



# 2013 Annual Drinking Water Quality Report Consumer Confidence Report (CCR)

## CITY OF RIVER OAKS, TEXAS

4900 RIVER OAKS BLVD.  
RIVER OAKS, TEXAS 76114  
817-626-5421 Ext. 324  
PWS ID NUMBER: TX2200069

### Annual Water Quality Report for the period of January 1 to December 31, 2013

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. **For more information about this report contact: Marvin Gregory @ 817-626-5421, extension 324 or James Hatley @ 817-626-5421, extension 332.**

#### EN ESPANOL

*Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono Lourdes Torres al tel. 817-626-5421 ext 315.*

#### PUBLIC PARTICIPATION OPPORTUNITIES

**City Council Meetings:** 2nd & 4th Tuesdays each month except for December at 7:00 P.M. in the City Council Chambers located at 4900 River Oaks Blvd. in River Oaks, Texas. In December there is only one monthly meeting held and that is on the second Tuesday @ 7:00 P.M. To learn more about future meetings (concerning your drinking water), or to schedule one, please call us at 817-626-5421, ext. 324. **You can also sign up for email notifications on line at [www.riveroakstx.com](http://www.riveroakstx.com).**

#### 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 the 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 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.

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.

Contaminants may be found in drinking water that cause taste, color and 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 at 817-626-5421.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocomprised 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 at (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 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>.*

#### Information about Source Water Assessments

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protections efforts at our system, contact Marvin Gregory at 817-626-5421, ext. 324 or James Hatley at 817-626-5421, ext. 332.

Source Water Name	Type of Water	Report Status	Location
Lake Worth	Surface Water	High	SWTP/1900 Nancy Ln.

## 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 to the MCLGs as feasible using the best available treatment technology.

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

**Maximum Residual Disinfectant Level or (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 or (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 contaminants.

**MFL:** million fibers per liter (a measure of asbestos)      **na:** not applicable.

**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.

**ppt:** parts per trillion, or nanograms per liter (ng/L)      **ppq:** parts per quadrillion, or picograms per liter (pg/L)

### REGULATED CONTAMINANTS

Disinfections and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2013	16	6.5—38.7	No Goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2013	56	0—84.9	No Goal for the total	80	ppb	No	By-product of drinking water disinfection.

### INORGANIC CONTAMINANTS

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2013	1	0.879 - 0.879	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2013	0.102	0.102 - 0.102	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2013	0.1	0.12 - 0.12	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2013	0.24	0.112 - 0.24	10	10	ppm	No	Runoff from fertilizer use; Leaching from Septic Tanks; sewage, Erosion of natural deposits
Thallium	2013	0.225	0.225 - 0.225	0.5	2	ppb	No	Discharge from electronics; glass, and Leaching from ore-processing sites; drug factories.

### RADIOACTIVE CONTAMINANTS

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon emitters	03/03/2010	4	4—4	0	50	pCi/L*	No	Decay of natural and man-made deposits

\* EPA considers 50 pCi/L to be the level of concern for beta particles

## Lead and Copper

### Definitions:

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

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2013	1.3	1.3	0.827	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2013	0	15	5.02	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

### 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
LEAD CONSUMER NOTICE (LCR)	12/30/2013	2013	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

### Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest Single Measurement	1 NTU	0.37 NTU	No	Soil Run Off
Lowest Monthly % meeting limit	0.3 NTU	97.49%	No	Soil Run Off

**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.

### COLIFORM BACTERIA

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely source of contamination
0	1 positive monthly sample	13		0	Yes	Naturally present in environment

### VIOLATIONS TABLE

#### TOTAL COLIFORM

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL (TCR), MONTHLY	06/01/2013	06/30/2013	Total Coliform Bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.
MCL (TCR), MONTHLY	08/01/2013	08/31/2013	Total Coliform Bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.

### STEPS TO CORRECT VIOLATION

We performed a process called nitrification, which is designed to remove the bio-films from the water mains due to chloramine disinfection. As a result of that process, the water dept. took 8 routine bacteriological samples in the month of September, and all 8 samples came back coliform free.

### Disinfectant Residual Reporting

Year	Disinfectant	Average Level	Min Level	Max Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2013	Chloramines	1.05	0.5	3.4	4.0	<4.0	ppm	Disinfectant used to control microbes

## Microorganism Testing

Tarrant Regional Water District (TRWD) monitors the raw water at the River Oaks raw water intake at Lake Worth for *Cryptosporidium*, *Giardia Lambia* and viruses. The source is human and animal fecal waste in the watershed. No viruses were reported. The *Cryptosporidium* testing methods cannot determine if the parasite is dead and inactive or alive and capable of causing cryptosporidiosis. This is an abdominal infection that causes nausea, diarrhea and abdominal cramps after indigestion.

The drinking water treatment process is designed to remove *Cryptosporidium*, *Giardia Lambia* through filtration. For more information contact the River Oaks Water Plant at 817-626-6454.

## EMERGENCY CONNECTION WITH CITY OF FORT WORTH

River Oaks has a contract for Emergency Water purchases with the City of Fort Worth, and only uses water during water emergencies. The River Oaks Water System used no water from the Fort Worth Emergency Connection in 2013 and therefore River Oaks is not including any data from the Fort Worth Water System as a part of this report.

Source of Water	Length of time Used	Gallons Used	Explanation
Ft. Worth Water Dept	0 days	0	N/A

### **DROUGHT CONTINUES:**

Landscape watering restricted to twice per week before 10 a.m. or after 6 p.m

### **KNOW YOUR WATERING SCHEDULE:**

**MONDAY: No outside watering allowed** TUESDAY AND FRIDAY: **Non-Residential Sites (Apartments, businesses, parks, common areas; etc.**  
**WEDNESDAY & SATURDAY: Residential addresses ending in 0,2,4,6 & 8.** THURSDAY & SUNDAY: **Residential addresses ending in 1,3,5,7 & 9.**

### **Information about Secondary Contaminants**

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.