

2017 Annual Water Quality Report

City of Blackwell

PWS ID# OK1021101

We are pleased to present this year’s Annual Water Quality Report. This report is designed to inform you about the quality of the water supplied to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We would like our clients to be informed of the efforts being made to continually improve our water treatment process and protect our water resources. We are committed to insuring the quality of your drinking water.

Is my water safe?

The Blackwell Water Treatment Plant treats water from Chikaskia River and provides safe drinking water to your home. We are required to test for bacteriological, disinfectants and disinfection byproducts, lead and copper, arsenic, nitrate and nitrite, and organic and inorganic contaminates. We regularly monitor these drinking water parameters to ensure the quality of your water.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Why are there contaminants in my drinking water?

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. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. 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, 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.
- 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;

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. 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:

Contact Jim Hoos, at (580) 363-1177. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

2017 Monitoring Results for The City of Blackwell

All test results are for the year 2017 unless otherwise noted

Contaminants	Sample Date	Highest Level Detected	Range	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Inorganic Contaminants								
Barium	2013	0.0248	0.0248- 0.0248	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate-Nitrite [measured as Nitrogen]	2018	0.79	0.79 – 0.79	10	10	ppm	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Radioactive Contaminants								
Beta/photon Emitters	2014	3.41	3.41- 3.41	0	50	pCi/L	No	Decay of natural and man-made deposits.
Combined Radium 226/228	2014	0.311	0.311- 0.311	0	5	pCi/L	No	Erosion of natural deposits
Gross Alpha excluding Radon and Uranium	2014	2.19	1.1-2.19	0	15	pCi/L	No	Erosion of natural deposits
Uranium	2014	1.63	1.63-1.63	0	30	µg/L	No	Erosion of natural deposits
Disinfectants and Disinfection By-Products								
Chlorine	2017	1	1 - 1	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
HAA5	2017	21	13.1 - 33.7	NA	60	ppb	No	By-product of drinking water chlorination
TTHM	2017	114	74.5 - 151	NA	80	ppb	Yes	By-product of drinking water chlorination
Synthetic Organic Contaminants Including Pesticides and Herbicides								
Atrazine	2017	0.412	0.248 - 0.412	3	3	ppb	No	Runoff from herbicide.

Contaminant	Sample Date	90 th Percentile	Action Level (AL)	MCLG	# Sites Over AL	Units	Violation	Likely Sources of Contamination
Lead and Copper								
Copper	2015	0.028	1.3	1.3	0	ppm	No	Erosion of natural deposits; Corrosion of household plumbing systems.

Violations Table

Violation Type	Violation Begin	Violation End	Violation Explanation
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.			
Failure to submit OEL report for THM	12/30/2017	2017	We failed to submit our operational evaluation level (OEL) report to our regulator. The report is needed to determine best treatment practices necessary to minimize possible future exceedances of THM.
MCL, Local Running Annual Average	1/1/2017	3/31/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
	4/1/2017	6/30/2017	
	7/1/2017	9/30/2017	
	10/1/2017	12/31/2017	
Consumer Confidence Rule			
CCR Report	7/1/2016	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.
	7/1/2017	2017	