

# 2008 DRINKING WATER QUALITY REPORT

## Williamson County Water Company

January 2008 to December 2008

This annual Drinking Water Quality Report provides information on Brushy Creek M.U.D.'s drinking water. The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers in the country provide a water quality report to their customers on an annual basis.

### **Special Notice for the Elderly, Infants, Cancer Patients, people with HIV/Aids or other Immune problems:**

Some people may be more vulnerable to contaminants in drinking water than the general population. 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/Centers for Disease Control and Prevention (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).

### **OUR DRINKING WATER MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS**

This report is a summary of the quality of the water we provide to our customers. The analysis was made from the most recent data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what is in your drinking water.

Where do we get our drinking water?

Our drinking water is obtained from the Brushy Creek MUD's Surface Water Treatment Facility. The Facility uses blended source water, treating it to drinking water standards. The surface water source is Lake Georgetown and the groundwater source is Edwards Aquifer wells.

### **ALL drinking water may contain contaminants**

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).

**DEFINITIONS:**

**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.

**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.

**Treatment Technique-** A required process intended to reduce the level of a contaminant in drinking water.

**Maximum Residual Disinfectant Level (MRDL) -** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG) –** The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contamination.

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

**NTU-** Nephelometric Turbidity Units

**MFL-** million fibers per liter

**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 (ug/l)

**ppt-** parts per trillion, or nanograms per liter

**ND-** Not Detected

**Public Participation Opportunities**

**Date:** June 25, 2009

**Time:** 6:00 PM

**Location:** Brushy Creek MUD Office  
16318 Great Oaks Drive  
Round Rock, TX 78681

**Phone No:** (512) 255-7871

**About The Tables:** The pages that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents

**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 are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

The Texas Commission on Environmental Quality completed a source water assessment for our drinking 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 detection of these contaminants will be found in this Consumer Confidence Report. To obtain more information on source water assessments and protection efforts in our system contact Mr. Mike Wheeler at 512-255-7871.

## Inorganics

Year	Constituent	Average Level	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
2007	Barium	0.041	0.041	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2008-2005	Fluoride	0.6	0.69-0.20	4	4	ppm	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008-2006	Nitrate	1.1	4.92-0.23	10	10	ppm	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits.

**Organics:** NOT TESTED FOR OR NOT DETECTED

## Unregulated Contaminants

Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. Bromoform, chloroform, bromodichloromethane, and dibromodichloromethanes are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Constituent	Average Level	Range of Detected Levels	Unit of Measure	MCL/MCLG	Source of Constituent
2008	Dibromochloromethane	11.3	13-9.6	ppb	None Established	By product of drinking water disinfection.
2008	Chloroform	8.0	9.1-6.9	ppb	None Established	By product of drinking water disinfection.
2008	Bromoform	1.95	2.3-1.6	ppb	None Established	By product of drinking water disinfection.
2008	Bromodichloromethane	12	14-10	ppb	None Established	By product of drinking water disinfection.

## Turbidity

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.

Year	Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limit	Unit of Measure	Source of Constituent
2008	Turbidity	0.30	100.00	0.3	NTU	Soil runoff.

## Radiochemicals

Year	Constituent	Highest Level At Any Sampling Point	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
2005	Radium 228	<1.0	<1.0-<1.0	5	0	pci/L	Erosion of natural deposits.
2005	Gross beta emitters	<4.0	<4.0-<4.0	50	0	pci/L	Erosion of natural deposits
2005	Gross alpha particles	<2.0	<2.0-<2.0	15	0	pci/L	Erosion of natural deposits.

## Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Range of Detected Levels	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2008	Chloramine Residual	1.54	2.23-1.72	4	4	ppm	Disinfectant used to control microbes.

## Disinfection By-Products (BCMUD)

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
2006	Total Trihalomethanes	28.6	28.6	80	0	ppb	Byproduct of drinking water chlorination.
2006	Total Haloacetic Acids	9.3	9.3	60	0	ppb	Byproduct of drinking water chlorination.

**Unregulated Initial Distribution System Evaluation for Disinfection Byproducts:** Not Yet Sampled

## Lead and Copper (BCMUD)

Year	Constituent	The 90 <sup>th</sup> percentile	Number of Sites Exceeding the Action Level	Action Level	Unit of Measure	Source of Constituent
1999	Lead	3.1	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.
1999	Copper	0.103	0	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits.

## 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>.

## Coliforms

### Total Coliform

Year	Constituent	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Source of Constituent
2008	Total Coliform Bacteria	0	2 in any month	Presence	Naturally present in the environment.

**Fecal Coliform** Not Detected

## Secondary and Other Constituents

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Range of Detected Levels	Secondary Limit	Unit of Measure	Source of Constituent
2008-2005	Bicarbonate	258	372-168	N/A	ppm	Corrosion of carbonate rocks such as limestone.
2007	Calcium	46.2	46.2	N/A	ppm	Abundant naturally occurring element
2008-2005	Chloride	24	44-16	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2004	Hardness as Ca/Mg	175	175	N/A	ppm	Naturally occurring calcium and magnesium.
2007	Magnesium	16.3	16.3	N/A	units	Abundant naturally occurring element.
2007	Manganese	0.0013	0.0013	0.05	ppm	Abundant naturally occurring element.
2007	Nickel	0.001	0.001	N/A	ppm	Erosion of natural deposits
2008-2005	pH	7.8	8.1-7.0	7	units	Measure of corrosivity of water.
2007	Sodium	20	20	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity.
2008-2005	Sulfate	24	39-16	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2008-2005	Total Alkalinity as CaCO <sub>3</sub>	212	305-138	N/A	ppm	Naturally occurring soluble mineral salts.
2008-2005	Total Dissolved Solids	297	369-242	1000	ppm	Total dissolved mineral constituents in water.
2007	Total Hardness as CaCO <sub>3</sub>	182	182	N/A	ppm	Naturally occurring calcium

# Brushy Creek MUD Service Area Map

