# 2014 Annual Drinking

## Water Quality Report

(Consumer Confidence Report)

#### CITY OF JUSTIN

Phone Number: 940.648.2541

## SPECIAL NOTICE

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are under going treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk infections. You should seek advice about drinking water your physician or health care provider. Additional guidelines 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**

Date: 2<sup>nd</sup> Monday of each Month

Time: 7:00 PM

Location: 415 N. College, Justin, TX 76247

Phone Number: 940.648.2541

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

# **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's 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. 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 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 naturallyoccurring or be the result of oil and gas production and mining activities.

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., (940) 648 – 2541 para hablar con una persona bilingüe en español.

#### Where do we get our drinking water?

The source of drinking water used by City of Justin water system is obtained from surface and ground water sources. It comes from Upper Trinity Regional Water District at Lewisville/Chapman lakes and the Trinity/Hickory Aquifers. TCEQ completed an assessment of your source water and results indicate that some 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 CCR. For more information on source water assessment and protection efforts at our system, please contact us.

### ALL drinking water may contain contaminants

When drinking water meets federal standards there may not be any health 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.

### 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. 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 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.

#### **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
- ppt parts per trillion, or nanograms per liter
- ppq parts per quadrillion, or picograms per liter

#### **Definitions**

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 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 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.
Maximum residual disinfectant level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
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:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**Inorganic Contaminants** 

Year or Range		Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2014	Arsenic	0.0* *None detector	0 ed	0	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
2014	Barium	0.0366	0.0366	0.0366	2	2	ppm	Discharge of drilling waste; discharge from metal refineries: erosion of natural deposits.
2011	Cyanide	0.0* *None detecte	11.6 d	27.3	200	200	ppb	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
2014	Chromium	0.0	0.0	0.0	100	100	ppb	Discharge from steel pulp mills; erosion of natural deposits.
2014	Fluoride	2.39	2.39	2.39	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2014 (1	Nitrate measured as Nitroger	0.02	0.02	0.02	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2012	Combined Radium (-226 & -228)	1.0	0	0	5	N/A	pCi/L	Erosion of natural deposits
2014	Selenium *L	0.0* ess than detec	0 ted	0.001	0.05	0.05	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

**Organic Contaminants** 

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2014	Atrazine *Les	0.0* s than detecte	0	0.08	3	3	ppb	Runoff from herbicide used on row crops

### Maximum Residual Disinfectant Level

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2014	Chlorine Residual Free	1.50	0.05	4.0	4	< 4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2014	Total Haloacetic Acids	2.2	<1.0	4.2	60	ppb	Byproduct of drinking water disinfection.
2014	Total Trihalomethanes	1.6	<1.0	6.0	80	ppb	Byproduct of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts Waived or Not Yet Sampled

**Unregulated Contaminants** 

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproduct. There is no maximum contaminant level for these chemicals at the entry point to distribution.									
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant			
2014	Chloroform	0.97	<1.0	1.0	ppb	Byproduct of drinking water disinfection.			
2014	Bromoform	0.97	1.0	1.0	ppb	Byproduct of drinking water disinfection.			
2014	Bromodichloromethane	0.97	1.0	1.0	ppb	Byproduct of drinking water disinfection.			
2014	Dibromochlloromethane	0.97	1.0	1.1	ppb	Byproduct of drinking water disinfection.			

#### Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2012	Lead	0.00109	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2012	Copper	0.0635	0	1.3	ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

### 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. 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 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 http://www.epa.gov/safewater/lead."

#### Coliform Bacteria

Year	Maximum Contaminant Level Goal	Highest Allowed MCL Sample	Highest Number of Positive Sample	Fecal Coliform or E. Coli Maximum Contaminant Level	Total # of Positive Fecal Coliform or E. Coli E. Coli Samples	Violation	Likely Source Of Contamination
2014 Monthly	0 Sample	0	N/A	0	0	No	N/A

#### **Justin Water Loss for 2014**

For the calendar year 2014, our system lost an estimated 12,500,000 gallons of water per the audit submitted to the Texas Development Board. If you have any question about the water loss audit please call (940) 465-1622.

#### 2014 WATER QUALITY REPORT

#### WATER FROM UPPER TRINITY REGIONAL WATER DISTRICT **CONSTITUENTS DETECTED FOR 2014**

30000000000000000000000000000000000000	UTRWD Source Water	Name: Lewisvi	lle/Chapman Lakes	Type: St	ırface Water	Location: Denton/Delta and Hopkins Counties					
	T	Maximum			<del></del>						
Date	Substance	Amount in	Range in UTRWD		Standards	Possible Source					
		UTRWD Water	Water	MCL	MCLG						
Regulated at the Treatment Plant											
7/22/2014	Barium (ppm)	0.051	0.046-0.051	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits					
4/7/2014	Bromate (ppb)	8.9	<1.0-8.9	10	0	Byproduct of drinking water disinfection					
7/22/2014	Copper (ppm)	0.0076	0.0016-0.0076	1.3	1.3	Erosion of natural deposits, runoff from orchards; runoff from glass and electronics production waste					
12/2/2014	Chloramines (ppm)	4.0	2.0-4.0	4.0*	4.0^	Water additive used to control microbes					
7/22/2014	Cyanide (ppb)	11.2	<5.0-11.2	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories					
7/22/2014	Fluoride (ppm)	0.335	0,186-0.335	4.0	4.0	Water additive, erosion of natural deposits, discharge from fertilizer and aluminum factories					
7/22/2014	Nitrate (ppm)	0.88	0.31-0.88	10	10	Fertilizer runoff, septic tanks, wastewater plant effluent, animal waste runoff.					
5/12/2014	TOC (ppm)	6.21	3.62-6.21	TT	N/A	Naturally present in the environment					
8/17/2014	Turbidity (NTU)	0.16	0.03-0.16	TT	N/A	Soil runoff.					
				L ^=MRDLG							
5/40/5044			Regulated in the		1	I I					
5/12/2014	Total THM's (ppb)	73.0	21.0-73.0	80	N/A	Disinfection by-product.					
5/12/2014	Total HAA's (ppb)	39.0	2.5-39.0	60	N/A	Disinfection by-product.					
			Radioactive	Contaminants							
6/20/2011	Gross Beta Emitters (pCi/L)	4.4	N/A	50	0	Decay of natural and man-made deposits.					
6/20/2011	Combined Radium (pCi/L)	1	N/A	5	0	Erosion of natural deposits					
	I	Synthetic Orga	inic Chemicals in	cluding Pestic	ides and Herbi	cides					
7/22/2014	Atrazine (ppb)	0.43	0.14-0.43	3	3	Herbicide runoff.					
7/29/2014	Simazine (ppb)	0.13	<0.05-0.13	4	4	Herbicide runoff.					

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. Upper Trinity continues to analyze our source water for the presence of Cryptosporidium. Cryptosporidium has never been detected in any of the samples tested for Upper

#### Trinity water.

#### Definitions:

in drinking water.

MCLG-Maximum Contaminant Level Goal: The level of a contamination in drinking water below which there is no known or expected risk to health.

MRDL-Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminations.

MRDLG- Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of disinfectants use to control microbes.

NTU: Nephelometric Turbidity Units. A measure of turbidity in water.

pCi/L: Picocuries per liter. Radioactivity in water equal to 10<sup>-12</sup> curies. Quantity of radioactive material producing 2.22 nuclear transformations per minute. ppb: Parts per billion. One part per billion is roughly equal to one packet of artificial sweetener sprinkled into an Olympic-size swimming pool.

MCL- Maximum Contaminant Level: The highest level of a contamination that is allowed | ppm: Parts per million. One part per million approximates one packet of artificial sweetener sprinkled into 250 gallons of iced tea.

TT-Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Turbidity: A measure of the clarity of water. While turbidity has no known health effects, it can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing symptoms such as nausea, cramps, diarrhea, and associated headaches

TOC-Total Organic Carbon: Has no known health affects. However, TOC provides a medium for the formation of disinfection by-products. These include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

THIS REPORT CONTAINS THE MOST RECENT DATA AVAILABLE IN ACCORDANCE WITH REGULATIONS.

Este reporte incluye informacion importante sobre el aqua para tomar. Para asistencia en espanol, favor de llamar al telephono (972-219-1228)

For opportunities to participate in decisions that may affect water quality, Board Meetings are held on the first Thursday of the month, starting at 1pm. Additional resources can be found at www.utrwd.com or by calling 972-219-1228