

# Annual Report on the Quality of Drinking Water

Public Water Systems 0240001, 0240036 & 0240084



We're pleased to present to you this year's Annual Quality Water 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 water source is from wells drawing from the Pascagoula Formation, Graham Ferry Formation and the Miocene Series Aquifer.

The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identified potential sources of contamination. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water system and is available for viewing upon request. The wells for the City of Biloxi PWS have received lower to higher susceptibility rankings to contamination.

If you have any questions about this report or concerning your water utility, please contact Tracey Forehand at tforehand@biloxi.ms.us or 228-435-6271. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first, third, and last Tuesday of each month at 1:30 p.m. at the Biloxi City Hall, at 140 Lameuse St.

We routinely monitor for constituents in your drinking water according to Federal and State laws. The tables inside lists all of the drinking water contaminants that we detected during for the period of January 1st to December 31st, 2013. In cases where monitoring wasn't required in 2013, the table reflects the most recent results. As water travels over the surface of land or underground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances or contaminants from the presence of animals or from human activity; microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm-water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations and septic systems; radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. 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 indicate that the water poses a health risk.

As you can see by the tables on the next page, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected however the EPA has determined that your water IS SAFE at these levels.

We are required to monitor your drinking water for specific constituents on a monthly basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. In an effort to ensure systems complete all monitoring requirements, MSDH now notifies systems of any missing samples prior to the end of the compliance period.

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. We are 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. The Mississippi State Department of Health Public Health Laboratory offers lead testing. Please contact 601-576-7582 if you wish to have your water tested.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 at 1-800-426-4791.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

The City of Biloxi works around the clock to provide top quality water to every tap. We ask that all our customers help us protect ourwater sources, which are the heart of our community, our way of life and our children's future.

Biloxi Water Well Listing					
Health Dept Tag No	Facility Name	Street Address			
240001-01	Maple Street	162 Maple St			
240001-04	Hospital Water Well	1123 Bayview Ave			
240001-05	Greater Ave	1880 Greater Ave			
240001-06	Porter Ave	1082 Irish Hill Dr			
240001-09	Old Bay Vista	2434 Bay Vista Dr			
240001-10	Bradford St Well	768 Bradford St			
240001-11	Debuys Water Well	262 Debuys Rd			
240001-12	Kuhn St	199 Kuhn Street			
240001-13	Iberville	205 Iberville Dr			
240001-14	Park Circle Water Well	345 Park Dr			
240001-15	Father Ryan	1352 Father Ryan Ave			
240001-16	Pine Street Well	129 Pine St			
240001-17	Tullis	369 Beach Blvd			
240001-18	Lakeview	364 Lakeview			
240036-02	North Rivervue	11186 N Riviere Vue Dr			
240036-03	Oaklawn	9339 Oaklawn Dr			
240036-05	Hwy. 67 & Oaklawn	Hwy. 67 & Oaklawn Dr			
240084-01	Rustwood	2181 Rustwood Dr			
240084-04	South Hill	1991 South Hill Dr			
240084-05	N Biloxi #1	2145 Popp's Ferry Rd			
240084-06	Vee Street	Vee Street			
240084-07	Cedar Lake Subdivision	11412 Penton Dr			
240084-08	Biloxi Sports Complex	765 Wells Dr			

Contaminant

**Violation** 

Date

Level

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

- · Action Level the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level (MCL) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed 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 "Goal" (MCLG) 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.
- Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control microbial contaminants.
- Maximum Residual Disinfectant Level Goal (MRDLG) The level of a drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- 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.

Likely Source of

MCL

MCLG

### Test Results of City of Biloxi Public Water Systems 0240001, 0240036 & 0240084

Unit

Range of Detects

Contaminant	Y/N	Collected	Detected	or # of Samples Exceeding MCL/ACL	Measurement	MOLU	MOL	Contamination
		Pu	blic Wat	er System 24	0084 - Te	st Resu	ılts	
Inorganic Co	ntaminants	•						
10. Barium	N	2011*	.005	.002 – .005	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Copper	N	2011/13	.1	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide	N	2011*	37	17 – 37	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	2011*	.33	.16 – .33	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead	N Dr. Draduck	2011/13	1	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection 81. HAA5	N N	2013	25	15 – 25	nnh	0	60	Du product of drialing restor disinfection
82. TTHM [Total trihalomethanes]	N	2013	29	22 - 29	ppb ppb	0	80	By-product of drinking water disinfection By-product of drinking water chlorination
Chlorine	N	2013	1.8	.30 – 4	mg/l	0	MDRL = 4	Water additive used to control microbes
Unregulated	Contamina	nts						
Chromium-Total	N	2013	1.975	No range	UG/L	0	MRL 3.03	Naturally- occurring element; used in making steel and other alloys. Forms are used for chrome plating, dyes and pigments, leather tanning and wood preservation
Strontium	N	2013	26.758	10.316 - 26.758	UG/L	0.3	MRL 0.3	Naturally-occurring element found in the earth's crust and at low concentrations in seawater, and in some surface and ground water; cobaltous chloride was formerly used in medicines and as a germicide
Vanadium	N	2013	2.15	.209 – 2.15	UG/L		MRL 0.2	Naturally-occurring elemental metal; used as vanadium pent oxide which is a chemical intermediate and a catalyst

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measurement	MCLG	MCL	Likely Source of Contamination	
Public Water System 240001 - Test Results									
Inorganic Co	<u>ontaminan</u>	ts							
10. Barium	N	2011*	.011	.001 – .011	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
13. Chromium	N	2011*	.8	.5 – .8	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits	
14. Copper	N	2011*	.2	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
15. Cyanide	N	2011*	83	18 – 83	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories	
16. Fluoride**	N	2011*	.39	.16 – .39	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
17. Lead	N	2011*	4	6	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits	
Disinfection	By-Produ	rte						oyotomo, orosion or mataria doposito	
81. HAA5	N N	2013	21	13 - 21	ppb	0	60	By-product of drinking water disinfection	
82. TTHM [Total trihalomethanes]	N	2013	28.6	11.79 - 28.6	ppb	0	80	By-product of drinking water chlorination	
Chlorine	N N	2013	1.2	.20 - 2.4	mg/l	0	MDRL = 4	Water additive used to control microbes	
Unregulated	d Contamir	nants							
Chloromethane	N	2013	0.394	No range	UG/L	0	MRL 0.2	Halogenated alkane; used as foaming agent, in production of other substances, and by-product that can form when chlorine used to disinfect drinking water	
Chromium-6	N	2013	0.045	0.039 - 0.045	UG/L	0	MRL 3.03	Naturally- occurring element; used in making steel and other alloys. Forms are used for chrome plating, dyes and pigments, leather tanning and wood preservation	
Strontium	N	2013	37.346	7.479 – 37.346	UG/L	0.3	MRL 0.3	Naturally-occurring element found in the earth's crust and at low concentrations in seawater, and in some surface and ground water; cobaltous chloride was formerly used in medicines and as a germicide	
Vanadium	N	2013	.258	.21258	UG/L		MRL 0.2	Naturally-occurring elemental metal; used as vanadium pent oxide which is a chemical intermediate and a catalyst	
		Pu	ıblic Wa	ter System 24	0036 - Te	st Resi	ılts		
Inorganic Co	ntaminants	5							
8. Arsenic	N	2011*	.6	No Range	ppb	n/a	10	Erosion of naturaldeposits; runoff from orchards; runoff from glass and electronics production wastes	
10. Barium	N	2011*	.002	.001 – .002	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
14. Copper	N	2008*	.1	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
15. Cyanide	N	2011*	34		ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories	
16. Fluoride	N	2011*	.32	.2532	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
17. Lead	N	2008*	4	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits	
Disinfection By-Products									
Chlorine	N	2013	1.90	.3 - 3	mg/l	0	MDRL = 4	Water additive used to control microbes	

<sup>\*</sup> Most recent sample. No sample required for 2013.

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**INSIDE:** 

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#### Mayor A.J. Holloway and the Biloxi City Council

George Lawrence • Felix Gines • Dixie Newman • Robert L. Deming III Paul A. Tisdale • Kenny Glavan • David Fayard



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