

2017 Annual Drinking Water Quality Report

(Consumer Confidence Report)

GALVESTON COUNTY WCID #8

PWS ID Number TX0840009

PHONE# 409-925-2821

Our Drinking Water Meets or Exceeds all Federal (EPA) Drinking-Water Requirements

This report is a summary of the quality of the 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 is in your drinking water.

Where do we get our drinking water?

Our drinking water is obtained from SURFACE water sources. It comes from the following Lake/River/Reservoir/Aquifer: BRAZOS RIVER A source Water Susceptibility Assessment for your drinking-water source(s) is currently being updated by the Texas Commission on Environmental quality and will be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking-water source based on the human activities and natural conditions. The information contained in the assessment will allow us to focus source water protection strategies.

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

<http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtsrc>

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WATER SOURCES: 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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

PUBLIC PARTICIPATION OPPORTUNITIES

DATE: 3rd Thursday of the month

TIME: 4:30 p.m.

LOCATION: 12148 15th, Santa Fe, Texas

PHONE: 409-925-2821

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

EN Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (409) 925-2821 para hablar con una persona bilingüe en español.

ALL drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point-of-use devices. Drinking water, including bottled water may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 for the Safe Drinking Water Hotline or at: <http://water.epa.gov/safewater/lead>.



Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

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. The EPA/Centers for Disease Control and Prevention (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 (1-800-426-4791).

Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. The constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

About the Following Pages

The pages that follow list all of the federally regulated or monitored contaminant which have been found in your drinking water. The U.S. EPS requires water systems to test for up to 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG)

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)

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

Max Residual Disinfectant Level Goal (MRDLG)

The level of a drinking-water disinfectant below which there is no know or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Treatment Technique (TT)

A required process intendent to reduce the level of a contaminant in drinking water.

Action Level (AL)

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

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 margin of safety.

Avg

Regulatory compliance with some MCLs are based on running annual average or monthly samples.

Level 1 Assessment

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.

Level 2 Assessment

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

ABBREVIATIONS

NTU – Nephelometric Turbidity Units

MFL – million fibers per liter (a measure of asbestos)

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

ppm – parts per million, or milligrams per liter (mg/L)

ppb – parts per billion, or micrograms per liter ($\mu\text{g/L}$)

ppt – parts per trillion, or nanograms per liter

ppq – parts per quadrillion, or picograms per liter

mrem/yr – millirem per year



Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2017	16	10.1 - 17.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection

* The value in the Highest Level of Average Detected column is the highest average of all HAA5 sample results collected at a location over a year'

Total Trihalomethanes (TTHM)	2017	48	34.5 - 52.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection
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* The value in the Highest Level of Average Detected column is the highest average of all TTHM sample results collected at a location over a year'

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.101	0.101 - 0.101	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Flouride	2017	0.54	0.54 - 0.54	4	4	ppm	N	Erosion of natural deposits; Water Additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	1	0.7 - 0.72	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	6/2/2015	4.4	4.4 - 4.4	0	4	mrem/yr	N	Decay of natural and man-made deposits

* EPA considers 50 pCi/L to be the level of concern for beta particles

Synthetic organic contaminants including pesticides & herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2017	0.14	0.1 - 0.14	3	3	ppb	N	Runoff from herbicide used on row crops

General Information

ppm = 1 ounce in 7,350 gallons

ppb = 1 ounce in 7,350,000 gallons

Coliform Bateria

Maxiumim Contaminant Level Goal	Total Colifounr Max Contaminant Level	Highest # of Positive	Fecal Coliform of E. Coli Maximum Contaminant Level	Total No. of Psotive E. Cloi or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1		0	N	Naturally present in the environment

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of 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	Violations	Likely Source of Contamination
Copper	6/8/2016	1.3	1.3	0.326	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2017	Turbidity	0.23	100%	0.3	NTU	Soil runoff.

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (y/n)	Likely Source of Contamination
Chloramines	2017	2.55	0.80	3.80	4	4	ppm	N	Disinfectant used to control microbes

VIOLATIONS TABLE

INFORMATION ABOUT SECONDARY CONTAMINANTS

Secondary contaminants are not required to be reported in this document but they may greatly affect the appearance and taste of your water. WCID #8 has provided these results as a courtesy to our customers.

Secondary and Other Constituents Not Regulated

(Not associated with adverse-health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2015	Bicarbonate	154	154	154	NA	ppm	Corrosion of carbonate rocks such as limestone.
2015	Barium	0.0750	0.0750	0.0750	2	ppm	Discharge of drilling wastes: discharge from metal refineries: erosion of natural deposits.
2015	Calcium	37.7	37.7	37.7	NA	ppm	Abundant naturally occurring element.
2015	Chloride	28	28	28	250	ppm	Abundant naturally occurring element; used in water purification; byproduct of oilfield activity.
2015	Copper	0.0169	0.0169	0.0169	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2015	Iron	0.017	0.017	0.017	0.3	ppm	Erosion of natural deposits; iron or steel water-delivery equipment or facilities.
2015	Magnesium	5.68	5.68	5.68	NA	ppm	Abundant naturally occurring element.
2015	Manganese	0.0036	0.0036	0.036	.05	ppm	Abundant naturally occurring element.
2015	Nickel	0.0021	0.0021	0.0021	NA	ppm	Erosion of natural deposits.
2015	pH	8.0	8	8	<7.0	units	Measure of corrosivity of water.
2015	Potassium	5.16	5.16	5.16			
2015	Sodium	20.1	20.1	20.1	NA	ppm	Erosion of natural deposits; byproduct of oilfield activity.
2014	Sulfate	28	28	28	250	ppm	Naturally occurring; common industrial byproduct; byproduct of oilfield activity.
2015	Total Alkalinity as CaCO ₃	92	92	92	NA	ppm	Naturally occurring soluble mineral salts.
2015	Total Dissolved Solids	198	198	198	500	ppm	Total dissolved mineral constituents in water.
2015	Total Hardness as CaCO ₃	118	118	118	NA	ppm	Naturally occurring calcium.
2015	Zinc	0.143	0.143	0.143	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.
2015	Flouride	0.64	0.64	0.64	4	ppm	Erosion of natural deposits: discharge from fertilizer and aluminum factories.