

**Secondary and Other Non Regulated Constituents**

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2007	Bicarbonate	126	126	126	NA	ppm	Corrosion of carbonate rocks such as limestone
2007	Chloride	138	138	138	300	ppm	Abundant naturally occurring element; used in water purification; by product of oil field activity
2006	Hardness as Ca/Mg	162	162	162	NA	ppm	Naturally occurring calcium and magnesium
2007	pH	7.4	7.4	7.4	>7.0	units	Measure of corrosivity of water
2007	Sulfate	43	43	43	300	ppm	Naturally occurring; common industrial by product; by product of oil field activity
2007	Total Alkalinity as CaCO3	103	103	103	NA	ppm	Naturally occurring soluble mineral salts
2007	Total Dissolved Solids	420	420	420	1000	ppm	Total dissolved mineral constituents in water

**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 (1-800-426-4791).



**WATER DEPARTMENT**  
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GRAHAM, TEXAS 76450

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# 2007 Drinking Water Quality Report

(City of Graham Consumer Confidence Report)

**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 our 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 the attached pages. We hope this information helps you become more knowledgeable about what is in your drinking water.

**En Espanol**

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) 549-4322 - para hablar con una persona bilingüe en español.

**ALL drinking water may 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).

**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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

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

Our drinking water is obtained from SURFACE water sources. It comes from the following Lake/River/Reservoir/ Aquifer: LAKE EDDLEMAN. 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. The report will describe 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 will allow us to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

**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.

**Public Participation Opportunities**

Every other Thursday 9:30 a.m.  
429 Fourth Street · Graham, Texas  
940-549-3324

To learn about future public meetings concerning your drinking water, or to request to schedule one, please call us.

**About The Following Pages**

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

**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 (TT)**

A required process intended to reduce the level of a contaminant in drinking water.

**Action Level (AL)**

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

**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 contamination.

**ABBREVIATIONS**

- NTU** - Nephelometric Turbidity Units
- 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 (mg/L)
- ppb** - parts per billion, or micrograms per liter (ug/L)
- ppt** - parts per trillion, or nanograms per liter
- ppq** - parts per quadrillion, or picograms per liter

**Inorganic Contaminants**

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2007	Fluoride	0.77	0.77	0.77	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2007	Nitrate	.12	.12	.12	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2005	Gross beta emitters	6.8	6.8	6.8	50	0	pCi/L	Decay of natural and man-made deposits.

**Organic Contaminants** TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

**Maximum Residual Disinfectant Level**

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2007	<i>Disinfectant used</i>	<i>Average level of CCR year's quarterly</i>	<i>Minimum result single sample</i>	<i>Maximum result single sample</i>	4.0	<4.0	ppm	Disinfectant used to control microbes.

**Disinfection Byproducts**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2007	Total Haloacetic Acids	16.7	16.7	16.7	60	ppb	Byproduct of drinking water disinfection.
2007	Total Trihalomethanes	28	28	28	80	ppb	Byproduct of drinking water disinfection.

**Unregulated Initial Distribution System Evaluation for Disinfection Byproducts** WAIVED OR NOT YET SAMPLED.

**Unregulated Contaminants**

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

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2007	Chloroform	10	10	10	ppb	Byproduct of drinking water disinfection.
2007	Bromoform	0.8	0.8	0.8	ppb	Byproduct of drinking water disinfection.
2007	Bromodichloromethane	8.7	8.7	8.7	ppb	Byproduct of drinking water disinfection.
2007	Dibromochloromethane	3.6	3.6	3.6	ppb	Byproduct of drinking water disinfection.

**Lead and Copper**

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2007	Lead	4.3	1	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2007	Copper	0.106	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

**Recommended Additional Health Information for Lead**

All water systems are required by EPA to report the language below starting with the 2009 CCR to be delivered to you by July of 2010. We are providing this information now as a courtesy.

*"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>."*

**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	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2007	Turbidity	.30	100.00	0.3	NTU	Soil runoff.

**Total Organic Carbon**

Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that 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.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2007	Source Water	5.4	4.5	5.95	ppm	Naturally present in the environment.
2007	Drinking Water	4.25	3.45	4.69	ppm	Naturally present in the environment.
2007	Removal Ratio	<i>Optional: PWS may complete this section 1.6% removal*</i>				NA

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

**Total Coliform**

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.

Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2007	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment.

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

**Fecal Coliform** REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.