

# 2017 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 naturally-occurring 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	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.

'TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact [Steve Martin , Gilberto Ramirez] [940-648-2541]'

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/16/2016	1.3	1.3	0.22	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/16/2016	0	15	3.7	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

### 2017 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2017	13	6 - 9.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

'\* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year'

Total Trihalomethanes (TTHM)	2017	19	14.8 - 20.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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'\* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year'

<b>Inorganic Contaminants</b>	<b>Collection Date</b>	<b>Highest Level or Average Detected</b>	<b>Range of Individual Samples</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
<b>Arsenic</b>	02/18/2016	1.6	1.6 - 1.6	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
<b>Barium</b>	02/18/2016	0.052	0.052 - 0.052	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Fluoride</b>	02/18/2016	0.216	0.216 - 0.216	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Nitrate [measured as Nitrogen]</b>	2017	1	0.0935 - 0.63	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Selenium</b>	02/18/2016	1.5	1.5 - 1.5	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

<b>Radioactive Contaminants</b>	<b>Collection Date</b>	<b>Highest Level or Average Detected</b>	<b>Range of Individual Samples</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
<b>Combined Radium 226/228</b>	08/13/2012	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.

### Disinfectant Residual

<b>Disinfectant Residual</b>	<b>Year</b>	<b>Average Level</b>	<b>Range of Levels Detected</b>	<b>MRDL</b>	<b>MRDLG</b>	<b>Unit of Measure</b>	<b>Violation (Y/N)</b>	<b>Source in Drinking Water</b>
	2017	1.78	1.30 - 2.60	4	4	ppm	N	Water additive used to control microbes.

**Justin Water Loss for 2017**

For the calendar year 2017, our system lost an estimated 5,266,856 gallons of water per the audit submitted to the Texas Water Development Board. If you have any question about the water loss audit please call (940) 648-2541.

## 2017 WATER QUALITY REPORT

WATER FROM UPPER TRINITY REGIONAL WATER DISTRICT  
CONSTITUENTS DETECTED FOR 2017

UTRWD Source Water	Name: Lewisville/Chapman Lakes	Type: Surface Water	Location: Denton/Delta and Hopkins Counties			
Date	Substance	Maximum Amount in UTRWD Water	Range in UTRWD Water	MCL	MCLG	Possible Source
<b>Regulated at the Treatment Plant</b>						
9/26/2017	Barium (ppm)	0.043	0.032 - 0.043	2 ppm	2 ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2nd QTR	Bromate (ppb)	8.80	1.1 - 8.8	10 ppb	0	Byproduct of drinking water disinfection
May-17	Chloramines (ppm)	3.69	3.19 - 3.69	4.0*	4.0^	Water additive used to control microbes
2/2/2017	Cyanide (ppm)	0.0747	ND - 0.0747	0.2 ppm	0.2 ppm	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
2/2/2017	Fluoride (ppm)	0.192	0.169 - 0.192	4 ppm	4 ppm	Water additive, erosion of natural deposits, discharge from fertilizer and aluminum factories
2/2/2017	Nitrate (ppm)	0.622	0.157 - 0.622	10 ppm	10 ppm	Fertilizer runoff, septic tanks, wastewater plant effluent, animal waste runoff.
9/26/2017	TOC (ppm)	4.38	2.77 - 4.38	TT	N/A	Naturally present in the environment
May-17	Turbidity (NTU)	0.29	0.03 - 0.29	TT	N/A	Soil runoff.
* = MRDL ^ = MRDLG						
<b>Regulated in the Distribution System</b>						
9/26/2017	Total THM's (ppb)	43	13.2 - 43	80 ppb	N/A	Disinfection by-product.
9/26/2017	Total HAA's (ppb)	21	7.8 - 21	60 ppb	N/A	Disinfection by-product.
<b>Radioactive Contaminants</b>						
2/2/2017	Gross Beta Emitters (pCi/L)	ND	N/A	50	0	Decay of natural and man-made deposits.
9/16/2015	Combined Radium (pCi/L)	1.5	N/A	5	0	Erosion of natural deposits
<b>Synthetic Organic Chemicals Including Pesticides and Herbicides</b>						
6/27/2016	Atrazine (ppb)	0.2	N/A	3 ppb	3 ppb	Herbicide runoff.
6/27/2016	Simazine (ppb)	0.06	ND - 0.06	4 ppb	4 ppb	Herbicide runoff.
<p>You may be more vulnerable than the general population to certain microbial contaminants, such as <i>Cryptosporidium</i>, 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 <i>Cryptosporidium</i> are available from the Safe Drinking Water Hotline at (800) 426-4791. Upper Trinity continues to analyze our source water for the presence of <i>Cryptosporidium</i>. <u><i>Cryptosporidium</i> has never been detected in any of the samples tested for Upper Trinity water.</u></p>						
<b>Definitions:</b>						
<p><b>MCL</b>- Maximum Contaminant Level: The highest level of a contamination that is allowed in drinking water.</p> <p><b>MCLG</b>-Maximum Contaminant Level Goal: The level of a contamination in drinking water below which there is no known or expected risk to health.</p> <p><b>MRDL</b>-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.</p> <p><b>MRDLG</b>- 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.</p> <p><b>NTU</b>: Nephelometric turbidity units. A measure of turbidity in water.</p> <p><b>pCi/L</b>: Picouries per liter. A measure of radioactivity in water equal to 10<sup>-12</sup> curies. Quantity of radioactive material producing 2.22 nuclear transformations per minute.</p> <p><b>ppb</b>: Parts per billion. One part per billion is roughly equal to one packet of artificial sweetener sprinkled into an Olympic-size swimming pool.</p>			<p><b>ppm</b>: Parts per million. One part per million approximates one packet of artificial sweetener sprinkled into 250 gallons of iced tea.</p> <p><b>TT</b>- Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.</p> <p><b>Turbidity</b>: 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.</p> <p><b>TOC</b>-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.</p>			
<b>THIS REPORT CONTAINS THE MOST RECENT DATA AVAILABLE IN ACCORDANCE WITH REGULATIONS.</b>						
<b>Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (972-219-1228)</b>						
<p>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 <a href="http://www.utrd.com">www.utrd.com</a> or by calling 972-219-1228</p>						