## THE WATER WE DRINK CITY OF HERNANDO PWS ID# 170009 June 16, 2014

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). Our goal is and has always been to provide to you a safe, adequate, and dependable supply of drinking water. Our water source consists of one water plant with four wells pumping from the Sparta aquifer. This report is a snap-shot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

Our source water assessment has been completed and copies are available upon request at Hernando City Hall, located at 475 West Commerce Street, Hernando, MS 38632. Our four active wells were ranked MODERATE in terms of susceptibility to contamination.

As required by the Safe Drinking Water Act copies of this report are available to any of our customers upon request at Hernando City Hall. If you have any questions concerning this report or about your water utility, please contact Gary McElhannon at 662-429-9092.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as people 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 (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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; 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, urban storm-water runoff, and septic systems; and 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The table below lists all of the drinking water contaminants that we detected for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2013. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old. In this table you will find terms and abbreviations you might not be familiar with. To better understand these we've provided the following definitions:

**MCLG-Maximum Contaminant Level Goal -** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**MCL-Maximum Contaminant Level -** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**MRDLG-Maximum Residual Disinfection Level Goal -** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**MRDL-Maximum Residual Disinfection Level -** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Ppm -** Parts per million or milligrams per liter (mg/L)

**Ppb** - Parts per billion or micrograms per liter (ug/L)

**NA** – Not applicable

## THE WATER WE DRINK CITY OF HERNANDO PWS ID# 170009 June 16, 2014

Contaminants (Units)	MRDLG or MCLG	MCL, AL or MRDL	Your Water	Low	High	Sample Date	Violation	Typical Source		
Disinfectants & Disinfection By-Products (There is convincing evidence that addition of a disinfectant is necessary for										
control of microbial contaminants)										
Haloacetic Acids	NA	60	6	6	6	2013	NO	By-product of drinking		
(HAA5) (PPD) Chloring(CL2)	1	4	11	0.8	1 /	2012	NO	Water chlorination		
(nnm)	-	-	1.1	0.0	1.4	2015	NO	control microbes		
Microbiological Contaminants										
Total Coliform	0	1	0	NA	NA	2013	NO	Naturally present in the		
positive	·	-	•					environment		
samples/month										
Inorganic Contaminants										
Arsenic	0	10	ND	NA	NA	2011	NO	Erosion of natural deposits; runoff from		
(ppb)								orchards; runoff from		
								glass and electronics		
			-					production wastes		
TTHMs (Total Trihalomethanes) (ppb)	NA	80	4	4	4	2013	NO	By-product of drinking water disinfection		
Barium (ppm)	2	2	0.0273	NA	NA	2011	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits		
Fluoride (ppm)	4	4	0.474	NA	NA	2011	NO	Water additive that promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories		
Nitrate [measured as Nitrogen](ppm)	10	10	0.71	NA	NA	2013	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Nitrite [measured as Nitrogen](ppm)	1	1	0.02	NA	NA	2013	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
			Your	# Sar	nples	Sample	Exceeds			
	<u>MCLG</u>	<u>AL</u>	<u>Water</u>	Exceed	ling AL	Date	<u>AL</u>			
Copper (ppm)	1.3	1.3	0.1	0		2009	NO	Corrosion of household plumbing systems; erosion of natural deposits		
Lead	0	15	2	1		2009	NO	Corrosion of household		
(ppb)	-	-					-	plumbing systems; erosion of natural deposits		

## **Additional Monitoring**

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science

		Range		
Name	Reported Level	Low	<u>High</u>	
chlorate (ppb)	110	100	110	
chromium-6 (hexavalent	0.17	0.12	0.17	
strontium (ppb)	34	NA	34	

## THE WATER WE DRINK CITY OF HERNANDO PWS ID# 170009 June 16, 2014

\*\*\*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 Hernando 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Cross Connection Control Survey: The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing crossconnection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary. Boiler/ Radiant heater (water heaters not included) Underground law sprinkler system Pool or hot tub (whirlpool tubs not included) Additional sources(s) of water on the property Decorative pond

Watering trough

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", the City of Hernando is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year that average fluoride sample results were within the optimal range of 0.7 – 1.3 ppm was 12. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.7 – 1.3 ppm was 100%.