2015 Annual Water Quality Report
City of Woodward
PWS ID# OK2007701

We are once again pleased to present this year's Annual Water Quality Report. This report is designed to inform our clients of all water testing results between January 1 and December 31, 2015. Our constant goal is to provide a safe and dependable supply of drinking water that meets all state and federal standards. We continually strive to improve water treatment methods and protect our water resources. We are committed to insuring the quality of your drinking water.

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Our source water is groundwater drawn from two well fields. The North well field, located five miles north of town, produces from the North Canadian River Aquifer and has 26 wells. The Southwest well field, located five miles southwest of town, produces from the Ogallala Aquifer and has 39 wells. There are a total of 65 wells that supply Woodward with drinking water. Woodward is required to test for bacteriological and other contaminants that may be present in the drinking water. All measured values were within the required levels. There were no reported violations.

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)
Mrem/ yr	Millirems per year (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.
MCL	MCLGs allow for a margin of safety.
NA	Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water.
	not applicable

For More Information

For any questions relating to your drinking water please contact Rick Dryden, Water Superintendent, at (580) 256-2280. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (800-426-4791). We want our valued customers to be informed about their water.

2015 Monitoring Results for Woodward

All test results are for the year 2015 unless otherwise noted[1]

Contaminant	Sample Date	Highest Level Detected	Range	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Inorganic Contaminants								
Barium	2015	0.095	0.095- 0.095	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2015	0.2	0.2 - 0.2	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizers and aluminum factories
Nitrate (measured as Nitrogen)	2015	5	1.35- 4.56	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants								
Beta/photon emitters	2015	4	4 - 4	0	4	Mrem/ yr	No	Decay of natural and manmade deposits.
Combined Radium 226/228	2015	1.4	1.4 - 1.4	0	5	pCi/L	No	Erosion of natural deposits
Disinfection and Disinfection Byproducts								
Chlorine	2015	1	1 - 1	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes
HAA5	2015	2	0.0- 3.3	NA	60	ppb	No	Byproduct of Drinking Water Disinfection
TTHM	2015	15	6.76- 22.6	NA	80	ppb	No	Byproduct of Drinking Water Disinfection

Contaminant	Sample Date	90th Percentile	Action Level (AL)	MCLG	# Sites Over AL	Units	Violation	Likely Sources of Contamination
Lead and Copper								
Copper	2015	0.207	1.3	1.3	0	ppm	No	Erosion of natural deposits; Corrosion of household plumbing systems.

Violations Table

E. Coli			
Fecal coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special risk for infants, young, and elderly. These must be sampled for if a bacteria sample is found to be positive for total coliforms.			
Violation Type	Begin	End	Explanation
Monitoring Ground Water Rule triggered / Additional Major	09/25/2014	2015	We failed to collect follow-up samples within 24 hours of learning of the total coliform positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected. **This includes when there is a positive sample in another water system that we sell water to**. There were no positive samples in our distribution system.