

The Water We Drink

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Public Water Supply I.D. 1057003

We are pleased to present to you the Annual Water Quality Report for the year 2016. This report is designed to inform you about the water quality and services we deliver to you every day (Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien). Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and in protecting our water resources. We are committed to ensuring the quality of your water. Our water source(s) are listed below and also our reservoir:

Source Name	Source Water Type	Source Water Body Type
THIBODAUX WATERWORKS	Surface Water	Bayou Lafourche

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 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 stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Organic Chemical Contaminants – including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum productions, and can also come from gas stations, urban stormwater runoff, and septic systems.

Pesticides and Herbicides- which may come from a variety of sources, urban stormwater, agriculture, runoff and residential uses

Radioactive Contaminants- which can be naturally-occurring or be the result of oil and gas production and mining.

A Source Water Assessment Plan (SWAP) is available from our office. This plan is an assessment of a delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources. According to the Source Water Assessment Plan, our water system had a 'HIGH' susceptibility rating. If you would like to review the Source Water Assessment Plan, please feel free to contact our office at (985) 446-7231.

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. Food and Drug Administration regulations establish limits in bottled water which must provide the same protection for public health. We want our valued customers to be informed about their water utility. If you have any questions concerning this report, want to attend any scheduled meetings, or simply want to learn more about your drinking water, please contact ARCHIE P. CHAISSON at 985-446-7273.

If present, elevated lead levels 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. THIBODAUX WATERWORKS 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 lead exposure potential by flushing your tap for 30 secs. 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>.

The Louisiana Dept. of Health and Hospital/Office of Public Health routinely monitors for constituents in your drinking water according to Federal and State laws. The tables that follow show the results of our monitoring for the period of January 1st to December 31st, 2016. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

In the tables below, you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms, we have provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter- one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000

Action Level (AL) – the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level (MCL)-the "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) – the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

Maximum Residual Disinfectant level (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 (MRDGL) – 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.

Nephelometric Turbidity Unit (NTU)-nephelometric turbidity unit is a measure of the clarity of the water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Picocuries per liter (pCi/L)-Picocuries per liter is a measure of the radioactivity in the water

During the period covered by this report we had the below noted violations of drinking water regulations:

Type	Category	Analytic	Compliance period
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No Violations Occurred in the Calendar Year of 2016

Our water system tested a minimum of 15 samples per month monthly sample(s) in accordance with the Total Coliform Rule for microbiological contaminants.

During the monitoring period covered by this report, we had the following noted detections for microbiological contaminants.

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	In month of May, 2 samples returned as positive.	MCL: Systems that collect less Than 40 samples per month – No More than 1 positive monthly sample	0	Naturally Present in the Environment

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis, therefore, information provided in this table refer back to the latest year of chemical sampling results.

Compound	Collection Date	Highest Value	Range	Unit	MCL	MCLG
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TURBIDITY 1

(Max. Single Reading)	1/26, 4/14, 7/25	0.26	0.18-0.28	NTU	0.30	0.1
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(Lowest Monthly Percentage of Samples Meeting Turbidity Limits)	N/A	100.0	100.0	NTU	0.30	0.1
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Turbidity is a measure of cloudiness in the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Its major sources include soil runoff.

Compound	Collection Date	Highest Value	Range	Unit	MCL	MCLG
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ARSENIC	03/15/2016	1.9	1.9	ppb	10	0
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Typical Sources: Erosion of natural deposits. Runoff from orchards; Runoff from glass and electronics production wastes.

COMBINED URANIUM(-226 & -228)	03/15/2016	0.255	0.255	µg/l	30	0
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Typical Sources: Erosion of natural deposits.

BARIUM	03/15/16	0.065	0.065	ppm	2	2
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Typical Sources: Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

FLUORIDE	03/15/2016	0.29	0.29	ppm	4	4
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Typical Sources: Erosion of natural deposits; Water additive promoting strong teeth. Discharge from fertilizer & aluminum factories

NITRATE/NITRITE 03/15/2016 1.3 1.3 ppm 10 10

Typical Sources: Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

GROSS BETA PARTICLE ACTIVITY 03/15/16 2.26 2.26 pCi/l 50 0

2, 4-D 03/15/16 0.45 0.45 ppb 70 70

Typical Source: Runoff from herbicide used on row crops.

Lead and Copper	Date	90 th Percentile	Range	Unit	AL	Sites over AL	Typical Source
Copper, Free	2014-2016	0.5	0.1-0.8	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
LEAD	2014-2016	1	1-4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Haloacetic Acids and Total Trihalomethanes required reporting data

Disinfection Byproducts	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Sources
HAA5	East 8 th	2016	49	31.7-48	ppb	60	0	Byproduct of drinking water chlorination
HAA5	Melrose	2016	43	24.1-37.1	ppb	60	0	Byproduct of drinking water chlorination
HAA5	Oakley St.	2016	49	33.5-61	ppb	60	0	Byproduct of drinking water chlorination
HAA5	Thib. Lab Tap	2016	49	26.2-43.97	ppb	60	0	Byproduct of drinking water chlorination
TTHM	East 8th	2016	50	39.8-55.8	ppb	80	0	Byproduct of drinking water chlorination.
TTHM	Melrose	2016	54	43.1-55.9	ppb	80	0	Byproduct of drinking water chlorination.
TTHM	Oakley St.	2016	54	41.4-58.8	ppb	80	0	Byproduct of drinking water chlorination.
TTHM	Thib. Lab Tap	2016	48	35.1-56.8	ppb	80	0	Byproduct of drinking water chlorination.
HAA5 – Haloacetic acids		TTHM – Total Trihalomethanes						

In the table below, the following deficiencies were identified during a survey done on the water system that we are currently working to resolve.

Date Identified	Facility	Code	Activity	Due Date	Description
04/05/16	Distribution System	CC17	IESWTR ADDRESS DEFICIENCIES	7/4/16	LAC 51: XII.344 – LSPC – Protection of Water Supply/Containment Practices

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments. During the past year, we were required to conduct one Level 1 assessment. One Level 1 assessment was completed.

Cryptosporidium (Crypto) is a microbial parasite found in surface water throughout the U.S. Ingestion of Crypto may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Crypto must be ingested to cause the disease, and it may be spread through means other than drinking water. Although filtration removes Cryptosporidium, the most common filtration methods cannot guarantee 100 percent removal. The City of Thibodaux conducted monthly source water monitoring for Cryptosporidium from October-December 2016. Of the 3 samples, **Crypto was detected in none.**

Contaminants	Date	Result	Unit	Range	MRDL or MCL	MRDLG or MCLG	Typical Source
Chlorine	1 st Q 2016	3.07	ppm	2.87-3.07	4	4	Water additive used to control microbes
Chloramines	3 rd Q 2016	3.57	ppm	2.85-3.57	4	4	Water additive used to control microbes
Chlorine Dioxide	10/17/16	446	ppb	0-446	800	800	Water additive used to control microbes
Chlorite	January 2016	0.673	ppm	0.107-0.673	1	0.8	Water additive used to control microbes

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/ AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Thank you for allowing us to continue providing your family with clean, quality drinking water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. We have improved our disinfection system and are updating the overall water treatment through new equipment, new processing methods to keep pace with the changing health, environmental and safety regulations. Both the THIBODAUX WATERWORKS and DISTRIBUTION SYSTEM personnel work around the clock to provide top quality drinking water to every tap. We ask that all our customers help us protect and conserve our water sources, which are the heart of our community, our way of life, and our children future. Please call our office if you have any questions (985-446-7223).