>A</sup>	0.004 ppm	AIN	0-0.004 ppm	Naturally occurring
NESS	Not Regulated	289 ppm	NA	¥	Naturally occurring
CONDUCTANCE	Not Regulated	2144 micromhos/cm	NA	MA	Naturally occurring
<u>}</u>	Not Regulated	179 ppm	NA	¥.	Naturally occurring
	300 ppm <sup>A</sup>	237 ppm	N/A	NA	Mineral and Nutrient