

2016 Annual Drinking Water Quality Report

(Consumer Confidence Report)

SANTO SUD

TX1820010

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. 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. For more information regarding this report contact: Name **Ricky N. Hardin** Phone **(940) 769-4594**

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

The Source of drinking water used by Santo SUD is Purchased Surface Water

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:

- 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 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.

Special Notice

Required Language for ALL Community Public Water Systems

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).

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 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>.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. **(940)328-7866** para hablar con una persona bilingüe en español.

Where do we get our drinking water?

The source of drinking water used by SANTO SUD is purchased Surface Water. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>.

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 EPA's 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. These 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.

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 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>.

Definitions

Maximum Contaminant Level (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.

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.

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.

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

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

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

na: Not applicable

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

Abbreviations

NTU - Nephelometric Turbidity Units
MFL - million fibers per liter (a measure of asbestos)
pCi/L -picuries per liter(a measure of radioactivity)
ppm - parts per million, or milligrams per liter(mg/L)
ppb - parts per billion, or micrograms per liter (µg/L)
ppt - parts per trillion, ornanograms per liter
ppq - parts per quadrillion, or picograms per liter

2016 REGULATED CONTAMINANTS DETECTED

Disinfectant Residual	Collection Date	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Units of Measure	Likely Source of Contamination
Chloramine	2016	2.72	2.7	3.9	4.0	<4.0	ppm	Disinfectant used to control microbes.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	Percentile	No. Sites Over All	Unit	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.1663	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	1.5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Inorganics Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MC	Units	Violation	Likely Source of Contamination
Barium	6/8/2016	0.071	0.071-0.071	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	6/8/2016	0.218	0.218 - 0.218	4.0	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum.
Nitrate (measured as Nitrogen)	6/8/2016	0.031	0.031- 0.031	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MC	Units	Violation	Likely Source of Contamination
Beta/photon emitters	3/9/2011	5.8	5.8 - 5.8	0	50	pCi/L	N	Decay of natural and man-made deposits
Combined Radium 226/228	3/9/2011	1	1-1	0	5	pCi/L	N	Erosion of natural deposits

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.17 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100 %	N	Soil runoff.

2016 REGULATED CONTAMINANTS DETECTED (continued)

TOTAL ORGANIC CARBON	Collection Date	Average Level	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Source water	2016	5.82	5.0-7.40	N/A	N/A	ppm	N	Naturally present in the environment
Drinking Water	2016	3.06	2.70-3.40	N/A	N/A	ppm	N	Naturally present in the environment
Removal Ratio	2016	1.42	1.18 -1.64	N/A	N/A	% removal *	N	N/A

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

Total Organic Carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure the water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

FECAL COLIFORM REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

2016 UNREGULATED CONTAMINANTS DETECTED

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloroform	2016	10.7	1.28 – 10.7	N/A	N/A	ppb	N	By-product of drinking water disinfection.
Bromoform	2016	61.40	1.58 – 61.4	N/A	N/A	ppb	N	By-product of drinking water disinfection.
Bromodichloromethan	2016	15.3	4.6-15.3	N/A	N/A	ppb	N	By-product of drinking water disinfection.
Dibromochloromethan	2016	37.8	9.8-37.8	N/A	N/A	ppb	N	By-product of drinking water disinfection.

There is no maximum contaminant level for these chemicals at the entry point to distribution.

Secondary and Other Constituents Not Regulated	Collection Date	Highest Level Detected	Range of Levels Detected	Secondary Limit	Units	Violation	Likely Source of Contamination
Bicarbonate	6/8/2016	75.5	75.5-75.5	N/A	ppm	N	Corrosion Of carbonate rocks such as limestone.
Chloride	6/8/2016	33.9	33.9-33.9	300	ppm	N	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
Hardness as Ca/Mg	6/18/2016	107	107-107	N/A	ppm	N	Naturally occurring calcium and magnesium
pH	3/9/2016	7.9	7.9-7.9	8.5	pH units	N	Measure of corrosivity of water,
Sodium	6/8/2016	30.9	30.9-30.9	N/A	ppm	N	Erosion of natural deposits; byproduct of oil field activity.
Sulfate	6/8/2016	50.8	50.8-50.8	300	ppm	N	Naturally occurring; common industrial byproduct; by-product of oil field activity.
Total Alkalinity as CaCO3	6/8/2016	20	20-20	N/A	ppm	N	Naturally occurring soluble mineral salts.
Total Dissolved Solids	6/8/2016	224	224-224	1000	ppm	N	Total dissolved mineral constituents in water

No associated adverse health effects.

Regulated Contaminants									
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Haloacetic Acids (HAA5)*	2016	42.3	19.5 – 42.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.	
Total Trihalomethanes (TTHM)	2016	115	39.3 – 115	No goal for the total	80	ppb	N	By-product of drinking water disinfection.	

WATER LOSS ESTIMATE

In The Water Loss Audit submitted to the Texas Water Development Board for the time period of January – December 2015, our system lost an estimated 12,248,620 gallons of water. This calculates to 13% loss of total purchased water. The TCEQ acceptable percentage of water loss is 10%. If you have any questions about the Water Loss Audit, please call the Santo Special Utility District at (940)769-4594.

