

ANNUAL DRINKING WATER QUALITY REPORT

TX 1520006

LUBBOCK COUNTY WCID 1

Annual Water Quality Report for the period of January 1 to December 31, 2016

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.

Public Participation: Board meeting on the 1st and 3rd Tuesday of every month in the administration office.

LUBBOCK COUNTY WCID 1 IS PURCHASED SURFACE WATER

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.

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 & 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.

For more information regarding this report contact:

Name: Heather Purcell

Phone: (806)747-3353 ext. 200

Este report incluye informacion sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono [\(806\)747-3353](tel:8067473353)

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 from 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 Assessments

The TCEQ has completed a source water assessment for all drinking water systems that own their sources. The report 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 system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Heather Purcell at (806)747-3353.

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

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

<u>Source Water Name</u>	<u>Type of Water</u>	<u>Report Status</u>	<u>Location</u>	
SW FROM CITY OF LUBBOCK	CC FROM TX 1520002 LUBBOCK	SW	ACTIVE	LAKE ALAN HENRY, BAILEY CO., ROBERTS CO.

2016 Regulated Contaminants Detected

Water Quality Test Results

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

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

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close the MCLGs as feasible using the best available treatment technology.

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.

Maximum Contaminant Level Goal or MCLG: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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 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 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)

na: Not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

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.

Treatment Technique or TT: a required process intended to reduce the level of a contaminant in drinking water.

ppt: parts per trillion, or nanograms per liter (ng/L)

ppq: parts per quadrillion, or picograms per liter (pg/L)

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2016	12	4.6-19.2	No goal for the total	60	Ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2016	28	21.9-40.2	No goal for the total	80	Ppb	N	By-product of drinking water disinfection
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2016	1	1.03-1.03	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

VIOLATIONS TABLE

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 BEGIN	VIOLATION END	VIOLATION EXPLANATION
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2014	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2015	09/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	07/01/2016	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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	02/13/2015	2016	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	02/08/2016	2016	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	11/12/2016	2016	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Lubbock County WCID No. 1 has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Chapter 30, Section 290, Subchapter F. Even though these were not emergencies, as our customers, you have the right to know what happened and what we are doing (or did) to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2012-2016 we did not complete all monitoring or testing for lead and copper and therefore cannot be sure of the quality of your drinking water during that time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Lead and Copper, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which the follow-up samples were (or will be) taken.

<i>CONTAMINANT</i>	<i>REQUIRED SAMPLING FREQUENCY</i>	<i># OF SAMPLES TAKEN</i>	<i>WHEN SAMPLES SHOULD HAVE BEEN TAKEN</i>	<i>WHEN SAMPLES WERE OR WILL BE TAKEN</i>
LEAD AND COPPER	5 PER 3 YEARS	0	2012-JANUARY 31, 2014	2017
LEAD AND COPPER	5 PER ROUTINE YEAR	0	JANUARY 1, 2015- JANUARY 31, 2015	2017
LEAD AND COPPER	10 ROUTINE PER 6 MONTHS	0	JANRUARY 1, 2016 – JUNE 30, 2016	2017
LEAD AND COPPER	10 ROUTINE PER 6 MONTHS	0	JULY 1, 2016 – DECEMBER 31, 2016	2017

What is being done?

We are working to correct the problem. For more information, please contact Heather Purcell at (806)747-3353 or Lubbock County WCID No. 1 Administration Office at 9999 High Meadow Road, Lubbock, TX 79404.

Corrective Actions: We are working with TCEQ to get the samples turned in an orderly fashion within the required date(s) given.

This notice was sent to you by Lubbock County WCID No. 1. Public Water System Number: TX1520006

CITY OF LUBBOCK PUBLIC WATER SYSTEM WATER QUALITY REPORT DATA, 2016

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of constituents that may come into contact with your drinking water sources based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Heather Purcell at (806)747-3353.

SOURCE	ROBERTS CO. WELLFIELD	RANGE	BAILEY CO. WELLFIELD	RANGE	LAKE ALAN HENRY	RANGE	MCL	MCLG	VIOLATION	SOURCES OF CONTAMINATION
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SUBSTANCES REGULATED AT THE TREATMENT PLANT

BETA/PHOTON EMITTERS	8.4 pCi/L (2011)	na	6.2 pCi/L (2011)	na	None detected (2014)	Na	50 pCi/L*	0	NO	Decay of natural & man-made deposits
ALPHA EMITTERS	4.7pCi/L (2011)	na	4.0 pCi/L (2011)	na	4.1 pCi/L	3.0 -11.5 pCi/L	15 pCi/L	0	NO	Erosion of natural deposits
URANIUM	Na	NA	NA	NA	2.7 ppb (2014)	Na	30 ppb	0	No	Erosion of Natural Deposits
ANTIMONY	None detected	na	None detected	na	0.29 ppb	na	6 ppb	6ppb	NO	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC	1.6 ppb	na	4 ppb	na	2.5 ppb	na	10 ppb**	0	NO	Erosion of natural deposits; runoff from orchards
BARIUM	0.13 ppm	na	0.098 ppm	na	0.19 ppm	na	2 ppm	2 ppm	NO	Erosion of natural deposits
CHROMIUM	2.2 ppb	na	2 ppb	na	1.9 ppb	na	100 ppb	100 ppb	NO	Erosion of natural deposits
CYANIDE	110 ppb(2015)	na	84.4 ppb (2014)	na	41.1 ppb	na	200 ppb	200 ppb	NO	Discharge from steel/metal, plastic and fertilizer factories
FLUORIDE	0.656 ppm	na	1.23 ppm (2014)	na	0.845 ppm	na	4 ppm	4 ppm	NO	Erosion of natural deposits
NITRATE	0.966 ppm	na	1.63 ppm	na	0.053 ppm	na	10 ppm	10 ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion
SELENIUM	None detected	na	2.7 ppb	na	None detected	na	50 ppb	50 ppb	NO	Erosion of natural deposits
TURBIDITY	0.22 NTU	0.04-0.22 NTU	Na	na	100% less than 0.3 NTU	0.02-0.08 NTU	TT=5NTU	0	NO	Soil runoff. Turbidity is measurement of cloudiness of water. It's a good indicator of the effectiveness of filtration system.
	100% less than 0.3 NTU		Na				TT=% of samples <0.3 NTU			

ADDITIONAL MONITORING

SOURCE:	ROBERTS CO. WELLFIELD	RANGE	BAILEY CO. WELLFIELD	RANGE	LAKE ALAN HENRY	RANGE	MCL	MCLG	VIOLATON	SOURCE OF CONTAMINATION
ALUMINUM	0.083 ppm	na	None detected	na	0.026 ppm	na	0.05-0.2ppm^	na	na	Water Treatment Chemical
CHLORIDE	284 ppm	na	12 ppm (2014)	na	258 ppm	na	300 ppm^	na	na	Naturally Occurring
TOTAL DISSOLVED SOLIDS	869 ppm	na	317 ppm (2014)	na	695 ppm	na	1000ppm^	na	na	Naturally Occurring
AMMONIA	0.23 ppm	na	0.23 ppm	na	0.20 ppm	na	Not Regulated	na	na	Water Treatment Chemical
CALCIUM	61.2 ppm	na	53.4 ppm	na	29.3 ppm	na	Not Regulated	na	na	Naturally Occurring
MAGNESIUM	30.8 ppm	na	17.9 ppm	na	10.3 ppm	na	Not Regulated	na	na	Naturally Occurring
SODIUM	207 ppm	na	32.9 ppm	na	211 ppm	na	Not Regulated	na	na	Naturally Occurring
POTASSIUM	6.22 ppm	na	4.7 ppm	Na	4.73 ppm	Na	Not Regulated	Na	Na	Naturally Occurring
MANGANESE	0.00074 ppm	na	none detected	na	None detected	na	0.05 ppm^	na	na	Naturally Occurring
NICKEL	0.00049 ppm	na	None detected	na	0.00043 ppm	na	Not Regulated	na	na	Erosion of natural deposits
pH	7.4	na	7.6	na	8.2	na	Greater than 7.0^	na	na	Naturally Occurring
ZINC	None detected	na	0.0033 ppm	na	0.0062 ppm	na	5 ppm	na	na	Naturally Occurring
HARDNESS	280 ppm	na	207 ppm	na	116 ppm	na	Not Regulated	na	na	Naturally Occurring
CONDUCTANCE	1530 micromhos/cm	na	524 micrmhos/cm (2014)	na	1310 micromhos/cm	na	Not Regulated	na	na	Naturally Occurring
TOTAL ALKALINITY	183 ppm	na	214 ppm (2014)	na	162 ppm	na	Not Regulated	na	na	Naturally Occurring
SUFATE	135 ppm	na	29.2 ppm (2014)	na	106 ppm	na	300 ppm^	na	na	Mineral & Nutrient

ALL DATA IN THIS TABLE WAS COLLECTED IN 2016 UNLESS OTHERWISE DESIGNATED IN PARENTHESES.

Lubbock County Water Control & Improvement District No. 1: 2016 Consumer Confidence Report 2017

9999 High Meadow Road - Lubbock, TX 79404

Administration Office Phone: (806)747-3353 - Police Department: (806)747-0496

www.buffalospingslake.net