

2016 Annual Drinking Water Quality Report

City of San Saba (325) 372-5144

SPECIAL NOTICE

Required language for ALL community Public water supplies:

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; 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 provider. Additional guidelines on appropriate means to lessen the risk infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800)426-4791.

Public Participation Opportunities

City Council Meetings

Date: Second Tuesday of every month

Time: 6:00 PM

Location: 303 S. Clear St., San Saba

Phone No.: 325-372-5144

325-372-8905

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

OUR DRINKING WATER IS REGULATED

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 test and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your 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.

Contaminants that may be present in source water before treatment 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.

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. (325) 372-5144 para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from Ground water sources. The City of San Saba has seven (7) wells ranging from 120 feet deep into the Marble Falls Limestone to 682 feet in the Ellenburger-San Saba aquifers. A Source Water Susceptibility Assessment for our drinking water sources is currently being updated by the TCEQ. This information describes the susceptibility and types of constituents that may come in contact with your drinking water based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.texas.gov/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

ALL drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health 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 does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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 EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Water Loss Audit Report

The 2016 Water Loss Audit Report shows total Water Loss volume in gallons for the system was 46,118,944.

Source Water Assessment Status

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 Confident Report. For more information on source water assessments and protection efforts at our system, contact Eric Morgan at (325)372-5144.

Required Additional Health Information for Lead

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. This water supply 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>

ABBREVIATIONS

- NTU - Nephelometric Turbidity Units (a measure of turbidity)
- 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
- ppb - parts per billion, or micrograms per liter
- ppt - parts per trillion, or nanograms per liter (ng/L)
- ppq - parts per quadrillion, or picograms per liter (pg/L)
- Treatment Technique or TT – A required process intended to reduce the level of a contaminant in drinking water

DEFINITIONS

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

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.

Regulated Contaminants

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 the drinking water. There is convincing evidence that addition of a disinfectant is necessary to control 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 contamination.

Mrem:

Millirems per year (a measure of radiation absorbed by the body)

Ppb:

Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

Na:

Not applicable

Avg:

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

Ppm:

Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water

The TCEQ completed an assessment of our source Water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Eric Morgan at 325/372-8905.

Collection Date	Disinfectants and Disinfection By-Products	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2015	Total Trihalomethanes (TTHM)	4	3.6-3.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Collection Date	Inorganic Contaminants	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2016	Barium	0.0763	0.0763 – 0.0763	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
10/23/13	Chromium	0.671	0.671-0.671	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
01/23/14	Fluoride	0.43	0.43-0.43	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2016	Nitrate (measured as Nitrogen)	2	1.61-1.61	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
5-01-12	Beta/photon emitters	7.3	7.3 – 7.3	50	0	pCi/L	N	Decay of natural & man-made deposits.
Collection Date	Radioactive Contaminants	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination

2015	Combined Radium 226/228	2.72	2.72 - 2.72	0	5	pCi/L	N	Erosion of natural deposits.
2015	Gross alpha excluding radon and uranium	11.3	11.3 - 11.3	0	15	pCi/L	N	Erosion of natural deposits.

Organics Contaminants Testing Waved, Not Reported, or None Taken

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source of Disinfectant
2016	Chlorine Residual, Free	1.25	0.60	3.81	4.0	4.0	ppm	N	Disinfectant used to control microbes

Disinfection Byproducts

Year	Contaminant	Highest Level Detected	Range of Level Detected	MCL	MCLG	Units	Violation	Source of Constituent
2016	Total Haloacetic Acids (HAA5)*	2	2.4 - 2.4	60	No goal for the total	ppb	N	By-product of drinking water chlorination
2016	Total Trihalomethanes (TTHM)	10	10.4-10.4	80	No goal for the total	ppb	N	By-product of drinking water chlorination

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfectant byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Constituent	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
7-21-11	Bromoform	<0.5	<0.5	<0.5	Ppb	By-product of drinking water chlorination
7-21-11	Bromodichloromethane	<0.5	<0.5	<0.5	Ppb	By-product of drinking water chlorination

Lead and Copper

Year	Constituent	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
2016	Copper	1.3	1.3	0.21	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
2016	Lead	0	15	3.1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Turbidity **NOT REQUIRED**
 Total Coliform **REPORTED MONTHLY TEST FOUND NO COLIFORM BACTERIA**
 Fecal Coliform **REPORTED MONTHLY TEST FOUND NO FECAL COLIFORM BACTERIA**

Secondary and Other Not Regulated Constituents
 (No associated adverse health effects)

Year (Range)	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
7-21-11	Bicarbonate	458	458	458	N/A	ppm	Corrosion of carbonate rock such as limestone
7-21-11	Chloride	92	92	92	300	pmm	Abundant naturally occurring element; used in water purification
2005	Hardness as Ca/Mg	362	362	362	NA	Ppm	Naturally occurring calcium and magnesium
7-21-11	pH	7.2	7.2	7.2	>7.0	units	Measure of corrosivity of water
7-21-11	Sulfate	9	9	9	300	pmm	Naturally occurring; common industrial byproduct; byproduct of oil field activity
7-21-11	Total Alkalinity as CaCO3	375	375	375	N/A	pmm	Naturally occurring soluble mineral salts
7-21-11	Total Dissolved Solids	519	519	519	1000	pmm	Total dissolved mineral constituents

SOURCE WATER NAME	TYPE OF WATER	REPORT STATUS	LOCATION
Wells 1, 2 & 3 Marble Falls Limestone Aquifer	GW	ACTIVE	901 E. Storey
Wells 4, 5, 6, & 7 Ellenberger-San Saba Aquifer	GW	ACTIVE	E. Mound St.

Violations Tables

Lead and Copper Rule			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R(LCR)	10/01/2015	08/22/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
LEAD CONSUMER NOTICE (LCR)	12/30/2016	02/15/2017	We failed to provide the test results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be Provided no later than 30 days after learning the results.

Revised Total Coliform Rule (RTCR)

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE, MAJOR (RTCR)	11/01/2016	11/30/16	We failed to collect all required routine samples of our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE, MINOR (RTCR)	07/01/16	07/31/16	We failed to collect some of the required routine samples of our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

City of San Saba
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