

This report is a summary of the quality of water San Antonio Water System (SAWS) provides its 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 this report. We hope this information helps you become knowledgeable about what is in your drinking water.

SOURCE 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 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

WHERE DO WE GET OUR DRINKING WATER?

The source of SAWS drinking water originated as groundwater from the Edwards, Carrizo, and Trinity aquifers, and in some areas, surface water from Canyon Lake, Lake Dunlap and Medina Lake. 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/>.

For more information on source water assessments and protection efforts at our systems, 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 EPA's Safe Drinking Water Hotline (800-426-4791).

SECONDARY CONSTITUENTS

Many constituents (such as calcium, sodium, or iron), which are 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 affect the appearance and taste of your water.

HEALTH INFORMATION ABOUT 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 two 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>.

SPECIAL NOTICE

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immuno-compromised such as those undergoing chemotherapy for cancer; those 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 provider. Additional guidelines appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 800-426-4791.

HOW TO READ YOUR WATER QUALITY REPORT

Substance	Action Level	Concentration Range Found	Avg. Conc. Found	MCL	MCLG	Potential Source
Substance 1 (ppm)		0.024 – 0.112	0.05	2	2	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits.
Substance 2 (ppb)		0 – 8.4	2.4	100	100	Erosion of natural deposits; discharge from fertilizer and aluminum factories

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

The year or years tests were conducted.

The highest amount of a contaminant EPA allows in drinking water.

Below this level, a contaminant has no known or expected health risks.

How a contaminant ends up in SAWS drinking water.

Parts per billion-One ppb equals to one teaspoon in 1,302,000 gallons.

Parts per million-One ppm equals to one teaspoon in 1,302 gallons.

The amount from lowest to highest of a contaminant detected in SAWS drinking water.

The average amount of a contaminant detected in SAWS drinking water.

This describes some of the ways contaminants enter drinking water; wording is provided by EPA and may or may not apply to SAWS



2013 WATER QUALITY REPORT SAN ANTONIO WATER SYSTEM | CASTLE HILLS

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total Number of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive	Highest Monthly % of positive samples: 0.0%	0	0	N	Naturally present in the environment

Maximum Residual Disinfectant Level

Disinfectant	Test Year	Average Concentration Found	Min. Level	Max. level	MRDL	MRDLG	Unit	Likely Source of Contamination
Chlorine Residual, Free	2012	0.96	0.35	1.9	4	4	ppm	Disinfectant used to control microbes

Lead and Copper Results

Substance	Date Sampled	MCLG	Action Level (AL)	90th Percentile	Number of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2010	1.3	1.3	0.34	0	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2010	15	15	6.0	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants

Distribution Sampling for By-Products of Drinking Water Chlorination (Disinfection)

Disinfectants and Disinfection By-Products	Collection Date	Average Concentration Found	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids (HAAs)	2012	1.23	<1.0 - 1.7	NA	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (THMs)	2012	8.7	4.2 - 13.3	NA	80	ppb	N	By-product of drinking water disinfection

Inorganic Contaminants

Inorganic Contaminants	Collection Date	Highest level Detected	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2011	0.041	0.0384 - 0.041	2	2	ppm	N	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2011	0.00476	0.00182 - 0.00476	0.1	0.1	ppm	N	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2012	0.18	0.18 - 0.18	4	4	ppm	N	Erosion of natural deposits; from fertilizer and aluminum factories; added for dental health
Nitrate	2012	2.14	1.74 - 2.14	10	10	ppm	N	Runoff from fertilizer us; leaching from septic tanks; sewage; erosion of natural deposits

Radioactive Contaminants

Radioactive Contaminants	Collection Date	Highest level Detected	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Radium 228	2011	<1.0	<1.0 - <1.0	0	5	pCi/L	N	Erosion of natural deposits
GROSS BETA	2011	<4.0	<4.0 - <4.0	0	50	pCi/L	N	Decay of natural and man-made deposits
GROSS ALPHA Particle Activity	2011	<2.0	<2.0 - <2.0	0	No MCL for this Analyte	pCi/L	N	Erosion of natural deposits

Volatile Organic Contaminants

Volatile Organic Contaminants	Collection Date	Average Concentration Found	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Tetrachloroethylene	2011	<0.50	<0.50 - <0.50	0	5	ppb	N	Discharge from factories and dry cleaners
Xylenes Total	2011	<0.50	<0.50 - <0.50	1000	1000	ppb	N	Discharge from petroleum and chemical factories

Synthetic Organic Contaminants including pesticides and herbicides

Synthetic Organic Contaminants including pesticides and herbicides	Collection Date	Average Concentration Found	Concentration Range Found	MCLG	MCL	Units	Violation	Likely Source of Contamination
Acetone	2011	<5.00	<5.00 - <5.00	NA	No MCL for this Analyte	ppb	N	Discharge from petroleum and chemical factories
Ethylbenzene	2011	<0.50	<0.50 - <0.50	700	700	ppb	N	Discharge from petroleum refineries

Secondary Constituents

Inorganic Contaminants	Collection Date	Concentration Range Found	Maximum Concentration Found	Secondary Standard
Alkalinity, Total (AS CaCO ₃) mg/L	2012	254 - 254	254	NA
Calcium (ppm)	2011	99.9 - 107	107	NA
Chloride (ppm)	2012	13.0 - 13.0	13	250
Hardness (Calcium Magnesium) mg/L	2011	310 - 328	328	NA
Magnesium (ppm)	2011	14.6 - 15	15	NA
Nickel (ppm)	2011	0.00305 - 0.00328	0.00328	0.1
pH UNITS	2011	7.6 - 7.6	7.6	6.5 - 8.5
Sodium (ppm)	2011	10.4 - 11.0	11	NA
Specific Conductance (µmhos/cm)	2012	606 - 606	606	NA
Sulfate (ppm)	2012	32.9 - 32.9	32.9	300
Total dissolved solids (mg/L)	2012	362 - 362	362	500
Zinc (ppm)	2012	0.00698 - 0.0167	0.0167	5

DEFINITIONS

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

ALG (Action Level Goal) – 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.

AL (Action Level) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCLG (Maximum Contaminant Level Goal) – 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.

MCL (Maximum Contaminant Level) – 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.

MRDLG (Maximum Residual Disinfectant Level Goal) – 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.

MRDL (Maximum Residual Disinfectant Level) – 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.

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

NA – Not applicable

NTU – Nephelometric Turbidity Units

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

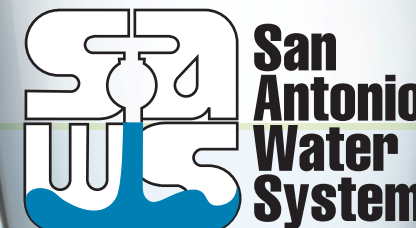
ppm – Parts per million or milligrams per liter (mg/L)

ppb – Parts per billion or micrograms per liter (µg/L)

ppt – Parts per trillion or nanograms per liter (ng/L)

ppq – Parts per quadrillion or picograms per liter (pg/L)

TT – Treatment technique



CASTLE HILLS

PWS ID Number: TX 0150045

CONTACT US

Questions About Your Water Quality Report?

If you would like more information or a copy of this Water Quality Report, call:

210-233-3176

Call 24 Hours a Day to:

- Report leaks, main breaks, or sewer back-ups
- Discuss water quality concerns

210-704-SAWS (210-704-7297)

In Your Neighborhood

SAWS External Relations team extends its community outreach efforts with neighborhood leaders through homeowners associations and

neighborhood meetings, schools and community gatherings. Call us for more information about how we can assist in your neighborhood.

210-233-3246

Website

Our website has the latest news and program information on water issues.

www.saws.org

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

210-233-3176

Para hablar con una persona bilingüe en español.

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