RECEIVED-WATER SUPPLY

2012 JUN -5 AM 10: 40

BUREAU OF PUBLIC WATER SUPPLY

CALENDAR YEAR 2011 CONSUMER CONFIDENCE REPORT CERTIFICATION FORM

City of Grenada
Public Water Supply Name

0220007
List PWS ID #s for all Water Systems Covered by this CCR

The Federal Safe Drinking Water Act requires each *community* public water system to develop and distribute a consumer confidence report (CCR) to its customers each year. Depending on the population served by the public water system, this CCR must be mailed to the customers, published in a newspaper of local circulation, or provided to the customers upon request.

Please Answer the Following Questions Regarding the Consumer Confidence Report

■ Customers were informed of availability of CCR by: ***(Attach copy of publication, water bill or other)***

- ☐ Advertisement in local paper
- ■ On water bills
- ■ Other Posted At Water Dept & Billing Office

Date customers were informed: 05/31/12

■ CCR was distributed by mail or other direct delivery. Specify other direct delivery methods:

Date Mailed/Distributed: 05/31/12

☐ CCR was published in local newspaper. ***(Attach copy of published CCR or proof of publication)***

Name of Newspaper: _____

Date Published: ___/___/___

■ CCR was posted in public places. ***(Attach list of locations)***

Date Posted: 06/01/12

☐ CCR was posted on a publicly accessible internet site at the address: www. city of grenada.ms

CERTIFICATION

I hereby certify that a consumer confidence report (CCR) has been distributed to the customers of this public water system in the form and manner identified above. I further certify that the information included in this CCR is true and correct and is consistent with the water quality monitoring data provided to the public water system officials by the Mississippi State Department of Health, Bureau of Public Water Supply.

Billy F. Collins-Mayor
Name/Title (President, Mayor, Owner, etc.)

June 1 2012
Date

Mail Completed Form to: Bureau of Public Water Supply/P.O. Box 1700/Jackson, MS 39215
Phone: 601-576-7518

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2011 Annual Drinking Water Quality Report
City of Grenada
PWS#: 220003, 220004, 220005, 220007, 220036 & 220062
April 2012

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 Meridian Upper Wilcox, Middle Wilcox and Lower Wilcox Aquifers.

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. The general susceptibility rankings assigned to each well of this system are provided immediately below. 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 Grenada have received lower to higher susceptibility rankings to contamination.

If you have any questions about this report or concerning your water utility, please contact Dale Ratliff at 662-227-3415. 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 second Monday of the month at 6:00 PM at City Hall.

We routinely monitor for constituents in your drinking water according to Federal and State laws. This table below lists all of the drinking water contaminants that were detected during the period of January 1st to December 31st, 2011. In cases where monitoring wasn't required in 2011, 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.

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.

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

PWS ID#: 0220003				TEST RESULTS				
Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination

Monitoring and reporting of compliance data violation
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. We did complete the monitoring requirements for bacteriological sampling that showed no coliform present. However on system #220004 in August 2011 and system # 220005 in October 2011 we exceeded the MCL for chlorine. 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. complete all monitoring requirements, MSDH now notifies systems of any missing samples prior to the end of the compliance period.

Significant Deficiencies:
System ID: 220003
During a sanitary survey conducted on 9/28/10, the Mississippi State Department of Health cited the following significant deficiency(s):
Unprotected cross connections
Corrective actions: The system is under a Bilateral Compliance Agreement with the Mississippi State Department of Health to complete the work of identifying, testing and repairing all backflow prevention devices. All deficiencies are scheduled to be completed by 2/7/2012.
System ID: 220004
During a sanitary survey conducted on 9/28/10, the Mississippi State Department of Health cited the following significant deficiency(s):
Inadequate internal cleaning/maintenance of storage tanks
Corrective actions: The system has completed an inspection and is in a Bilateral Compliance Agreement with the Mississippi State Department of Health to sandblast and paint the tanks. All deficiencies are scheduled to be completed by 2/7/2014.
System ID 220005:
During a sanitary survey conducted on 9/28/10, the Mississippi State Department of Health cited the following significant deficiency(s):
Unprotected cross connections
Corrective actions: The system is under a Bilateral Compliance Agreement with the Mississippi State Department of Health to complete the work of identifying, testing and repairing all backflow prevention devices. All deficiencies are scheduled to be completed by 2/7/2012.
System ID 220007:
During a sanitary survey conducted on 9/28/10, the Mississippi State Department of Health cited the following significant deficiency(s):
Inadequate internal cleaning/maintenance of storage tanks
Corrective actions: This system is currently under a Bilateral Compliance Agreement with the Mississippi State Department of Health to correct this deficiency by 2/07/2013.
During a sanitary survey conducted on 9/28/10, the Mississippi State Department of Health cited the following significant deficiency(s):
Failure to meet water supply demands (overloaded)
Corrective actions: The system is under a Bilateral Compliance Agreement with the Mississippi State Department of Health to correct this deficiency by 2/07/2013.

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. Our Water Association 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. 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.

*******A MESSAGE FROM MSDH CONCERNING RADIOLOGICAL SAMPLING*******
In accordance with the Radionuclides Rule, all community public water supplies were requires to sample quarterly for radionuclides beginning January 2007 – December 2007. Your public water supply completed sampling by the scheduled deadline; however, during an audit of the Mississippi State Department of Health Radiological health laboratory, the Environmental Protection Agency (EPA) suspended analyses and reporting of radiological compliance samples and results until further notice. Although this was not the result of inaction by the public water supply, MSDH was required to issue a violation. This is to notify you that as of this date, your water system has not completed the monitoring requirements. The Bureau of Public Water Supply has taken action to ensure that your water system be returned to compliance by March 31, 2013. If you have any questions, please contact Melissa Parker, Deputy Director, Bureau of Public Water Supply, at 601.576.7518.

The City of Grenada works around the clock to provide top quality water to every tap. We have four certified operators on staff, who would be pleased to answer any and all customer questions. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Radioactive Contaminants								
5. Gross Alpha	N	2008*	2.48	1.36 – 2.48	pCi/L	0	15	Erosion of natural deposits
6. Radium 226 Radium 228	N	2008* 2008*	525 .783	.351 - .525 .173 - .783	pCi/1	0	5	Erosion of natural deposits
7. Uranium	N	2008*	.004	.002 - .004	µg/L	0	30	Erosion of natural deposits
Inorganic Contaminants								
10. Barium	N	2011	.142	.075 – .142	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Copper	N	2010*	.6	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives
15. Cyanide	N	2011	.147	.46 – 1.47	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	2011	.132	No Range	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
17. Lead	N	2010*	2	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection By-Products								
81. HAA5	N	2011	6	No Range	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2011	14.37	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2011	1.1	.84- 1.95	ppm	0	MDRL = 4	Water additive used to control microbes

PWSID#: 220004 TEST RESULTS

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
10. Barium	N	2011	02	.018- 02	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2011	2.3	1.1 – 2.3	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2009/11	.2	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride	N	2011	.186	.182 – 1.86	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Disinfection By-Products								
82. TTHM [Total trihalomethanes]	N	2008*	8.59	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	Y	2011	1.5	1.05 – 5.65	ppm	0	MDRL = 4	Water additive used to control microbes

PWSID#: 220005 TEST RESULTS

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
10. Barium	N	20118*	.0263	No Range	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Disinfection By-Products								
82. TTHM [Total trihalomethanes]	N	2008*	13.45	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	Y	2011	1.50	.80 -6.55	ppm	0	MDRL = 4	Water additive used to control microbes

PWSID#: 220007 TEST RESULTS

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
10. Barium	N	2011	.030	.016 - .030	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2011	2.7	2.6 – 2.7	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2008*	.3	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride	N	2011	.20	17 - .20	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead	N	2008*	2	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
21. Selenium	N	2011	2.6	No Range	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Volatile Organic Contaminants								
76. Xylenes	N	2010*	.0005	No Range	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories
Disinfection By-Products								
81. HAA5	N	2011	4	No Range	ppb	0	60	By-Product of drinking water disinfection
82. TTHM [Total trihalomethanes]	N	2011	15.64	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2011	.70	.56 - .92	ppm	0	MDRL = 4	Water additive used to control microbes

PWSID#: 220036 TEST RESULTS

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
8. Arsenic	N	2011	.9	No Range	ppb	n/a	10	Erosion of natural deposits, runoff from orchards; runoff from glass and electronics production wastes
10. Barium	N	2011	.018	No Range	ppm	2	2	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2011	2.5	1.9 – 2.5	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2009/11	.4	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide	N	2011	16.28	No Range	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	2011	.175	No Range	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
17. Lead	N	2009/11	4	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
21. Selenium	N	2011	3.2	3 – 3.2	ppb	50	50	Discharge from petroleum and metal refineries, erosion of natural deposits; discharge from mines
Disinfection By-Products								
81. HAA5	N	2011	14	No Range	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2011	39.5	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2010	1.1	1 – 1.3	ppm	0	MDRL = 4	Water additive used to control microbes

PWSID#: 220062 TEST RESULTS

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
10. Barium	N	2011	.04	.004 - .04	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2011	2.2	1.7 - 2.2	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2009/11	.3	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride	N	2011	.115	.108 - .115	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead	N	2009/11	2	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection By-Products								
Chlorine	N	2011	1.20	1 – 1.25	ppm	0	MDRL = 4	Water additive used to control microbes

** Most recent sample. No sample required for 2011*