

# 2010 ANNUAL DRINKING WATER QUALITY REPORT

(Consumer Confidence Report)

City of Lake Worth, TX

Phone No: 817-237-1211 ext 200

## 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.

### **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 Agency (EPA) required test and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

**Where do we get our drinking water?** Our drinking water is obtained from Ground and Surface water sources. It comes from the following: Lake/River/Reservoir/Aquifer: PALUXY and TRINITY aquifers and the City of Ft. Worth. A Source Water Susceptibility Assessment for drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. For more information on source water assessment and protection efforts at our system, please contact us.

**En español** Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel (817) 237-1211. Par hablar con una persona bilingüe en español.

## **PUBLIC PARTICIPATION OPPORTUNITIES**

Days: Monday – Friday

Time: 8:00 a.m. – 5:00 p.m.

Location: Lake Worth City Hall at 3805 Adam  
Grubb

Phone: (817) 237-1211 ext 200

Website: [www.lakeworthtx.org](http://www.lakeworthtx.org)

## **Source of Drinking Water**

The source of drinking water (both tap water and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the lands or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup 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.

## 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

### About The Following Pages

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

### 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 EPA. These constituents are not cause for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

### DEFINITIONS / Abbreviations:

**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.

**Maximum Contaminant Level (MCL)** – The highest permissible level of a contaminant in drinking water. MCL's are set as close to the MCLG's as feasible using the best available technology.

**Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

**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.

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

**NTU** – Nephelometric Turbidity Units

**MFL** – million fibers per liter (a measure of asbestos)

**pCi/l** – picocuries per liter (measurement of radioactivity)

**ppm** – parts per million, or milligrams per liter (mg/l)- milligrams per liter or parts per million- or one ounce in 7350 gallons of water

**ppb** – parts per billion, or micrograms per liter (ug/l)- Micrograms per liter or parts per billion- or one ounce in 7,350,000 gallons of water

**na-** not applicable

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

**ppt** – parts per trillion, or nanograms per liter

**ppq-** parts per quadrillion, or picograms per liter

### 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 Sample Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2009	Turbidity	0.50	99.00	0.3	NTU	Soil runoff.

### Radioactive Contaminants

Year or Range	Contaminant	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violations	Source of Contaminant
2010	Gross Alpha excluding radon & uranium	2.7	2.4	0	15	pCi/L	N	Erosion of natural deposits

## Inorganic Contaminants

Year or Range	Contaminant	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violations	Source of Contaminant
2010	Antimony	0.41	0 – 0.41	6	6	ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
2010	Arsenic	0.228	0 – 0.228	0	10	ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes.
2010	Barium	0.0106	0.00949 - 0.0106	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits.
2010	Chromium	4.4	3.93-4.4	100	100	ppb	N	Discharge from steel and pulp mills, Erosion of natural deposits.
2010	Fluoride	0.58	0.58-0.58	4	4.0	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2010	Nitrate (measured as Nitrogen)	0.23	0 – 0.23	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
2010	Selenium	1.01	0.93 – 1.01	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; discharge from mines.
2010	Thallium	0.123	0.011 – 0.012	0.5	2	ppb	N	Discharge from electronics, glass, and leaching from ore-processing sites; drug factories.

## Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Chlorine Residual, Total	2.42	.5	3.5	4	4	ppm	Disinfectant used to control microbes.
2010	Chlorine Residual, Free	1.59	.2	3.5	4	4	ppm	Disinfectant used to control microbes.

## Disinfection Byproducts

Year	Contaminant	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violations	Source of Contaminant
2010	Trihalomethanes (TTHm)	21	4.8 – 21	No Goal for Total	80	ppb	N	Byproduct of drinking water disinfection.
2010	Haloacetic Acids (HAA5)	7	1 – 7	No Goal for Total	60	ppb	N	Byproduct of drinking water disinfection.

**Total Coliform- Reported Monthly Test Found No Coliform Bacteria.**

**Fecal Coliform- Reported Monthly Test Found No Fecal Coliform Bacteria.**

## Lead and Copper

### Definitions:

**Action Level Goals (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for margin of safety.

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

Year	Constituent	The 90 <sup>th</sup> Percentile	MCLG	Number of Sites Exceeding Action Level	Action Levels (AL)	Unit	Violation	Source of Constituent
2010	Lead	2.15	0	0	15	ppb	N	Corrosion of household plumbing systems, Erosion of natural deposits.
2010	Copper	0.238	1.3	0	1.3	ppm	N	Corrosion of household plumbing systems, Erosion of natural deposits, Leaching from wood preservatives.

### 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. 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 you 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>.”

### Secondary And Other Not Regulated Constituents (No associated adverse health effects.)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Limit Level	Unit of Measure	Source of Constituent
2009 - 2005	Bicarbonate	283	95	421	NA	ppm	Corrosion of carbonate rocks such as limestone.
2008	Hardness as Ca/Mg	151	120	185	NA	ppm	Naturally occurring calcium and magnesium.
2006-2005	Carbonate	23	0	34	NA	ppm	Corrosion of carbonate rocks such as limestone.
2009-2005	Chloride	21	15	34	300	ppm	Abundant naturally occurring element; Used in water purification; Byproduct of oil field activity.
2009-2005	P. Alkalinity as CaCO <sub>3</sub>	19	0	28	NA	ppm	Naturally occurring soluble mineral salts.
2009-2005	pH	8.8	8.2	9.2	>7.0	units	Measure of corrosivity of water.
2009 - 2005	Sulfate	45	27	60	300	ppm	Naturally occurring; Common industrial byproduct; Byproduct of oil field activity.
2009	Sodium	24	19	26	NA	ppm	Erosion of natural deposits; byproduct of oil field activity
2009-2005	Total Alkalinity as CaCO <sub>3</sub>	295	95	401	NA	ppm	Naturally occurring soluble mineral salts.
2009-2005	Total Dissolved Solids	426	197	538	1000	ppm	Total dissolved minerals constituents in water.