City of Gautier

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2010 Annual Drinking Water Quality Report

City of Gautier

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The City of Gautier is pleased to present to you the 2010 Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our system pumps groundwater from eight deep groundwater wells. The water is extracted from the Miocene system, which includes the Graham Ferry and Pascagoula aquifer formations.

WELL LOCATION	AQUIFER
Martin Bluff on Lark Street	Lower Graham Ferry Formation
Westgate Parkway in Westgate Estates	Lower Graham Ferry Formation
Martin Bluff (West) on Lark Street	Upper Pascagoula Formation
Behind Singing River Mall (North of Hwy. 90)	Lower Graham Ferry Formation
Public Works Office	Lower Graham Ferry Formation
Honduras Drive and Merida Road – Point Clear	Lower Graham Ferry Formation
½ Mile West of Mall (South of Hwy. 90)	Lower Graham Ferry Formation
MS 57 vicinity Robinson Still Road	Upper Pascagoula Formation

The Bottom-Line: Is our water safe to drink? ABSOLUTELY!

Throughout 2010, as in years past, your tap water met U.S. Environmental Protection Agency (EPA) and Mississippi Department of Health (MSDH) drinking water standards. We vigilantly safeguard our water supply and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard. This report is a snapshot of last year's water quality. Included are details about what your water contains, and how it compares to standards set by regulatory agencies. We want our valued customers to be informed about our water service.

If you have any questions about this report or concerning your water utility, please contact the **Public Works Division at 497-4283.**

The Mississippi Department of Environmental Quality (MDEQ), under contract from the Mississippi State Department of Health (MSDH), has completed a source water assessment. MDEQ's rankings of groundwater wells in Mississippi range from low to moderate to high susceptibility to contamination. The City's wells were all ranked as moderate susceptibility; however, no contamination problems were noted.

The City routinely monitors for constituents in our drinking water according to Federal and State laws. The following table is a snapshot of our water quality and shows the results of our monitoring for the period of January 1st to December 31st, 2010, except as noted. As water travels over the land or underground, 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, microbial contaminants, inorganic contaminants, pesticides and herbicides, and organic chemical contaminants. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. **It's important to remember that the presence of these constituents does not necessarily pose a health risk.**

How do I read the following "Detected Contaminant Table"?

It's easier than it appears! Our water is tested to assure that it is safe and healthy. The City performed tests for over 40 contaminants during the year. If the contaminants were not found in the water supply, they were not included in the table. The column marked "Your Water" shows the highest test results detected during the year. The column headed "Likely Source of Contamination" indicates where this substance usually originates. Footnotes explain important details.

In the following table you will find many terms and abbreviations with which you might not be familiar. To help you better understand these terms we provide the following definitions:

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

Maximum Contaminant Level (MCL) – The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) – The "Goal" is 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.

Micrograms per liter (ug/l) – micrograms per liter is a measure of uranium in water.

Monitoring Not Required (MNR) – Monitoring is not required; however, utilities may elect to monitor.

Not Applicable (NA).

Non-Detect (ND) – laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) *or Milligrams per liter* (mg/l) – one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) *or Micrograms per liter* – one part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.

Picocuries per liter (pCi/l) – picocuries per liter is a measure of the radioactivity in water.

Treatment Technique (TT) – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Sampling Results

As you can see from the table, our system had no violations. We're proud that your drinking water meets or exceeds Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that **YOUR WATER IS SAFE** at these levels.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water (slightly more than one quart) every day at the MCL level for a lifetime to have a one-in-a-million chance of having a health effect.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Maximum Residual Disinfectant Levels (MRDL)

MSDH requires public water systems that use chlorine as a primary disinfectant to monitor/test for chlorine residuals as required by the federal Disinfection By-Products Rule. Each month, Gautier is required to sample specified locations for chlorine residual levels. As we reported to you, our customers, by letter dated April 28, April 29, and May 2, 2011 only 10 of the 20 samples collected in February 2010 were tested locally for chlorine residual before being shipped to the State for testing. However, all 20 samples were taken, and passed the required tests at the State level. This was a monitoring violation, not a water quality deficiency. Your water was then, and is now, SAFE.

Detected Contaminant Table

The City regularly monitors for contaminants in the water as regulated by MSDH. Of the many contaminants tested, only these few were identified above the level of detection. All sampling/testing results are from 2010 except for inorganic contaminants barium, chromium and fluoride (last required sampling in 2009) and radioactive contaminants (last required sampling between December 2008 and February 2009). **No detected contaminant violated the established MCL.**

Contaminants (units)	MCLG	MCL	Your Water	Range Low	Range High	Violation	Typical Source
Inorganic Contaminants							
Barium (ppm)	2	2	0.007342	0.004219	0.007342	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium [Total] (ppm)	0.1	0.1	0.002317	ND	0.002317	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	4	4	0.81	0.509	0.81	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (mg/l)	AL = 0.015 at 90th percentile		0.004	---	---	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (mg/l)	AL = 1.3 at 90th percentile		0.3	---	---	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Radioactive Contaminants							
Alpha Particles (pCi/l)	0	15	1.73	ND	1.73	No	Erosion of natural deposits of certain minerals
Radium 226 (pCi/l)	0	5	0.363	ND	0.363	No	Erosion of natural deposits
Radium 228 (pCi/l)	0	5	0.499	ND	0.499	No	Erosion of natural deposits
Uranium (ug/l)	0	30	0.253	0.042	0.253	No	Erosion of natural deposits
Disinfection Byproducts							
Total Trihalomethanes [TTHM] (ppb)	NA	80	24.19	---	---	No	By-product of drinking water disinfection
Haloacetic Acids [HAA5] (ppb)	NA	60	0.00	---	---	No	By-product of drinking water disinfection
Chlorine Residual (mg/l)	NA	4	0.40	0.37	0.43	No	Water additive used to control microbes – This entry reports Maximum Residual Disinfectant Level (MRDL) Running Annual Average ("Your Water") and Monthly Average ("Range - Low & High")

Other Educational Information

Total Trihalomethanes (TTHM) – Some people who drink water that contains trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Additional 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. The City of Gautier 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 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. The Mississippi State Department of Health Public Health Laboratory offers lead testing for $10 per sample. Please contact 601-576-7582 if you wish to have your water tested.

Additional Health Information

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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection from microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Summary

The City of Gautier operates a community water system that is fully compliant with all National Primary Drinking Water Regulations. We provide water to each customer that meets or exceeds the standards established by EPA and the State of Mississippi. We ask that all customers assist us in protecting our water system. Please dispose of all chemicals in accordance with the procedures outlined on their containers. Be vigilant of our system's wells, elevated water storage tanks and fire hydrants, and report any suspicious activity at these facilities to the police.

Please call our office at 497-4283 if you have any questions.