2017 Annual Water Quality Report
Osage County RWD #1
PWS ID# OK3005704

We are 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 supplied to you each day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We would like you to be informed of the efforts being made to continually improve water treatment processes and protect our water resources. We are committed to insuring the quality of your drinking water.

Is my water safe?

We provide safe drinking water to your home. Our drinking water is purchased from Bartlesville. They treat water from Hudson Lake and Hulah Lake at the Bartlesville water plant and then it is distributed to our system. We are required to test for bacteriological, lead and copper, and other possible contaminants to ensure that your drinking water is safe for consumption.

Do I need to take special precautions?

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up contaminants resulting from animals or human activity: Contaminants that may be present in source water include:

- 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;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Abbreviations:	
ppm	parts per million, or milligrams per Liter (mg/L)
ppb	parts per billion, or micrograms per Liter (µg/L)
pCi/L	picocuries per Liter (a measure of radioactivity)
MCLG	Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected risks 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.
NA	not applicable

For More Information:

If you have any questions about this report or concerning your water utility, please contact Kaleb Mackey at (918) 535-2302. We want our valued customers to be informed about their drinking water. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

2017 Monitoring Results for Osage County RWD #1

All test results are for the year 2017 unless otherwise noted

Contaminants	Sample Date	90th percentile	# sites over AL	MCLG	Action Level (AL)	Units	Violation	Likely Sources of Contamination
Lead and Copper								
Copper	2017	0.021	0	1.3	1.3	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing
Lead	2017	< 5	0	15	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

Contaminants	Sample Date	Highest Level Detected	Range	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Inorganic Contaminants (Bartlesville)								
Barium	2013	0.0481	0.0481 - 0.0481	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2017	1.04	0.46 - 1.04	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.32	0.32 – 0.32	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; Erosion of natural deposits.
Disinfectants and Disinfection By-Products (Osage Co RWD #1)								
Chlorine	2017	3.1	1.0 – 3.1	MRDLG =4	MRDL =4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2017	22	10.6 – 26.6	NA	60	ppb	No	By-product of drinking water disinfection
Total Trihalo-methanes (TTHM)	2017	40	19.4 – 48.6	NA	80	ppb	No	By-product of drinking water disinfection.

Violations

Violation Type	Begin	End	Explanation
Consumer Confidence Rule: The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems			
CCR Report	7/1/2017	2017	We failed to provide to you, our drinking water customers, and/or the DEQ, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.
Haloacetic Acids (HAA5)*: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.			
MONITORING, ROUTINE (DBP), MAJOR	4/1/2014	6/30/2014	We failed to test our drinking water for the contaminant and period indicated. Because ofthis failure, we cannot be sure of the quality of our drinking water during the period indicated.
	7/1/2014	9/30/2014	
	10/1/2016	12/31/2016	
Total Trihalomethanes (TTHM): Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
MONITORING, ROUTINE (DBP), MAJOR	4/1/2014	6/30/2014	We failed to test our drinking water for the contaminant and period indicated. Because ofthis failure, we cannot be sure of the quality of our drinking water during the period indicated.
	7/1/2014	9/30/2014	
	10/1/2014	12/31/2016	

Other Notes

Additional Information about 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. We are 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..