

## 2024 Annual Drinking Water Quality

Report Town of Lyon

PWS#: 0140010

June 2025

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 providing you with information because informed customers are our best allies. Our water source is from wells drawing from the Lower Wilcox Aquifer.

The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identify 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 well for the Town of Lyon has received moderate rankings in terms of susceptibility to contamination.

If you have any questions about this report or concerning your water utility, please contact J. Robinson, Water Operator at 662.541-2863. We want our valued customers to be informed about their water utility. If you want to learn more, please join us at any of our regularly scheduled meetings. They are currently being held on the first Tuesday of the month at 6:00pm at Lyon Town Hall located at 111 Park Street, Lyon, MS.

We routinely monitor for contaminants 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 1<sup>st</sup> thru December 31<sup>st</sup>, 2024. In cases where monitoring wasn't required in 2024, 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 amounts 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 contaminants. It's important to remember that the presence of these contaminants 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 to 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.

*Level 1 Assessment (LVIA)* - A study of a water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system

*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.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl2) (ppm)	4	4	1.4	1.3	1.4	2024	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	.014	12.4	15.3	2024	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	.063	58.9	65.5	2024	No	By-product of drinking water disinfection
*Some people who drink water containing Total Trihalomethanes and Haloacetic Acids in excess of the maximum contaminant level (MCL) over many years may experience problems with the liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.								

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Nitrate	10	10	<.08	2023	0	No	
Nitrite	1	1	<.02	2023	0	No	
Nitrate-Nitrite	10	10	<.1	2023	0	No	
Copper - action level at consumer taps (ppm)	1.3	1.3	.002	2022	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	.8	2022	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Antimony, Total	.006		<.0005	2022	0		
Arsenic	.010		.00016	2022	0		
Barium	2		.0089	2022	0		
Beryllium, Total	.004		<.0005	2022	0		
Cadmium	.005		<.0005	2022	0		
Chromium	.1		.0013	2022	0		
Fluoride	4		.353	2022	0		
Mercury	.002		<.0005	2022	0		
Selenium	.02		.0054	2022	0		
Thallium, Total	.002		.0006	2022	0		

Contaminants	MCL(Ppb)	Your Water	Sample Date	Violation
<b>Volatile Organics</b>				
1,2,4 Trichlorobenzene	70	<.5	2021	No
CIS-1,2-Dichloroethylene	70	<.5	2021	No
Xylenes, Total	10000	.993	2021	No
Dichloromethane	5	<.5	2021	No
O-Dichlorobenzene	600	<.5	2021	No
P-Dichlorobenzene	75	<.5	2021	No
Vinyl Chloride	2	<.5	2021	No
1,1-Dichloroethylene	7	<.5	2021	No
Trans – 1,2 - Dichloroethylene	100	<.5	2021	No
1,2 – Dichloroethylene	5	<.5	2021	No

1,1,1 – Trichloroethane	200	<.5	2021	No
Carbon Tetrachloride	5	<.5	2021	No
1,2 – Dichloropropane	5	<.5	2021	No
Tichloroethylene	5	<.5	2021	No
1,1,2 – Trichloroethane	5	<.5	2021	No
Tetrachloroethylene	5	<.5	2021	No
Chlorobenzene	100	<.5	2021	No
Benzene	5	<.5	2021	No
Toluene	100	<.5	2021	No
Ethylbenzene	700	<.5	2021	No
Styrene	100	<.5	2021	No

Lead and Copper				
Lead	.015	.0018	2022	No
Copper, Free	1.3	.852	2022	No

Lead and Copper 90 <sup>th</sup> Percentile			
Lead 90 <sup>th</sup>	# of Samples	Copper 90 <sup>th</sup>	# of Samples
.002	5	.015	5
Action Level .015		Action Level 1.3	

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	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	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 technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	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	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant 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.
MNR	MNR: Monitored Not Regulated

Important Drinking Water Definitions	
MPL	MPL: State Assigned Maximum Permissible Level

*In addition to the above contaminants, we tested for 20 additional organic chemicals for which the state and EPA have set standards. We found no detectable levels of those chemicals.*

*\* Most recent sample. No sample required for 2024*

Your system had 2 violations over the course of the year 2024. One of the violations for failure to monitor during the 2<sup>nd</sup> quarter of the year 2024 for DBPs. One for failure to monitor for NO2-NO3 for the year of 2024. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that the EPA has determined that your water IS SAFE at these levels.

## Lead Education Statement

Lead has been known to 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 Town of Lyon is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Town of Lyon and ask for the water operator. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>. The MS Public Health Laboratory (MPHL) can provide information on lead and copper testing and/or other laboratories certified to analyze lead and copper in drinking water. MPHL can be reached at 601-576-7582 (Jackson, MS).

The Town of Lyon also received violations for failure to prepare and report the Lead Service Line Inventory (LSLI) to the MS State Department of Health, Bureau of Public Supply, by October 16, 2024, as required by the Lead and Copper Rule Revisions. We submitted the Lead Service Line Inventory on February 05, 2024. This Lead Service Line Inventory can be obtained by going to Lyon Town Hall and requesting a copy.

We are required to monitor your drinking water for specific contaminants 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. Our water system 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 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 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 microbial contaminants are available from the Safe Drinking Water Hotline 1.800.426.4791.

The Town of Lyon works around the clock to provide top quality water to every tap. 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.

