## Where Your Money Goes

Your water use charge is:

- $3.21/100 cubic feet if you are within the City Limits,
- $6.42/100 cubic feet if you are outside the City Limits but within 1 mile of the City Limits and
- $2.48/100 cubic feet if you are more than 1 mile outside of the City Limits.

65% of this charge is used for operations and maintenance of the water system. 35% of this charge is used for debt retirement.

## Get Involved

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. Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. There are a few suggestions:

- Conservation measures you can use inside your home include:
  - ✓ Fix leaking faucets, pipes, toilets, etc.
  - ✓ Replace old fixtures and install water -saving devices in faucets, toilets and appliances.
  - ✓ Wash only full loads of laundry.
  - ✓ Do not use the toilet for trash disposal.
  - ✓ Take shorter showers.
  - ✓ Do not let the water run while shaving or brushing teeth.
  - ✓ Soak dishes before washing.
  - ✓ Run the dishwasher only when full.
- You can conserve outdoors as well:
  - ✓ Water the lawn and garden in the early morning or evening.
  - ✓ Use mulch around plants and shrubs.
  - ✓ Repair leaks in faucets and hoses.
  - ✓ Use water from a bucket to wash your car and save the hose for rinsing.

Information on other ways you can help conserve water can be found on the Environmental Protection Agency's website at www.epa.gov/safewater/publicoutreach.

### Thirsty for More Information about Your Water?

Please feel free to contact us:

If you have any questions about this report or concerning your water utility, please contact:
Cynthia Hill, Water Plants Superintendent……..601-960-2417

For water sampling and results, water quality complaints, or boil water questions, call:
City of Jackson Water Laboratory……601.960.2723
Lenore S. Hicks, Laboratory Supervisor……601.960.2730

For water leaks or repairs, water meter issues, or locating water lines, call:
Water Maintenance (for leaks, repairs, or meters)……601.960.1777
601.960.1778

Billing Questions/ Concerns……..601.960.2000
For any other non-emergency issue in the City……311

City of Jackson, Mississippi
Division of Water/ Sewer Administration
200 South President Street
P. O. Box 17
Jacksons, Mississippi 39205-0017

# 2013 Annual Drinking Water Quality Report

## City of Jackson Surface Water System

## Public Water Supply Identification Number MS0250008

## May 30, 2014

We are pleased to present the 2013 Annual 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 water sources for this great city are the Ross Barnett Reservoir and the Pearl River (surface water) and are treated and provided to you through our two (2) state of the art Class "A" drinking water facilities: O. B. Curtis and J. H. Fewell Water Treatment Plants.

***Our mission is to provide clean, safe drinking water that meets Federal and State regulations, in adequate amounts and at the lowest possible cost.***

## 2013 Water Quality Data

The Mississippi Department of Environmental Quality has completed their source water assessment report which is available for review by appointment at the Water / Sewer Utilities Division Office, 200 S. President Street, Room 405, between the hours of 8:00 AM and 5:00 PM Monday through Friday. Call 601-960-2090 for appointment.

If you have any questions about this report or concerning your water utility, please contact Cynthia Hill, Water Plants Superintendent at 601-960-2417. We want our valued customers to be informed about their water utility. To participate in decisions that may affect the quality of the water, please attend any of our regularly scheduled City Council meetings. They are held every other Tuesday at either 6:00 PM or 10:00 AM within City Hall.

In order to ensure that your tap water is safe to drink, the City of Jackson Surface Water System routinely monitors for constituents in your drinking water according to Federal and State laws. These laws limit the amount of certain contaminants in your drinking water. This table shows the results of our monitoring for the period of January 1, 2013 to December 31, 2013.

## Information about Your Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. 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. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage, wildlife, and other sources.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges.
- 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.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, contact the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

## The Water Treatment Process

Your water is treated in a series of processes applied in sequence that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals called coagulants to form tiny sticky particles called "floc", which attract the dirt particles. Flocculation is the formation of larger flocs from smaller flocs and is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, and anthracite to remove even smaller particles. Ultraviolet light with a small amount of chlorine and ammonia is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.

## TEST RESULTS

| Contaminant | Violation Yes/No | Sample Date | Level Detected | Range of Detects or # of Samples Exceeding AL | MCLG | MCL , TT, AL | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| ***Microbiological Contaminants*** | | | | | | | |
| Total Organic Carbon (TOC) (% removal) | No | 2013 | 1.44 *average* | 45% - 50% | N/A | TT based on untreated water TOC | Naturally present in the environment |
| Turbidity (NTU) - 0.3 NTU in 95% of samples | No | 2013 | 0.51 *(max)* | Lowest monthly percentage below 0.3 NTU = 96.1 | N/A | TT for conventional filtration | Soil runoff |
| ***Inorganic Contaminants*** | | | | | | | |
| Barium (ppm) | No | 2013 | 0.03 | 0.02 - 0.03 | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Cyanides (ppb) | No | 2013 | 0.04 | ND - 0.04 | 200 | 200 | Discharge from steel and pulp mills; Discharge from plastic and fertilizer factories |
| Copper (ppm)* - consumer taps level; 90th percentile | No | 2012 | 0.2 | 0 exceeding | 1.3 | AL = 1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Fluoride (ppm)** | No | 2013 | 0.8 | 0.7 - 0.8 | 4 | 4 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from |
| Lead (ppb)* -consumer taps level; 90th percentile | No | 2012 | 14 | 5 exceeding | 0 | AL = 15 | Corrosion of household plumbing systems, erosion of natural deposits |
| Nitrate (ppm) | No | 2013 | 0.09 | ND - 0.09 | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Nitrite (ppm) | No | 2013 | 0.04 | ND - 0.04 | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Nitrate-Nitrite (ppm) | No | 2013 | 0.11 | 0.11 | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| ***Disinfection Byproducts*** | | | | | | | |
| Chloramines (ppm) | No | 2013 | 2.0 | 0.20 - 4.10 | 4 | 4 | Water additive used to control microbes |
| Chlorine Dioxide (ppb) | No | 2013 | 15 | ND - 61 | 800 | 800 | Water additive used to control microbes |
| Chlorite (ppm) | No | 2013 | 0.14 | ND - 0.76 | 0.8 | 1 | Byproduct of drinking water disinfection |
| Haloacetic Acids (ppb) (***LRAA=Locational Running Annual Average) | | | | | | | |
| Site 1 | No | 2013 | 37.0 | 23.0 - 58.0 | N/A | 60 | Byproduct of drinking water disinfection |
| Site 2 | | | 37.3 | 23.0 - 59.0 | | | |
| Site 3 | | | 33.8 | 22.0 - 66.0 | | | |
| Site 4 ***highest LRAA | | | 41.0 | 26.0 - 85.0 | | | |
| Site 5 | | | 39.3 | 24.0 - 66.0 | | | |
| Site 6 | | | 25.8 | 10.0 - 46.0 | | | |
| Site 7 | | | 38.3 | 24.0 - 64.0 | | | |
| Site 8 | | | 39.0 | 24.0 - 75.0 | | | |
| Total Trihalomethanes (ppb) (***LRAA=Locational Running Annual Average) | | | | | | | |
| Site 1 | No | 2013 | 27.5 | 24.4 - 43.0 | N/A | 80 | Byproduct of drinking water disinfection |
| Site 2 | | | 36.9 | 27.2 - 45.0 | | | |
| Site 3 | | | 26.0 | 26.0 - 39.5 | | | |
| Site 4 | | | 33.0 | 26.0 - 42.2 | | | |
| Site 5 | | | 28.4 | 25.0 - 42.3 | | | |
| Site 6 | | | 22.5 | 22.5 - 34.9 | | | |
| Site 7 | | | 38.5 | 27.0 - 49.6 | | | |
| Site 8 ***highest LRAA | | | 49.0 | 30.5 - 49.0 | | | |
| ***Unregulated Contaminants*** *(averages)* | | | | | | | |
| Hexavalent Chromium (ppb) | N/A | 2013 | 0.09 | ND - 0.21 | N/A | N/A | Unregulated contaminants don't have a USEPA drinking water standard. They are monitored to help the EPA decide whether a standard should be set. |
| Chlorate (ppb) | N/A | 2013 | 60.5 | ND - 110 | N/A | N/A | |
| Chromium - total (ppb) | N/A | 2013 | 0.29 | ND - 0.29 | N/A | N/A | |
| Strontium (ppb) | N/A | 2013 | 36.9 | 26 - 60 | N/A | N/A | |
| Vanadium (ppb) | N/A | 2013 | 0.47 | ND - 0.95 | N/A | N/A | |
| N-nitroso-dimethylamine* (ppb) | N/A | 2010 | 0.02 | 0.01 - 0.05 | N/A | N/A | |

**Most recent sample. No sample required for 2013.*

***Fluoride level is routinely adjusted to the MS State Department of Health's recommended level of 0.7 - 1.3 mg/L.*

## For Customers with Special Health Concerns

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 (800-426-4791).

## 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 Jackson 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 and copper testing for $20 per sample. Please contact 601-576-7582 if you want to have your water tested.

## Fluoridation and Your Drinking Water

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", CITY OF JACKSON is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year in which average fluoride sample results were within the optimal range of 0.7 to 1.3 ppm was 12. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range was 91%.

As you can see by the table, our system had **NO VIOLATIONS.** We're proud that our water meets or exceeds all Federal and State requirements.

City of Jackson Water Plants received a **4.7 out of 5.0** rating from the Mississippi Department of Health for our 2013 Inspection.

### ABBREVIATIONS & DEFINITIONS

These definitions have been provided to help you better understand the table above.

**Non-Detects (ND):** laboratory analysis indicates that the constituent is not present.
**Parts per million (ppm)**: one part per million corresponds to one minute in two years or a single penny in $10,000.
**Parts per billion (ppb)**: 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.
**Millirems per year (mrem/yr)**: measure of radiation absorbed by the body.
**NTU**: Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
**Action Level (AL)**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
**Treatment Technique (TT)**: A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
**Maximum Contaminant Level (MCL)**: 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 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.