# Annual Drinking Water Quality Report (Consumer Confidence Report) January 1 – December 31, 2016 Denton County Fresh Water Supply District No. 11-A Phone No. 713.621.3707 Public Water System (PWS) No. TX0610259

## **OUR DRINKING WATER IS REGULATED**

This report is intended to provide you with important information regarding your drinking water and the efforts made by the water system to provide safe drinking water. The report is based on analysis of data from numerous 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(s) of Drinking Water

The sources of drinking water (both tap water and bottled water) generally 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.

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 EPAs 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, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems, which are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our system operator at the number listed on your water bill.

#### 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 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 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. Our source water has been analyzed for the presence of Cryptosporidium, and Cryptosporidium has never been detected in any of the samples tested.

### Where Do We Get Our Drinking Water?

Our drinking water is surface water obtained from Upper Trinity Regional Water District. It comes from the following lakes: JIM CHAPMAN LAKE and LEWISVILLE LAKE.

Information about Source Water Assessments

The Texas Commission on Environmental Quality has completed a Source Water Assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Upper Trinity Regional Water District at (972) 219-1228.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://www.tceq.texas.gov/gis/swaview

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: http://dww2.tceq.texas.gov/DWW/

## Public Participation Opportunities and Requests for Additional Information

**Date:** Board of Directors generally meets the 4<sup>th</sup> Thursday of each month

**Time:** 6:00 p.m.

**Location:** 900 Villa Paloma Blvd, Little Elm, Texas 75068

**Phone No:** (713) 621-3707

To learn about future public meetings (concerning your drinking water), or to request to schedule one, or for any further information regarding this report, please call us.

#### En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (713) 621-3707.

# WATER FROM UPPER TRINITY REGIONAL WATER DISTRICT CONSTITUENTS DETECTED FOR 2016

#### DEFINITIONS - The following definitions pertain to scientific terms and measures used in the tables included in this report.

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

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 a 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.

#### ABBREVIATIONS

**ntu** – nephelometric turbidity units (a measure of turbidity in water)

**pCi/L** – picocuries per liter (a measure of radioactivity)

ppm - parts per million, or milligrams per liter (mg/L) - or one ounce in 7,350 gallons of water

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

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

## REGULATED CONTAMINANTS DETECTED

Regulated at Upper Trinity Regional Water District's Treatment Plant

Regulated at Opper 11 mity Regional Water District's 11 cathlent I fant										
Date	Substance	Maximum Amount Detected	Range Detected	MCL	MCLG	Unit of Measure	Possible Source			
6/15/2016	Barium	0.039	0.037-0.039	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits			
10/10/2016	Bromate	6.77	1.23-6.77	10	0	ppb	Byproduct of drinking water disinfection			
10/29/2016	Chloramines	3.6	3.2-3.6	4.0*	4.0^	ppm	Water additive used to control microbes			
6/7/2016	Cyanide	0.134	N/A	0.2	0.2	ppm	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories			
3/30/2016	Fluoride	0.102	ND-0.102	4.0	4.0	ppm	Erosion of natural deposits; Water additive; Discharge from fertilizer and aluminum factories			
3/30/2016	Nitrate	0.671	0.474-0.671	10	10	ppm	Runoff from fertilizer, septic tanks, wastewater treatment plant effluent, animal waste			
5/23/2016	TOC	5.23	2.10-5.23	TT	N/A	ppm	Naturally present in the environment			
7/28/2016	Turbidity	0.29	0.03-0.29	TT	N/A	ntu	Soil runoff			

<sup>\*=</sup>MRDL

#### **Radioactive Contaminants**

Date	Substance	Maximum Amount Detected	Range Detected	MCL	MCLG	Unit of Measure	Possible Source
6/20/2011	Gross Beta Emitters	4.4	ND-4.4	50	0	pCi/L	Decay of natural and man-made deposits.
6/20/2011	Combined Radium	1	ND-1	5	0	pCi/L	Erosion of natural deposits.

<sup>^=</sup>MRDLG

**Synthetic Organic Chemicals Including Pesticides and Herbicides** 

Date	Substance	Maximum Amount Detected	Range Detected	MCL	MCLG	Unit of Measure	Possible Source
6/27/2016	Atrazine	0.34	ND-0.34	3	3	ppb	Herbicide runoff.
6/27/2016	Simazine	0.08	ND-0.08	4	4	ppb	Herbicide runoff.

Regulated in Denton County Fresh Water Supply District No. 11-A's Distribution System

Collection Date	Substance	Highest Level Detected	Range of Levels Detected in No. 11-A's Water	MCL	MCLG	Unit of Measure	Violation	Likely Source
2016	Nitrate (measured as Nitrogen)	1	0.555-0.555	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
2015	Nitrite	<0.004	<0.004	1	1	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
2016	Total Trihalomethanes (TTHM)	35	23.4-30.1	80	no goal	ppb	N	By-product of drinking water disinfection
2016	Haloacetic Acids (HAA5)	29	13.3-32.8	60	no goal	ppb	N	By-product of drinking water disinfection

## MAXIMUM RESIDUAL DISINFECTANT LEVEL

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source
2016	Chloramine Residual	3.14	0.63	3.82	4.0	<4.0	ppm	Water additive used to control microbes

## **LEAD AND COPPER**

Date Sampled	Lead and Copper	MCLG	Action Level	90th Percentile	# Sites Over Action Level	Units	Violation	Likely Source
2015	Copper	1.3	1.3	0.55	0	ppm	N	Erosion of natural deposits; Leaching from wood preservative; Corrosion of household plumbing systems
2015	Lead	0	15	0	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>\*</sup> 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 at (800) 426-4791 or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

# **TOTAL COLIFORM**

Reported Monthly Tests Found No Coliform Bacteria