

## 2023 Annual Drinking Water Quality Report April 2, 2024 PWS ID # 0380005

The City of Meridian is pleased to present to you this year's Annual Water Quality report. This report is designed to inform you about the quality of the water we produce and services we deliver to you everyday. 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 to protect our water resources. We are committed to insuring the quality of your drinking water.

Our water source consists of eight wells pumping from the LOWER WILCOX AQUIFIER. The depth of these wells range from 747' to 948'. A source water assessment has been completed by the Mississippi State Department of Health and can be reviewed in the utility billing office at 311 27th Ave.

## THE CITY IS PLEASED TO REPORT THAT OUR DRINKING WATER MEETS OR EXCEEDS ALL FEDERAL AND STATE REQUIREMENTS.

The City of Meridian routinely monitors for 154 constituents or potential contaminants in your drinking water according to Federal and State Laws. Of these 154 constituents, we had 0 detects in 2023. The table on the back shows the results of our monitoring for the period of January 1st to December 31st, 2023.

**Fluoride.** To comply with the "Regulation Governing Fluoridation of Community Water Supplies", MS0380005 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 0.6 – 1.2 parts per million (ppm) was 12. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6 - 1.2 ppm was 92%. The number of months samples were collected and analyzed in the previous calendar year was 12. **Important Information Regarding Your Drinking Water** All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. 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 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.** 

## **VULNERABLITITY:**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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).

**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 Meridian 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

## **QUESTIONS:**

We at the City of Meridian work around the clock to provide top quality water to every tap. If you have any questions about this report or concerning your water utility, please contact one of our Certified Freshwater Plant Operators, at 1598 B-Street or call 601-485-1975. We want our valued customers to be informed about their water utility. If you want to learn more please attend our scheduled meeting on Tuesday, June 11, 2024 at 4:00 p.m. in the Public Works Conference Room located at 311 27th Avenue South. 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. Sincerely.

David Hodge, Public Works Director

DID YOU KNOW? The City of Meridian: Was incorporated on February 10, 1860. Has a population of 34,424. Covers 54.3 square miles. Has 330 miles of paved streets with 6,756 street lights. Has approximately 13,728 water services in place with an average of 12,329 active accounts. Maintains approximately 432 miles of water lines, 445 miles of sewer lines and maintains approximately 65 lift stations. Has two freshwater treatment plants that produced 1.7 billion gallons of water last year Has 5 above ground storage tanks that have the total capacity of storing 12 million gallons of water. Has two wastewater treatment plants that treated approximately 2.47 billion gallons of raw sewage last year. Employs 369 full time workers and approximately 133 part time workers throughout 2023.

Bad Debt was 1% of total services billed. For every \$100 billed all but \$1.00 was collected.

In the data table on the reverse of this page you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below.

Init descriptions									
Term	Definition								
μg/L	Number of micrograms of substance in one liter of water								
ppm	parts per million or milligrams per liter (mg/L)								
ppb	parts per billion, or micrograms per liter ( $\mu$ g/L)								
positive samples/yr	the number of positive samples taken that year								
% positive samples/month	Percent of samples taken monthly that were positive								
NA	not applicable								
ND	not detected								
NR	Monitoring not required, but recommended								

mportant Drinking water Definitions							
Term	Definition						
MCLG	Maximum Contaminant Level Goal: 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						
MCL	Maximum Contaminant Level: 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 tech- nology						
TT	Treatment Technique: a required process intended to reduce the level of a contaminant in drink- ing water.						
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.						
Variances and Exemptions	State or EPA permission not to meet an MCL or a treatment technique under certain conditions						
MRDLG	Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no know or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.						
	Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking wa- ter. There is convincing evidence that addition of a disinfectant is necessary for control of micro-						
MRDL	bial contaminants						
MNR	Monitored Not Regulated						
MPL	State Assigned Maximum Permissible Level						

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Water	ange	Sample								
			Low	High	Date	Violation	1		Typical Source				
Disinfectants & Disinfectant By-Products													
(There is convincing evidence that addition of a disinfectant is necessary for control of microb	TTHMs [Total Trihalomethanes] (ppb) N/A 80 19.9 4.01 19.9 2023 No By-product of drinking water disinfection												
				_									
Haloacetic Acids (HAA5) (ppb)	N/A	60		3.43	2023	No			ter disinfection				
Chlorine (as Cl <sub>2</sub> ) (ppm) 4 4 2.00 0.80 3.10 2023 No Water additive used to control microbes													
Inorganic Contaminants Nitrate [measured as Nitrogen] (ppm) 10 10 < 0.08 < 0.08 < 0.08 2022 No Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.													
			<0.02 <0.02				-	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.					
Nitrite [measured as Nitrogen] (ppm)	1	1			2022	No			Leaching from septic tanks, sewage; Erosion of natural deposits.				
Nitrate-Nitrite [as Nitrogen] (ppm)	10	10	<0.1 <0.1	<0.1	2022	No			Leaching from septic tanks, sewage; Erosion of natural deposits.				
Cyanide [as Free Cn] (ppm)	0.2	0.2	<0.015 <0.015		2022	No			I fertilizer factories; discharge from steel/metal factories				
Fluoride (ppm)	4	4	0.72 0.63	0.808	2022	No			s; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.				
Antimony, Total (ppm)	0.006	0.006	<0.000 <0.000		2022	No			a refineries; fire retardants; ceramics; electronics; solder				
Arsenic (ppm)	0		<0.000 <0.000	_	2022	No			s; runoff from orchards, runoff from glass and electronics production wastes				
Barium (ppm)	2	2	0.0315 0.030	5 0.0323	2022	No	Discharge o	f drilling waste	ers; discharge from metal refineries; erosion of natural deposits				
Beryllium, Total (ppm)	0.004	0.004	<0.000 <0.000	5 <0.0005	2022	No	Discharge from metal refineries and coal-burning factories; discharge from electrical ,aerospace, and defense industries						
Cadmium (ppm)	0.005	0.005	<0.000 <0.000	5 <0.0005	2022	No	Corrosion o	f galvanized pi	pes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints				
Chromium (ppm)	0.1	0.1	<0.005 <0.000	5 <0.0005	2022	No	Discharge fr	rom steel and p	oulp mills; erosion of natural deposits				
Mercury (ppm)	0.002	0.002	<0.000 <0.000	5 <0.0005	2022	No	Erosion of n	atural deposit	s; discharge from refineries and factories; runoff from landfills and croplands				
Selenium (ppm)	0.05	0.05	<0.002 <0.000	5 <0.0005	2022	No	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines						
Thallium, Total (ppm)	0.0005	0.002	<0.000 <0.000	5 <0.0005	2022	No	Leaching fro	om ore-proces	sing sites; discharge from electronics, glass, and drug factories				
Microbiological Contaminants	T	T		-			-						
Total Coliform (%positive samples/month)	0	5	0 N/A	N/A	2023	No	Naturally pr	resent in the er	nvironment				
Fecal Coliform/E. coli - in the distribution system (positive samples)	0	0	0 N/A	N/A	2023	No	Human and	animal fecal w	vaste				
A violation occurs when a routine sample and a repeat sample, in any	given mor	th, are t	otal coliform po	sitive, and	one is also	o fecal coli	iform or E. col	i positive.					
Radioactive Contaminants							<u> </u>						
Combined Uranium (µg/L)	0	30	<0.5 N/A	N/A	2021	No		Erosion of natural deposits					
Gross Alpha, Incl. Radium	U	15	1.7 N/A	N/A	2019	No		atural deposit					
Contaminants	MCLG	AL	Your Wa	ter Sa	mple Date		nples Ex- ding AL	Exceeds AL	Typical Source				
Inorganic Contaminants													
Lead - Action level at consumer taps (ppb)	0 15		1.2		2023		0	No	Corrosion of household plumbing systems; Erosion of natural deposits				
Copper - action level at consumer taps (ppm)	1.3	1.3	0.017	3	2023		0	No	Corrosion of household plumbing systems; Erosion of natural deposits				

Contaminants		MCL, TT, or	Your	Range		Sample				
		6 MRDL	Water	Low	High	Date	Violation	Typical Source		
Volatile Organic Compounds	<u> </u>	<u> </u>	<u> </u>	<u>.</u>						
1,2,4-TRICHLOROBENZENE (ppb)	N/A	70	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
CIS-1,2-DICHLOROETHYLENE (ppb)	N/A	70	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
XYLENES, TOTAL (ppb)	N /A	10000	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
DICHLOROMETHANE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
O-DICHLOROBENZENE (ppb)	N/A	600	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
P-DICHLOROBENZENE (ppb)	N/A	75	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
VINYL CHLORIDE (ppb)	N/A	2	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
1,1-DICHLOROETHYLENE (ppb)	N/A	7	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
TRANS-1,2-DICHLOROETHYLENE (ppb)	N/A	100	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
1,2-DICHLOROETHANE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
1,1,1-TRICHLOROETHANE (ppb)	N/A	200	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
CARBON TETRACHLORIDE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
1,2-DICHLOROPROPANE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
TRICHLOROETHYLENE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
1,1,2-TRICHLOROETHANE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
TETRACHLOROETHYLENE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
CHLOROBENZENE (ppb)	N/A	100	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
BENZENE (ppb)	N/A	5	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
TOLUENE (ppb)	N/A	1000	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
ETHYLBENZENE (ppb)	N/A	700	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		
STYRENE (ppb)	N/A	100	<0.05	<0.05	<0.05	2022	No	Paints, pharmaceuticals, refrigerants, pesticides and other commonly used chemicals		

Unregulated Contaminants										
(Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.)										
Contaminants	MCLG	MCL,	Your Water	Low	High	Date	Violation	Typical Source		
Bromide (µg/L)	N/A	N/A	46.4	27.9	46.4	2019	N/A	Naturally occurring element		
Total Organic Carbon (μg/L)	N/A	N/A	1020	N/A	N/A	2019	N/A	Naturally occurring element		
HAA5 (µg/L)	N/A	N/A	2.81	1.56	2.81	2019	N/A	y-product of drinking water disinfection		
HAA6Br (µg/L)	N/A	N/A	3.39	1.82	3.39	2019	N/A	-product of drinking water disinfection		
HAA9 (µg/L)	N/A	N/A	4.89	2.92	4.89	2019	N/A	By-product of drinking water disinfection		
Sodium (ppb)	N/A	N/A	33100	27600	38600	2022	N/A	Road salt, Water treatment chemicals, water softeners, and sewage effluents		
PFBS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFHpA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFHxS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFNA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFOS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFOA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFDA (µg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFDoA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFHxA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFUnA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
11C1-PF3OUdS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
9C1-PF3ONS (µg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
ADONA (µg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
HFPO-DA (µg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFBA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
6:2 FTS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
4:2 FTS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
8:2 FTS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFMPA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFPeA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFMBA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFEESA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
NFDHA (µg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFPeS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFHpS (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFTA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
PFTrDA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
NEtFOSAA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
NMeFOSAA (μg/L)	N/A	N/A	Not detected	N/A	N/A	2023	N/A	Per- and Polyfluoroalkyl substance manufactured from industry and consumer products. Commonly found in soil, fire extinguishing foam, nonstick products and common household items.		
Lithium (ppm)	N/A	N/A	14	12	14	2023	N/A	Naturally occurring element		