

**2016 Annual Drinking Water Report
Consumer Confidence Report (CCR)
City of Cut and Shoot Texas
(281) 367-0935**

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.

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.

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.

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>.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (281) 367-0935.

**For more information regarding this report
contact the water operations office at
(281) 367-0935 weekdays 8:00 AM to 4:00 PM.**

Information about Source Water Assessments

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Darcy Tramm at the water office.

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/>

Source Water Name	Type of Water	Report Status	Location	
1-Well #1	15587 FM 1484	GW	Y	Evangeline Aquifer
2-Well #2	16087 FM 1484	GW	Y	Evangeline Aquifer
3-Well #3	12250 Willis-Waukegan	GW	Y	Upper Jasper Aquifer
4-Well #4	12250 Willis-Waukegan	GW	Y	Upper Jasper Aquifer

Water Quality Test Results:

Definitions: The following tables contain scientific terms and measures, some of which may require explanation

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples

Maximum Contaminant Level or MCL: 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.

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.

Maximum Contaminant Level Goal or MCLG: 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.

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.

Maximum residual disinfectant level or 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 or 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.

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

na: not applicable

mrem: millirems per year (a measure of radiation absorbed by the body)

NTU: nephelometric turbidity units (a measure of turbidity)

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

ppb: micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water

ppm: milligrams per liter or parts per million – or one ounce in 7,350 gallons of water

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water

ppt: parts per trillion, or nanograms per liter (ng/L)

ppq: parts per quadrillion, or pictograms per liter (pg/L)

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Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2016	Chlorine	1.0325	0.46	1.71	4.0	<4.0	ppm	Disinfectant used to control microbes

Coliform Bacteria

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

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 (AL): 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)	90 th Percentile	#Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/2014	1.3	1.3	0.071	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	09/2014	0	15	1.2	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

2016 Regulated Contaminants Detected

Inorganic Contaminants

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Arsenic	08/05/2015	3.9	0 – 3.9	0	10	ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes.
Barium	08/05/2015	0.256	0.216 – 0.256	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	08/05/2015	0.25	0.19 – 0.25	4	4.0	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum.
Nitrate (measured as Nitrogen)	07/18/2016	0.03	0.02 – 0.03	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

2016 Regulated Contaminants Detected (continued)

Radioactive Contaminants

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Beta/photon emitters	08/05/2015	9.1	4.4 – 9.1	0	50	pCi/L*	N	Decay of natural and man-made deposits
Combined Radium 226/228	08/05/2015	0.96	0.88 – 0.96	0	5	pCi/L	N	Erosion of natural deposits
Gross alpha excluding radon and uranium	08/05/2015	5.5	4.7 – 5.5	0	15	pCi/L	N	Erosion of natural deposits

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

Synthetic Organic Contaminants

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Di (2-ethylhexyl) phthalate	07/18/2016	0.84	0 – 0.84	0	6	Ppb	N	Discharge from rubber and chemical factories

Information about Secondary Contaminants

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. These constituents are not causes for health concern. Therefore, secondary contaminants are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Water System Water Loss Information

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2015, our system lost an estimated 6.9% or 5,665,987 gallons of water. If you have any questions about the water loss audit please call PWS phone number.

The City of Cut and Shoot City Council meets on the 2nd Thursday of every month at City Hall (14391 Highway 105) at 7:00PM. The public is welcome to attend all City meetings.