

The Water We Drink

CITY OF LAKE CHARLES WATER SYSTEM

Public Water Supply ID: LA1019029

We are pleased to present to you the Annual Water Quality Report for the year 2019. This report is designed to inform you about the quality of your water and services we deliver to you every day (Este informe contiene información muy importante sobre su agua potable. Tradúzcalo 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 protect our water resources. We are committed to ensuring the quality of your water.

Our water source(s) are listed below:

Source Name	Source Water Type
WELL SW#3	Ground Water
WELL #C2 (T)	Ground Water
WELL G14 WEST PLANT	Ground Water
WELL CH2 (#2A)	Ground Water
WELL M2 (V)	Ground Water
WELL SW#1	Ground Water
WELL C1 (S)	Ground Water
WELL G#8-RR WEST	Ground Water
WELL G#9-RR EAST	Ground Water
WELL CH1 (#1A)	Ground Water
WELL M1 (U)	Ground Water
WELL #3 - MCNEESE (M3)	Ground Water
WELL SW#2	Ground Water
WELL #11 WEST PLANT	Ground Water
WELL #C3 (W)	Ground Water
WELL G#10 WEST PLANT	Ground Water
WELL #13 WEST PLANT	Ground 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 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.

Pesticides and Herbicides - which may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff, and septic systems.

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

A Source Water Assessment Plan (SWAP) is now 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 susceptibility rating of 'MEDIUM'. If you would like to review the Source Water Assessment Plan, please feel free to contact our office.

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 for contaminants 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 about this report, want to attend any scheduled meetings, or simply want to learn more about your drinking water, please contact Charles Guillory, Water Division Technical Supervisor, at 337-491-1479.

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. CITY OF LAKE CHARLES WATER SYSTEM 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>.

The Louisiana Department of 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 during the period of January 1st to December 31st, 2019. 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.

In the tables below, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've 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 (ug/L) – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

Treatment Technique (TT) – an enforceable procedure or level of technological performance which public water systems must follow to ensure control of a contaminant.

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 (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.

Level 1 assessment – 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.

Level 2 Assessment – 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.

During the period covered by this report we had the below noted violations.

Compliance Period	Analyte	Type
No Violations Occurred in the Calendar Year of 2019		

Our water system tested a minimum of 90 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

Disinfectant	Date	HighestRAA	Unit	Range	MRDL	MRDLG	Typical Source
CHLORINE	2019	1.5	ppm	0.11 - 2.3	4	4	Water additive used to control microbes.

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 refers back to the latest year of chemical sampling results. To determine compliance with the primary drinking water standards, the treated water is monitored when a contaminant is elevated in the source water.

Source Water Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	11/20/2019	0.5	0.2 - 0.5	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	12/18/2019	0.2	0 - 0.2	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Treated Water Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Source Water Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	11/18/2019	1.9	0 - 1.9	pCi/l	5	0	Erosion of natural deposits
GROSS ALPHA PARTICLE ACTIVITY	11/20/2019	2.59	0 - 2.59	pCi/l	15	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	3/23/2015	4	0 - 4	PCI/L			
GROSS BETA PARTICLE ACTIVITY	12/2/2019	3.26	0 - 3.26	pCi/l	50	0	Decay of natural and man-made deposits. Note: The gross beta particle activity MCL is 4 millirems/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.

Treated Water Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2019							

Lead and Copper	Date	90 TH Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.1	0 - 0.3	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Disinfection Byproducts	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	209 HELEN STREET	2019	6	3.5 - 6.7	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	2437K ORY ROAD	2019	7	4 - 8	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	4260 INDIGO PLACE	2019	6	5 - 5.6	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	4908 DESOTO STREET	2019	7	4.9 - 8.3	ppb	60	0	By-product of drinking water disinfection
TTHM	209 HELEN STREET	2019	22	12.8 - 23.6	ppb	80	0	By-product of drinking water chlorination
TTHM	2437K ORY ROAD	2019	26	11.9 - 28.9	ppb	80	0	By-product of drinking water chlorination
TTHM	4260 INDIGO PLACE	2019	19	12.9 - 19	ppb	80	0	By-product of drinking water chlorination
TTHM	4908 DESOTO STREET	2019	22	16.6 - 28	ppb	80	0	By-product of drinking water chlorination

Source Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL
ALUMINUM	11/18/2019	0.01	0 - 0.01	MG/L	0.2
CHLORIDE	12/2/2019	222	24 - 222	MG/L	250
IRON	11/20/2019	11.7	0.01 - 11.7	MG/L	0.3
MANGANESE	11/20/2019	0.52	0.14 - 0.52	MG/L	0.05
PH	11/18/2019	6.91	6.22 - 6.91	PH	8.5
SULFATE	12/18/2019	4	0 - 4	MG/L	250

Treated Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL
No Detected Results were Found in the Calendar Year of 2019					

Unresolved significant deficiencies that were identified during a survey done on the water system are shown below.					
Date Identified	Facility	Code	Activity	Due Date	Description
03/21/2019	DISTRIBUTION SYSTEM	CC17	GWR ADDRESS TT45 DEFICIENCIES	7/12/2019	LAC 51:XII.344 - Protection of Water Supply/Containment Practices
03/21/2019	DISTRIBUTION SYSTEM	CC17	GWR APPROVED CORRECTIVE ACTION PLAN	4/30/2020	LAC 51:XII.344 - Protection of Water Supply/Containment Practices

Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose for these contaminants is to help USEPA decide whether the contaminants should have a standard.				
Source Water				
Unregulated Contaminants	Collection Date	Average concentration	Range	Unit
Bromide	5/22/2019	<155	ND - 373	ug/L
Total Organic Carbon	5/22/2019	<725	ND - 1030	ug/L

Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose for these contaminants is to help USEPA decide whether the contaminants should have a standard.				
Treated Water				
Unregulated Contaminants	Collection Date	Average concentration	Range	Unit
alpha-BHC	5/22/2019	ND	ND - ND	ug/L
Chlorpyrifos	5/22/2019	ND	ND - ND	ug/L
Dimethipin	5/22/2019	ND	ND - ND	ug/L
Ethoprop	5/22/2019	ND	ND - ND	ug/L
Merphos-Oxone	5/22/2019	ND	ND - ND	ug/L
Oxyfluorfen	5/22/2019	ND	ND - ND	ug/L
Permethrin	5/22/2019	ND	ND - ND	ug/L
Profenofos	5/22/2019	ND	ND - ND	ug/L
Tebuconazole	5/22/2019	ND	ND - ND	ug/L
Butylated Hydroxyanisole	5/22/2019	ND	ND - ND	ug/L
Quinoline	5/22/2019	ND	ND - ND	ug/L
O-Toluidine	5/22/2019	ND	ND - ND	ug/L
n-Butanol	5/22/2019	ND	ND - ND	ug/L
2-Methoxyethol	5/22/2019	ND	ND - ND	ug/L
2-Propen-1-ol (allyl alcohol)	5/22/2019	ND	ND - ND	ug/L
Germanium	5/22/2019	ND	ND - ND	ug/L
Manganese	5/22/2019	3.89	0.76 - 7.8	ug/L

*ND = Non-detect, which means that the laboratory result is below the adjusted reporting limit.

+++++Environmental Protection Agency Required Health Effects Language+++++
 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 ave 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).

There are no additional required health effects notices.

There are no additional required health effects violation notices.

+++++

Thank you for allowing us to continue providing your family with clean, quality 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 at the CITY OF LAKE CHARLES WATER SYSTEM 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's future. Please call our office if you have questions.

**Got A Question?
Need Some Answers**



If you have questions or problems with your water service, please let us know.

Billing/New Service	491-1307
Meter Problems	491-1522
Main Breaks	491-1487
Rusty Water/Odor	491-1554
Distribution Department	491-1494
Production/Plant Info	491-1479
24 Hour Number	491-1483
For Plant Tours	491-1487