

# 2006 Annual DRINKING WATER QUALITY REPORT

(Consumer Confidence Report)

City of Lake Worth

Phone No: 817-237-7210

## 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. 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 (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.

### *En Espanol*

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o' comentarios sobre este inform en espanol, favor de llamar al tel. (817) 237-1211. Par hablar con una persona bilingue en espanol.

### *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.

## PUBLIC PARTICIPATION OPPORTUNITIES

<b>Days</b>	Monday - Friday
<b>Time</b>	7:30 a.m. – 6:00 p.m.
<b>Location</b>	Lake Worth City Hall
<b>Phone No.</b>	(817) 237-7210
<b>Web Site</b>	WWW.LAKEWORTHX.ORG

### **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).

**Water Sources:** The Source of drinking (both tap water and bottle water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material and can pick up substance resulting from animal or from human activity. Contaminants that may be present in source water before treatment includes: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

**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.

**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.

**DEFINITIONS:**

**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.

**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)

**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

**Inorganics Contaminants**

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2002	Barium	0.03	0.011	0.058	2	2	ppm	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.
2006 2005	Fluoride	0.51	0.3	1.1	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

**Inorganics Contaminants (continued)**

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2006	Nitrate	0.2	0.05	0.59	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2006	Nitrite	0.01	0	0.01	1	1	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2005 2002	Gross alpha	0.9	0	1.8	15	0	pCi/L	Erosion of natural deposits
2005 2002	Gross beta emitters	2.43	0	5.4	50	0	pCi/L	Decay of natural and man made deposits.

**Organics Contaminants- Testing Waived, Not Reported, Or None Detected****Maximum Residual Disinfectant level**

Year (Range)	Disinfectant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2006	Chlorine Residual, Free	2.03	0.2	4	4	4	ppm	Disinfectant used to control microbes.

**Disinfection Byproduct**

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2006	Total Haloacetic Acids	12.1	12.1	12.1	60	ppb	Byproduct of drinking water disinfection.
2006	Total Trihalomethanes	21.8	21.8	21.8	80	ppb	Byproduct of drinking water disinfection.

## Unregulated Contaminants

Bromoform, Chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2006 2002	Chloroform	1.74	0	12	ppb	Byproduct of drinking water disinfection
2006 2002	Bromoform	1.25	0	3.1	ppb	Byproduct of drinking water disinfection
2006 2002	Bromodichloromethane	2.11	0	12	ppb	Byproduct of drinking water disinfection
2006 2002	Dibromochloromethane	1.77	0	7.6	ppb	Byproduct of drinking water disinfection

## Lead and Copper

Year	Constituent	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Action Levels	Unit of Measure	Source of constituent
2004	Lead	2.1	0	15	ppb	Corrosion of Household Plumbing Systems, Erosion of natural deposits.
2004	Copper	0.178	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 Sample Meeting Limits	Turbidity Limits	unit of Measure	Source of Contaminant
2006	Turbidity	0.40	99.00	0.3	NTU	Soil runoff

**Total Coliform**    **Reported Monthly Test Found No Fecal Coliform Bacteria**

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

**Secondary and other not regulated constituents** ( No associated adverse health effects)

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	Limit	Unit of Measure	Source of Contaminant
2006 2005	Bicarbonate	273	107	406	NA	ppm	Corrosion of Carbonate rocks such as limestone
2002	Calcium	23.8	0	52.8	NA	ppm	Abundant naturally occurring element
2006 2005	Carbonate	17	0	34	NA	ppm	Corrosion of carbonate rocks such as limestone
2006 2005	Chloride	28	20	44	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2002	Iron	0.016	0	0.026	.3	ppb	Erosion of natural deposits; iron or steel water delivery equipment or facilities
2002	Magnesium	3.9	0	9.6	NA	ppm	Abundant naturally occurring element
2006 2005	P. Alkalinity as CaCO <sub>3</sub>	14	0	28	NA	ppm	Naturally occurring soluble mineral salts
2006 2005	pH	8.5	7.8	9	7	units	Measure of corrosivity of water
2002	Sodium	123	11	223	NA	ppm	Erosion of natural deposits; byproduct of oil field activity
2006 2005	Sulfate	44	33	48	300	ppm	Naturally occurring; common industrial byproduct; Byproduct of oil field activity
2006 2005	Total Alkalinity as CaCO <sub>3</sub>	252	88	389	NA	ppm	Naturally occurring soluble minerals salts.
2006 2005	Total Dissolved Solids	376	185	513	1000	ppm	Total dissolved minerals constituents in water
2002	Total Hardness as CaCO <sub>3</sub>	69	0	150	NA	ppm	Naturally occurring calcium
2002	Zinc	0.004	0	0.03	5	ppb	Moderately abundant naturally occurring element; used in metal industry