



CITY OF LUCAS
AUGUST 2015 ANNUAL DRINKING WATER QUALITY REPORT AMENDED
CONSUMER CONFIDENCE REPORT COVERING CALENDAR YEAR 2014

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 for cancer; 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 from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.



PUBLIC PARTICIPATION OPPORTUNITIES

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us. On the first and third Thursday of each month, citizens have an opportunity to address the City Council about water related issues during the Citizens' Input agenda item on every City Council meeting. The next City Council meeting will be held:

Date: September 3, 2015
Time: 7:00 p.m.
Location: Lucas City Hall
665 Country Club Road
Lucas, Texas 75002-7651
Telephone: (972) 727-8999

En Español - Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien o llame a Linezka Maduro a la Ciudad de Lucas.

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 knowledgeable about what is 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. **The City of Lucas uses purchased surface water, sourced from the Lavon Lake.** 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. 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.

WHERE DO WE GET OUR DRINKING WATER?

The source of drinking water used by the **City of Lucas is Purchased Surface Water** from the North Texas Municipal Water District (www.ntmwd.com) from **Lavon Lake**. The **Texas Commission on Environmental Quality (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 from which we purchase our water received the assessment report. In the **Water Loss Audit** submitted to the Texas Water Development Board, the City of Lucas estimated that 44,089,100 gallons of water were unaccounted for during the 2014 calendar year. Unaccounted for water use went to leaks, hydrant flushing, water

works maintenance, fire-rescue operations, etc. For more information on source water assessments, protection efforts at our system, or the water loss audit; please contact our Public Works Director Stanton Foerster, PE, at stanton@lucastexas.us and (972) 912 - 1208. Further details about sources and source-water assessments are available in Drinking Water Watch at the following site: www.dww.tceq.texas.gov/DWW.

ALL DRINKING WATER MAY CONTAIN CONTAMINANTS

When drinking water meets federal standards there may not be any health-based 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 concern. Therefore, secondary constituents 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 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. Your 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 the following site: www.epa.gov/safewater/lead.

DEFINITIONS & ABBREVIATIONS

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant in the drinking water. MCLs 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 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 to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

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

ppb - micrograms per liter or parts per billion- or one ounce in 7,350,000 gallons of water

na - not applicable

avg - Some MCLs are based on running annual average of monthly samples.

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

NTU - Nephelometric Turbidity Units

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

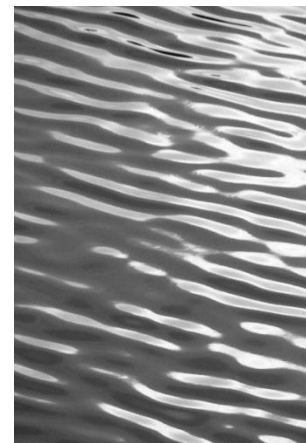
pCi/L - picocuries per liter (a measure of radioactivity)

ppm - parts per million or milligrams per liter (mg/l)

ppb - parts per billion or micrograms per liter (ug/l)

ppt - parts per trillion or nanograms per liter

ppq - parts per quadrillion or picograms per liter



Lead and Copper - City of Lucas

	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Y/N)	Likely Source of Contamination
Copper	9/13/2014	1.3	1.3	95	20	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	9/13/2014	0	15	95	20	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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

Regulated Contaminants - City of Lucas

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids (HAA5)	2014	23	22.8 - 41.6	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2014	42	45.9 - 65.9	No goal for the total	80	ppb	No	By-product of drinking water disinfection.
Bromate	2014	ND	ND	5	10	ppb	No	By-product of drinking water ozonation.

NOTE: Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Maximum Residual Disinfectant Level - City of Lucas

Chemical Used	Year	Average Level of Quarterly Data	Lowest Result of Single Sample	Highest Result of Single Sample	MRDL	MRDLG	Units	Source of Chemical
Chlorine Residual (Chloramines)	2014	2.82	1.03	3.98	4.0	<4.0	ppm	Disinfectant used to control microbes.
Chlorine Dioxide	2014	<0.10	0	0.51	0.8	0.8	ppm	Disinfectant.
Chlorite	2014	0.05	0	0.51	1.0	N/A	ppm	Disinfectant.

Unregulated Contaminants - City of Lucas

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Chloroform	2014	16.7	6.2 - 16.7	ppb	By-product of drinking water disinfection.
Bromoform	2014	17.4	3.4 - 17.4	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2014	29.7	16.9 - 29.7	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2014	16	10.5 - 16	ppb	By-product of drinking water disinfection.

NOTE: Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection by-products. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Regulated Contaminants - North Texas Municipal Water District Data (www.ntmwd.com)

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2014	0.51	0 - 0.51	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)*	2014	22	15.4 - 22.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2014	57	24.4 - 57.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants - NTMWD

	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2014	1	0 - 0.739	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2014	0.0425	0.0413 - 0.0425	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2014	168	122 - 168	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2014	0.8	0.806 - 0.81	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2014	1	1.38 - 1.45	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants - NTMWD

	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	04/29/2010	4.4	4.4 - 4.4	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.

Synthetic Organic Contaminants Including Pesticides and Herbicides - NTMWD

	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2014	0.29	0.25 - 0.29	3	3	ppb	N	Runoff from herbicide used on row crops.
Simazine	2014	0.16	0.13 - 0.16	4	4	ppb	N	Herbicide runoff.

Turbidity - NTMWD

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.96 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	99.16%	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