



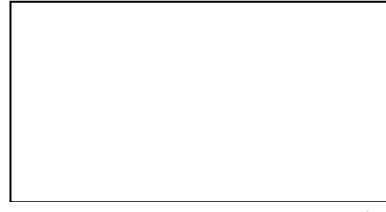
City of San Marcos  
Water/Wastewater Utilities  
630 E. Hopkins Street  
San Marcos, TX 78666

# 2009 Drinking Water Quality Report

## (CONSUMER CONFIDENCE REPORT)

### OAKRIDGE SYSTEM WATER CUSTOMERS

Este reporte incluye información importante sobre el agua potable. Si tiene preguntas o dudas sobre este reporte en español, favor de llamar al tel. 512.393.8010 para hablar con una persona bilingue en español.



Requested in home by July 1<sup>st</sup>.

#### NOTICE TO AT-RISK POPULATIONS

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

#### KINDS OF WATER SOURCES

The sources of drinking water (both tap 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.

#### CONTACT US

Account Information/  
Billing questions: 393-8383

Water quality inquiries/  
complaints: 393-8038

Report water leaks/  
sewer problems: 393-8010



If you have internet capability, Water/Wastewater Utilities has a very informative web page at the City's website: [sanmarcostx.gov/water](http://sanmarcostx.gov/water)

You may also contact us by e-mail at: [WWW\\_Info@sanmarcostx.gov](mailto:WWW_Info@sanmarcostx.gov)

The spreadsheet inside lists all of the federally regulated or monitored substances which have been found in your drinking water. The US EPA requires water systems to test for up to 97 substances.

#### Conserve Water San Marcos!

Water is a precious resource. It provides tourism, recreation, habitat for endangered species, and drinking water. Unfortunately, it is also a limited resource that is being stretched to accommodate the growing number of users that rely on it. Conserving our water by using it efficiently is the simplest and most cost-effective way to stretch our water supplies.

The City of San Marcos Water Department offers a variety of programs that can help you conserve water. Visit our website at [sanmarcostx.gov/water](http://sanmarcostx.gov/water) or call 393-8310 for details. We encourage you to take advantage of these programs and do your part to **Conserve Water San Marcos!**



#### Summer Water Conservation Tips:

- Water your lawn in the evening or early morning hours. **City ordinance prohibits watering with sprinklers between the hours of 10:00 a.m. and 8 p.m.**
- Water your lawn no more than once per week to encourage deep roots and make your lawn more resistant to drought and disease. A thorough watering is about 1 inch of water, or enough to dampen the soil down to 6 inches.
- Turn off your sprinklers when it's windy or raining. Rain shutoff devices are inexpensive and can be used with any sprinkler or sprinkler system.
- If you have an automatic sprinkler system, make it a monthly ritual to check for leaks and malfunctioning sprinkler heads.
- Use drip irrigation instead of sprinklers for trees, shrubs, flower beds and narrow strips of lawn.
- Use several inches of good-quality mulch on landscape beds.
- Use a broom instead of a hose to clean sidewalks and driveways.
- If you have a swimming pool, keep it covered while not in use to reduce evaporation.
- Take your car to a carwash that recycles water instead of washing it at home. If you do wash your car at home make sure to use a hose with an auto shut-off device. And don't forget that **charity carwashes are prohibited in San Marcos.**
- Take advantage of our City programs that can help you to be water smart! Call 393-8310 for more information.

#### KNOW THE FACTS ABOUT YOUR DRINKING WATER

The City of San Marcos Water/Wastewater Utilities' goal and responsibility is to provide you safe and reliable drinking water. Our drinking water is regulated by the Texas Commission on Environmental Quality (TCEQ) and they have determined that certain water quality issues exist which prevent our water from meeting all of the requirements as stated in the Federal Drinking Water Standards. Each issue is listed in this report as a violation, and we are working closely with the TCEQ to achieve solutions.

Some of the information contained in this report may seem complex. We hope this information helps you become more knowledgeable about what's in your drinking water. Please feel free to contact our Water Quality Supervisor at #512-393-8038 if you have any questions or would like to request a meeting regarding your drinking water.

#### FREQUENTLY ASKED QUESTIONS

##### Where do we get our drinking water?

Our drinking water is obtained from surface water sources. It comes from the Edwards Aquifer (South BFB). 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. 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 our source water protection strategies. Some of this source water assessment information will be available later this year 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 system, please contact us.

##### Can ALL drinking water 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 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).

##### What are 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 concerns. Therefore, secondaries are not required to be reported in this document, but may greatly affect the appearance and taste of your water.

## What Quality is our Source Water?

Oakridge System  
TCEQ ID#1050008

### REGULATED AT THE SOURCE

Substance	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Sources of Substance
Barium 2009 (in ppm)	0.043	0.043	0.043	2	2	Erosion of natural deposits; discharge of drilling wastes.
Fluoride 2009 (in ppm)	0.59	0.59	0.59	4	4	Erosion of natural deposits; water additive to promote strong teeth; discharge from fertilizer and aluminum factories.
Nitrate 2009 (in ppm)	1.55	1.55	1.55	10	10	Erosion of natural deposits; runoff from fertilizer, septic tanks, sewage, animal waste.
Selenium 2009 (in ppb)	3.1	3.1	3.1	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Substance	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Sources of Substance		
Turbidity 2009 (in NTU)	0.10	100%	0.3	Soil runoff.		

NOTE: 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.

## How Well Did We Treat the Water?

### REGULATED IN THE DISTRIBUTION SYSTEM

Substance	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Sources of Substance
Chlorine Residuals (in ppm)	2.61	1.23	3.70	4.0	<4.0	Disinfectant used to control microbes.
Substance	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Sources of Substance
Total Haloacetic Acids 2009	0.0	0.0	0.0	60	ppb	By-product of drinking water disinfection.
Total Trihalomethanes 2009	1.5	1.5	1.5	80	ppb	By-product of drinking water disinfection.
Total Coliform Bacteria 2009	Highest Monthly Number of Positive Samples 0			*	Presence	Naturally present in the environment. Human and animal fecal waste.

\* Two or more coliform found samples in any single month.

**Total coliform bacteria** are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Fecal coliform bacteria and, in particular, E. coli, are members of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (E. coli) in drinking water may indicate recent contamination of the drinking water with fecal material. The preceding table indicates whether total coliform or fecal coliform bacteria were found in the monthly drinking water samples submitted for testing by your water supplier last year.

### UNREGULATED AT THE ENTRY POINT TO DISTRIBUTION SYSTEM

Substance	Average Level	Minimum Level	Maximum Level	Unit of Measure	Sources of Substance
Bromoform 2009	0.00	0.00	0.50	ppb	Bromoform, chloroform and Dibromochloromethane are disinfection byproducts. There is no MCL for these chemicals at the entry point to the distribution system.
Bromodichloromethane 2009	0.60	0.60	0.60	ppb	
Dibromochloromethane 2008	0.90	0.90	0.90	ppb	

## LEAD AND COPPER TEST RESULTS

### REGULATED AT THE CUSTOMER'S TAP

Substance	90th Percentile Values	Sites Exceeding Action Level	AL	Unit of Measure	Sources of Substance
Lead 2007	4.1	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Copper 2007	0.27	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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/index.html>.

## CRYPTOSPORIDIUM MONITORING INFORMATION

Substance	Average Level	Minimum Level	Maximum Level	Unit of Measure	Sources of Substance
Cryptosporidium	N/A	N/A	N/A	Oocysts/l	See note below.
E. Coli 2008	0.61	0	11	mpn	Fecal contamination.

NOTE: After successful completion of TCEQ's Cryptosporidium Monitoring Program, the City has been categorized by the State as a Bin 1 classification. Therefore, the City is no longer required to test for Cryptosporidium. Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

## SECONDARY & OTHER CONSTITUENTS NOT REGULATED

Substance	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Sources of Substance
Bicarbonate 2009	321	321	321	NA	ppm	Corrosion of carbonate rocks such as limestone.
Calcium 2009	81	81	81	NA	ppm	Abundant naturally occurring element.
Chloride 2009	25	25	25	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
Copper 2009	0.012	0.012	0.012	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead 2009	0.001	0.001	0.001	NA	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
Magnesium 2009	18.7	18.7	18.7	NA	ppm	Abundant naturally occurring element.
Nickel 2009	0.002	0.002	0.002	NA	ppm	Erosion of natural deposits.
pH 2009	7.3	7.3	7.3	>7.0	units	Measure of corrosivity of water.
Sodium 2009	16	16	16	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
Sulfate 2009	31	31	31	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
Total Alkalinity as CaCO3 2009	263	263	263	NA	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids 2009	380	380	380	1000	ppm	Total dissolved mineral constituents in water.
Zinc 2009	0.011	0.011	0.011	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.

## KEY TERMS - ABBREVIATIONS

**Maximum Contaminant Level (MCL)** The highest 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 contamination.

**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.

**Parts per million (ppm)** is equivalent to milligrams per liter. One ppm is comparable to one penny of \$10 thousand.

**Parts per billion (ppb)** is comparable to one penny of \$10 million.

**mpn** - Most Probable Number

**NTU** - Nephelometric Turbidity Units are used to measure water turbidity.

**Oocysts/l** - Oocysts per liter.

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