

# 2017 Annual Drinking Water Quality Report Calendar 2016 Test Results (Consumer Confidence Report)

*South Tawakoni Water Supply Corp.  
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*May 20, 2017*

## **2017 Drinking Water Quality Report Consumer Confidence Report (CCR) Calendar 2016 Test Results**

This information has been prepared to provide our customers with information on the quality of their drinking water. (*Jan. – Dec. 2016*)

## **Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements**

This report is a summary of the quality of 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.

### **En Español**

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (903-873-2509) para hablar con una persona bilingue en español.

## **2017 Drinking Water Quality Report Contact Person:**

Richard Phillips, General Manager

**If you have any questions about this report please  
call our office at 903-873-2509.**

## **Sources of 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.

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 may cause taste, color, or 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.

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; 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 (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:

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information 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 information contained in the assessment allows us to focus source water protection strategies.

For information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:

<http://gisweb.tceq.texas.gov/swav/Controller/index.jsp? wtrsrc=>

Further details about sources and source water assessments are available in Drinking Watch at the following URL:

<http://dww.tceq.texas.gov/DWW/>

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

The raw water source for STWSC is surface water from Lake Tawakoni.

The source Water Name is 3-TAWAKONI DAM.

Type of Water: SW (Surface Water)

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#### STWSC Water Loss Report

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan. – Dec. 2016, our system lost an estimated 23.26% of

total gallons of water pumped. Accounted for loss

thru flushing and leaks	<u>14.48%</u>
Unaccounted for loss	<u>8.78%</u>
Total Loss:	<u>23.26%</u>

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[Opportunities for public participation in decisions that may affect the quality of the water will be held at the regularly scheduled Board of Directors meeting on July 18, 2017 at 6:00pm.](#)

<b>Water Quality Test Results</b>	
<p><b>DEFINITIONS:</b></p> <p><u>Avg:</u></p> <p><u>Maximum Contaminant Level or MCL:</u></p> <p><u>Level 1 Assessment</u></p> <p><u>Maximum Contaminant Level Goal or MCLG:</u></p> <p><u>Level 2 Assessment</u></p> <p><u>Maximum Residual Disinfectant Level or MRDL:</u></p> <p><u>Maximum Residual Disinfectant Level Goal or MRDLG:</u></p> <p><u>MFL</u></p> <p><u>na</u></p> <p><u>NTU</u></p> <p><u>pCi/L</u></p> <p><u>pph</u></p> <p><u>ppm</u></p> <p><u>Treatment Technique or TT</u></p> <p><u>ppt</u></p> <p><u>ppq</u></p>	<p>The following tables contain scientific terms and measures, some of which may require explanation.</p> <p>Regulatory compliance with some MCLs are based on running annual average of monthly samples</p> <p>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.</p> <p>A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.</p> <p>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.</p> <p>A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.</p> <p>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.</p> <p>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.</p> <p>Million fibers per liter (a measure of asbestos)</p> <p>Not applicable</p> <p>Nephelometric turbidity units (a measure of turbidity)</p> <p>Picocuries per liter (a measure of radioactivity)</p> <p>Micrograms per liter or parts per billion – or one ounce in 7,340,000 gallons of water.</p> <p>Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.</p> <p>A required process intended to reduce the level of a contaminant in drinking water.</p> <p>Parts per trillion, or nanograms per liter (ng/L)</p> <p>Parts per quadrillion, or pictograms per liter (pg/L)</p>

## 2016 Regulated Contaminants Detected

### 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 (Y/N)	Likely Source of Contamination
Copper	06/11/2014	1.3	1.3	0.49	0	ppm	N	Erosion of natural deposits; Leaching From wood preservatives; Corrosions and Household plumbing systems.
Lead	06/11/2014	0	15	2.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

### Regulated Contaminants

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5) *	2016	36	25.8 - 43.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TThm) *	2016	32	21.8 - 41.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

### Disinfection Data

Year	Disinfection Data	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2016	Chloramine	3.34	0.4	4.9	4.0	<4.0	Ppm	Chloramine Disinfectant used to control microbes

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2016	1	1.1 - 1.1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

Barium	2016	0.052	0.052- 0.052	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	2016	0.52	0.52 - 0.52	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2016	76.7	76.7 - 76.7	200	200	ppm	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2016	0.1	0.103 -0.103	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum
Nitrate [measured as Nitrogen]	2016	0.452	0.452 - 0.452	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Nitrate Advisory - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2016	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.29 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

**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.

#### Total Organic Carbon (TOC)

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC Violation is noted in the violations section.