

# 2005 Annual Drinking Water Quality Report

(Consumer Confidence Report)

## CITY OF LUCAS

Phone No: 972-727-8999

***Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:***

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

### **Public Participation Opportunities**

**Date: 1st and 3rd Mondays**

**Time: 7:00 P.M.**

**Location: City Annex, 185 Country Club Road,  
Lucas, TX 75002**

**Phone No: 972-727-8999**

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

### **Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements**

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's in your drinking water.

**WATER SOURCES:** 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. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

#### ***En Español***

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (972) 727 - 8999 - para hablar con una persona bilingüe en español.



## Where do we get our drinking water?

Our drinking water is obtained from Surface water sources. It comes from the following Lake/River/Reservoir/Aquifer: LAVON LAKE. The TCEQ has completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of contaminants that may come into contact with the 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, please contact Lucas City Hall at 972-727-8999.

### ***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, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

## About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

### **DEFINITIONS**

#### **Maximum Contaminant Level (MCL)**

The highest permissible level of a contaminant in 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 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 to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

#### **Treatment Technique (TT)**

A required process intended to reduce the level of a contaminant in drinking water.

#### **Action Level (AL)**

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

### **ABBREVIATIONS**

- 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 (µg/L)
- ppt** - parts per trillion, or nanograms per liter
- ppq** - parts per quadrillion, or picograms per liter

### Inorganic Contaminants

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2002 2002	Barium	0.031	0.03	0.032	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2004 2004	Fluoride	0.750	0.7	0.8	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2004 2004	Nitrate	0.365	0.36	0.37	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2004 2004	Gross beta emitters	3.500	3.4	3.6	50	0	pCi/L	Decay of natural and man-made deposits.

### Organic Contaminants

Year (Range)	Contaminant	Highest Average	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2004 2004	Simazine	0.058	0	0.2	4	4	ppb	Herbicide runoff.
2004 2004	Atrazine	0.532	0	0.97	3	3	ppb	Runoff from herbicide used on row crops.

**Maximum Residual Disinfectant Level** NOT TESTED OR REPORTED

### Disinfection Byproducts

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2004 2004	Total Haloacetic Acids	19.767	16.9	24.8	60	ppb	Byproduct of drinking water disinfection.
2004 2004	Total Trihalomethanes	57.475	41.8	81.1	80	ppb	Byproduct of drinking water disinfection.

### Unregulated Contaminants

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2004 2004	Chloroform	21.675	9.7	37		ppb	Byproduct of drinking water disinfection.
2004 2004	Bromoform	1.875	0.7	3		ppb	Byproduct of drinking water disinfection.
2004 2004	Bromodichloromethane	16.250	0	33		ppb	Byproduct of drinking water disinfection.
2004 2004	Dibromochloromethane	15.475	7.9	22		ppb	Byproduct of drinking water disinfection.

**Lead and Copper**

Year (Range)	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
1999 1999	Lead	4.2000	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
1999 1999	Copper	0.4270	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

**Turbidity**

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.						
Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2004 2004	Turbidity	0.69	97.00	0.3	NTU	Soil runoff.

**Total Organic Carbon (TOC)**

The water system must provide TOC information to their customers by completing this section.

**Total Coliform** NOT DETECTED

**Fecal Coliform** NOT DETECTED

**Secondary and Other Not Regulated Constituents**  
(No associated adverse health effects)

Year (Range)	Constituent	Average Level	Minimum Level	Maximum Level	Limit	Unit of Measure	Source of Constituent
2004 2004	Bicarbonate	117.000	116	118	NA	ppm	Corrosion of carbonate rocks such as limestone.
2002 2002	Calcium	55.900	54.1	57.7	NA	ppm	Abundant naturally occurring element.
2004 2004	Chloride	50.500	50	51	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2002 2002	Copper	0.039	0.016	0.062	NA	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2002 2002	Iron	0.010	0	0.02	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2002 2002	Magnesium	3.655	3.65	3.66	NA	ppm	Abundant naturally occurring element.
2004 2004	pH	6.950	6.9	7	NA	units	Measure of corrosivity of water.
2002 2002	Sodium	15.950	14.5	17.4	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2004 2004	Sulfate	83.000	82	84	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2004 2004	Total Alkalinity as CaCO <sub>3</sub>	96.000	95	97	NA	ppm	Naturally occurring soluble mineral salts.
2004 2004	Total Dissolved Solids	310.000	304	316	1000	ppm	Total dissolved mineral constituents in water.
2002 2002	Total Hardness as CaCO <sub>3</sub>	154.500	150	159	NA	ppm	Naturally occurring calcium.





**Data to send to Wholesale Customers**

Compound	Units	Range	Highest Avg. Sample Pt.	Notes - FYI
Atrazine	ppb	1.10 - 1.28	1.21	
Barium	ppm	2002 Data	2002 Data	TCEQ didn't test in 2003, 2004, or 2005, use data from last years CCR
Fluoride	ppm	0.50 - 0.70	0.70	
Nitrate	ppm	0.64 - 0.76	0.76	
Total THMs	ppb	Customer #	Customer #	
Simazine	ppb	0.0 - 0.29	0.15	
Arsenic	ppb	2002 Data	2002 Data	TCEQ didn't test in 2003, 2004, or 2005, use data from last years CCR
Lead	ppm	Customer #	Customer #	TCEQ didn't test in 2003, 2004, or 2005, use data from last years CCR
Copper	ppm	Customer #	Customer #	TCEQ didn't test in 2003, 2004, or 2005, use data from last years CCR
Sulfate	ppm	68.0 - 69.0	69.0	
Sodium	ppm	2002 Data	2002 Data	TCEQ didn't test in 2003, 2004, or 2005, use data from last years CCR
Bromodichloromethane	ppb	Customer #	Customer #	
Chloroform	ppb	Customer #	Customer #	
Dibromochloromethane	ppm	Customer #	Customer #	
Bromoform	ppb	Customer #	Customer #	
Gross Alpha Particle Activity (2004 Data)	pc/l	ND - ND	ND	
Gross Beta (2004 Data)	mrem/yr	<4 - <4	<4	
Radium 228 (2004 Data)	pc/l	ND - ND	ND	
Carbon Tetrachloride	ppb	0.0 - 0.6	0.3	Cleaner
Dalapon	ppm	0.0 - 2.9	0.7	Pesticide
TOC	ppm	4.15 - 4.79	4.46	Treatment Technique
Total HAA	ppb	Customer #	Customer #	
Turbidity	NTU	0.07 - 0.37	0.15	100% of combined effluent samples met limit of 1.0 ntu
Coliforms	Customer #	Customer #	Customer #	99.95% less than 0.3 NTU. 6170 Data Points used six positives during the year, well below 5% limit per month On month that there were two positives, 56 samples taken giving a rate of 3.6 percent

**NOTE- MUST HAVE LANGUAGE IN THIS REPORT ABOUT SOURCE WATER ASSESSMENT**

