2007 DRINKING WATER QUALITY REPORT
903-935-4485

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 data from the most recent U. S. Environmental Protection Agency required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

SOURCE WATER

The drinking water supply for the City of Marshall is obtained from Big Cypress Bayou. Water is pumped 10.5 miles, then it flows by gravity 4.5 miles to the Water Treatment Plant located at 605 East End Blvd. South (Highway 59). A Source Water Susceptibility Assessment for your drinking water source 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.

OPPORTUNITIES FOR PUBLIC PARTICIPATION

The public is always welcome to attend Commission Meetings scheduled on the second and fourth Thursday of each month at 6:30 p.m. at City Hall. For more information about these meetings, call 903-935-4421. For questions or concerns about water quality or the contents of this report, please call the Water Treatment Plant at 903-935-4485 during normal business hours (Monday—Friday, 8:00 a.m. to 5:00 p.m.).

ESTE REPORTE INCLUYE INFORMACION IMPORTANTE SOBRE EL AGUA PARA TOMAR. PARA ASISTANCIA EN ESPANOL, FAVOR DE LLAMAR AL TELEFONO 903-935-4438

SPECIAL INFORMATION FOR PEOPLE WITH WEAKENED IMMUNE SYSTEMS

Some people may be more vulnerable to contaminants in the drinking water than the general population. Immuno-compromised persons such as persons with cancer who are undergoing chemotherapy, people who have had 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 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 (1-800-426-4791).

WATER SOURCES: The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land and 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 human activity. Contaminants that may be present in the source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants and organic chemical contaminants.

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, secondary's are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

WATER QUALITY DEFINITIONS

NTU — Nephelometric Turbidity Units. This is the unit to measure water turbidity.
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 CONTAMINANT LEVEL (MCL) - The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Residual Disinfectant Level (MRDL) - The highest level of disinfectant allowed in the 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.
TREATMENT TECHNIQUE - A required process intended to reduce the level of a contaminant.
ACTION LEVEL—The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Ppm — Parts per million or milligrams per liter (mg/l).
Ppb — Parts per billion or micrograms per liter (ug/l).
MFL— Million fibers per liter (a measure of asbestos).
pCi/L—Picocuries per liter (a measure of radioactivity).

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 these contaminants does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

LEAD & COPPER

Year	Substance	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measurement	Source
2007	Lead	2.6	0	15	ppb	Corrosion of Household Plumbing
2007	Copper	0.082	0	1.3	ppm	See Above

"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 material 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."

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Disinfectant Used	Average Level	Minimum Level	Maximum Level	MRDL	MRDL Goal	Unit of Measure	Source of Chemical
Chloramines 2007	1.69	.5	3.2	4.0	< 4.0	ppm	Disinfectant used to control microbes.

SECONDARY & OTHER CONSTITUENTS NOT REGULATED (No associated health effects.)

Constituent	Average Level	Unit of Measure	Source
Bicarbonate	12	ppm	Corrosion of carbonate rocks such as limestone.
Calcium	5.3	ppm	Abundant naturally occurring element.
Chloride	23	ppm	Naturally occurring, byproduct of oilfield activity.
Iron	.016	ppm	Erosion of natural deposits; iron or steel water delivery equipment.
Magnesium	2.4	ppm	Abundant naturally occurring element.
pH	6.8	units	Measure of corrosivity of water.
Sodium	11	ppm	Erosion of natural deposits, byproduct of oilfield activity.
Sulfate	28	ppm	Naturally occurring, common industrial byproduct, byproduct of oilfield activity.
Total Alkalinity	10	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	137	ppm	Total dissolved mineral contents in water.
Total Hardness	23	ppm	Naturally occurring calcium.

Substance	Average Level	Minimum Maximum	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Source of Contaminant
INORGANIC CONTAMINANTS					
NITRATE 2007	0.09 ppm	0.09 ppm 0.09 ppm	10 ppm	10 ppm	Fertilizer run-off, erosion of natural deposits
FLUORIDE 2007	0.9 ppm	0.9 ppm 0.9 ppm	4 ppm	4 ppm	Water additive which promotes strong teeth.
ORGANIC CONTAMINANTS					
TOTAL TRIHALOMETHANES 2007	60.7 ppb	8.8 ppb 145.7 ppb	80 ppb	0	Disinfection by-product.
TOTAL HALOACETIC ACIDS 2007	26.2 ppb	7.7 ppb 75.5 ppb	60 ppb	0	Disinfection by-product.
UNREGULATED CONTAMINANTS					
CHLOROFORM 2007	27.9 ppb	27.9 ppb 27.9 ppb	NOT REGULATED	NOT REGULATED	Disinfection by-product.
BROMODICHLOROMETHANE 2007	8.15 ppb	8.15 ppb 8.15 ppb	NOT REGULATED	NOT REGULATED	Disinfection by-product.
DIBROMOCHLOROMETHANE 2007	1.37 ppb	1.37 ppb 1.37 ppb	NOT REGULATED	NOT REGULATED	Disinfection by-product.

TOTAL ORGANIC CARBON

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

2007 TOC	Average	Minimum	Maximum	Source of Contaminant
Source Water	9.84 ppm	6.12 ppm	15.2 ppm	Naturally present in the environment.
Drinking Water	4.35 ppm	1.39 ppm	7.33 ppm	
Removal Ratio -Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by the TCEQ to be removed. 2007 Average Ratio - 1.16				

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.

2007 Turbidity	Highest Single measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limit	Source of Contaminant
	.90	96.00	.30	Soil Runoff

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.

Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant
Total Coliform Bacteria	1	*	Presence	Naturally Present in the Environment

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

FECAL COLIFORM

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.

Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant
Fecal Coliform or E. coli	1	*	Presence	Human and animal fecal waste.

* A routine sample and a repeat sample are total coliform positive and one is also fecal coliform or E. coli positive.

City of Marshall Water Utility Division
P.O. Box 698—Marshall, Texas 75671

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