

# 2016 Annual Drinking Water Quality Report

The source of drinking water used by ANGELINA COUNTY FWSD No. 1 is Purchased Ground Water from the City of Lufkin—TX0030004

## Consumer Confidence Report (CCR)

**PWS ID Number: TX0030102**

**PWS Name: ANGELINA COUNTY FWSD  
No. 1 (ACF)**

- Annual Water Quality Report for the period of January 1 to December 31, 2016
- 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.
- 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 at (800) 426-4791.

For more information regarding this report, contact:

Angelina & Neches River Authority (ANRA)  
Chris Key, P.E. - (936) 632-7795

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (800) 282-5634.

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 on 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.

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.

## Information about Source Water Assessments

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. This 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 Chris Key, P.E. at (936) 632-7795.

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

To learn more about future public meetings concerning your drinking water, please call or contact:

### **Angelina & Neches River Authority**

**Contact: Chris Key, P.E.**

**210 E. Lufkin Avenue**

**Lufkin, Texas 75901**

**Phone: 936-632-7795**

### **Next Regularly Scheduled Board Meeting:**

**Date:** July 11, 2017

**Time:** 5:30 PM

**Place:** Angelina County FWSD No. 1 Office

ANRA and ACF also welcome public comments in writing mailed/emailed to:

**Angelina County FWSD No. 1**

**P.O. Box 821**

**Lufkin Texas 75902**

**Email:** [info@acfwater.org](mailto:info@acfwater.org)

The following tables contain scientific terms and measures, some of which may require explanation. Please find the definitions below to aid you in understanding the results provided.

<b><u>Avg:</u></b>	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
<b><u>Maximum Contaminant Level or MCL:</u></b>	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.
<b><u>Maximum Contaminant Level Goal or MCLG:</u></b>	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.
<b><u>Maximum Residual Disinfectant Level or MRDL:</u></b>	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.
<b><u>Maximum Residual Disinfectant Level Goal or MRDLG:</u></b>	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.
<b><u>MFL:</u></b>	Million Fibers per Liter (a measure of asbestos).
<b><u>na:</u></b>	Not applicable.
<b><u>NTU:</u></b>	Nephelometric Turbidity Units (a measure of turbidity).
<b><u>pCi/L:</u></b>	Picocuries per Liter (a measure of radioactivity).
<b><u>ppb:</u></b>	Micrograms per Liter or Parts per Billion—or one ounce in 7,350,000 gallons of water.
<b><u>ppm:</u></b>	Milligrams per Liter or Parts per Million—or one ounce in 7,350 gallons of water.
<b><u>ppt:</u></b>	Parts per Trillion, or Nanograms per Liter (ng/L).
<b><u>ppq:</u></b>	Parts per Quadrillion, or Picograms per Liter (pg/L).

## 2016 Regulated Contaminants Detected—ACF

### Regulated Contaminants

<u>Disinfectants and Disinfection By-Products</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Haloacetic Acids (HAA5)	2016	23	21.6-23.1	No Goal for the Total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	48	47.2-48.3	No Goal for the Total	80	ppb	N	By-product of drinking water disinfection.

<u>Inorganic Contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Nitrate (measured as Nitrogen)	2016	0.0255	0.0255-0.0255	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

### Lead and Copper

<u>Lead and Copper</u>	<u>Date Sampled</u>	<u>MCLG</u>	<u>Action Level (AL)</u>	<u>90th Percentile</u>	<u># Sites Over AL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Copper	9/18/2015	1.3	1.3	0.56	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	9/18/2015	0	15	0	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

## 2016 Regulated Contaminants Detected—ACF

### Chlorine Residual

<u>Disinfectant Type</u>	<u>Year</u>	<u>Average Level</u>	<u>Minimum Level</u>	<u>Maximum Level</u>	<u>MRDL</u>	<u>MRDLG</u>	<u>Units</u>	<u>Violation</u>	<u>Source of Chemical</u>
Chlorine	2016	1.69	0.34	3.90	4.0 mg/L	4.0 mg/L	ppm	N	Disinfectant used to control microbes introduced at the City of Lufkin water treatment plant.

### Coliform Bacteria

<u>Maximum Contaminant Level Goal</u>	<u>Total Coliform Maximum Contaminant Level</u>	<u>Highest No. of Positive</u>	<u>Fecal Coliform or E. Coli Maximum Contaminant Level</u>	<u>Total No. of Positive E. Coli or Fecal Coliform Samples</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
0	na	0	na	0	N	Naturally present in the environment.

# 2016 Violations Table — ACF

## Ground Water Rule

- The Ground Water Rule specifies the appropriate use of disinfection while addressing other components of ground water systems to ensure public health protection.

Violation Type	Violation Begin	Violation End	Violation Explanation
na	na	na	No violations for 2016

# 2016 Regulated Contaminants Detected—City of Lufkin

## Lead and Copper

<u>Lead and Copper</u>	<u>Date Sampled</u>	<u>MCLG</u>	<u>Action Level (AL)</u>	<u>90th Percentile</u>	<u># Sites Over AL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Copper	2016	1.3	1.3	0.45	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	1.5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

## Regulated Contaminants

<u>Disinfectants and Disinfection By-Products</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Haloacetic Acids (HAA5)	2016	28	14.5-43.1	No Goal for the Total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	51	32.4-67.6	No Goal for the Total	80	ppb	N	By-product of drinking water disinfection.

## Residual Disinfection Level

<u>Disinfectant Types</u>	<u>Year</u>	<u>Average Level</u>	<u>Minimum Level</u>	<u>Maximum Level</u>	<u>MRDL</u>	<u>MRDLG</u>	<u>Units</u>	<u>Source</u>
Chlorine	2016	2.38	1.0	4.0	4.0	4.0	ppm	Disinfectant used to control microbes.

## 2016 Regulated Contaminants Detected—City of Lufkin

### Regulated Contaminants

<u>Inorganic Contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Asbestos	10/31/2012	0.3776	0—0.3776	7	7	MFL	N	Decay of asbestos cement water mains; Erosion of natural deposits.
Barium	2016	0.0078	0.0078—0.0078	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	02/18/2014	7.68	7.68—7.68	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	02/18/2014	0.67	0.67—0.67	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (Measured as Nitrogen)	2016	0.0215	0.0215—0.0215	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

<u>Radioactive Contaminants</u>	<u>Collection Date</u>	<u>Highest Level Detected</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Combined Radium 226/228	07/06/2011	1	1—1	0	5	pCi/L	N	Erosion of natural deposits.