

2016 WATER QUALITY REPORT

Water testing performed in 2016

SPANISH (ESPAÑOL)

Este informe contiene informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducir la informacion.

INFORMATION ON THE INTERNET

The U.S. EPA Office of Water (www.epa.gov/watrhme) and the Centers for Disease Control and Prevention (www.cdc.gov) web sites provide a substantial amount of information on many issues relating to water resources, conservation, and public health.

CONTACT US

If you have any questions about your water quality report, please call (580) 529-2703. We want our customers to be informed about their water quality. The City of Lawton Water Authority meets on an as-needed basis. City council meetings and Water Authority meetings are posted in the city clerk's office.

- Revenue Service(580) 581-3308
- City Clerk.....(580) 581-3307
- City Manager.....(580) 581-3301
- Public Works Admin...(580) 581-3410
- Water & Sewer.....(580) 581-3324
- Medicine Park WTP.....(580) 529-2703
- Southeast WTP.....(580) 581-3532



WHERE DOES MY WATER COME FROM?

The water for the City of Lawton is supplied entirely from surface sources. The primary water supply for the Medicine Park location is Lake Lawtonka. The watershed for Lake Lawtonka is approximately 92 square miles. The water supply for the Southeast location comes from Lake Ellsworth and Lake Waurika. Lake Ellsworth watershed is approximately 251 square miles and Lake Waurika watershed is approximately 562 square miles.

SOURCE WATER ASSESSMENT AND PROTECTION

The City of Lawton continues to work on its source water protection program. This is an ongoing effort to identify the sources of possible pollution and to minimize its effect on the water supply. ODEQ has given the City of Lawton watersheds, Lake Lawtonka and Lake Ellsworth, a MODERATE susceptibility rating. Your help is needed for this program to succeed. For more information, please visit: <http://www.epa.gov/owow/watershed>. To report sources of pollution on Lake Lawtonka or Lake Ellsworth reservoirs or their watersheds, please contact the water treatment plant at (580) 529-2703.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by the public water systems. The Food and Drug Administration (FDA) and Oklahoma Department of Environmental Quality (ODEQ) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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. Substances that may be present in source water include:

- Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;
- Inorganic Contaminants, such as salts and metals, which may be natural 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 stormwater runoff, and septic systems;
- Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

2016 WATER QUALITY DATA

SAMPLING RESULTS

The table below lists all of the drinking water contaminants that we detected during the 2016 calendar year. Although many more contaminants were tested, only those substances listed below were found in your water. Unless otherwise noted, the data presented in this table is from testing done in the 2016 calendar year. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year.

Medicine Park Facility							
Microbiological Contaminants							
Contaminant	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Total Organic Carbon (% Removal)	NA	TT	43	NA	2016	NO	Naturally present in the environment
Turbidity (NTU) (highest occurrence)	NA	1	0.14	NA	9/30/2016	No	Soil runoff
Inorganic Contaminants							
Arsenic (ppb)	0	10	ND	NA	2012	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.111	NA	2012	No	Discharge of drilling waste, discharge from metal refineries; erosion of natural deposits
Bromate (ppb)	0	10	ND	NA	2016	No	By-product of drinking water disinfection
Fluoride (ppm)	4	4	0.71	0.40-0.71	2016	No	Erosion of natural deposits; Runoff from orchards; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Mercury (ppb)	2	2	ND	NA	2012	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland.
Nitrate - Nitrite (ppm) (measured as Nitrogen)	10	10	0.13	NA	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm) (optional)	-	MPL	49.9	NA	2012	No	Naturally present in the environment
Radiochemical Contaminants							
Gross Alpha (pCi/L)	0	15	0.518	NA	2015	No	Erosion of natural deposits
Gross Beta (pCi/L)	0	50	3.54	NA	2015	No	Decay of natural and man-made deposits
Combined Radium 226/228 (pCi/L)	0	5	0.027	NA	2015	No	Decay of natural and man-made deposits
Uranium (ppb)	0	30	1.0	NA	2015	No	Erosion of natural deposits

Southeast Facility							
Microbiological Contaminants							
Contaminant	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Total Organic Carbon (% Removal)	NA	TT	42	NA	2016	No	Naturally present in the environment
Turbidity (NTU) (highest occurrence)	NA	1	0.14	NA	6/20/2016	No	Soil runoff
Inorganic Contaminants							
Arsenic (ppb)	0	10	ND	NA	2015	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.142	NA	2015	No	Discharge of drilling waste, discharge from metal refineries; erosion of natural deposits
Bromate (ppb)	0	10	ND	NA	2016	No	By-product of drinking water disinfection
Chlorine Dioxide (ppm)	0.8	0.8	0.23	ND-0.23	2016	No	Water additive used to control microbes
Chlorite (ppm)	0.8	1.0	0.039	ND-0.0675	2016	No	Water additive used to control microbes
Fluoride (ppm)	4	4	ND	NA	2015	No	Erosion of natural deposits; Runoff from orchards; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Mercury (ppb)	2	2	ND	NA	2015	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland.
Nitrate - Nitrite (ppm) (measured as Nitrogen)	10	10	0.51	NA	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm) (optional)	-	MPL	71.6	NA	2015	No	Naturally present in the environment
Radiochemical Contaminants							
Gross Alpha (pCi/L)	0	15	1.7	NA	2015	No	Erosion of natural deposits
Gross Beta (pCi/L)	0	50	1.59	NA	2015	No	Decay of natural and man-made deposits
Combined Radium 226/228 (pCi/L)	0	5	0.097	NA	2015	No	Decay of natural and man-made deposits
Uranium (ppb)	0	30	1.0	NA	2015	No	Erosion of natural deposits

Distribution Testing							
Disinfectants & Disinfectant By-Products							
Contaminant	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Haloacetic Acids (HAA5) (ppb)	NA	60	4.85	2.24-7.65	2016	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	NA	80	15.4	9.08-19.4	2016	No	By-product of drinking water chlorination
Inorganic Contaminants							
Copper (ppm)	1.3	1.3	0.357	ND-1.01	2015	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppm)	0	0.015	0.0109	ND-0.0311	2015	No	Corrosion of household plumbing systems; erosion of natural deposits
Microbiological Contaminants							
Total Coliform (% positive samples/month)	0	5	0	NA	2016	No	Naturally present in the environment

*As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through monitoring and testing that some contaminants have been detected. The EPA has determined that your water **IS SAFE** at these levels

Table Definitions

Term	Definition
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 technology.
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.
MPL:	State assigned Maximum Permissible Level
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.
MRDLG (Maximum Residual Disinfectant 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.
MRL:	Minimum Reporting Level
NA:	Not Applicable
ND:	Not Detected
pCi/L:	picocuries per Liter (a measure of radioactivity)
ppb (parts per billion):	One part substance per billion parts water (or micrograms per liter).
ppm (parts per million):	One part substance per million parts water (or milligrams per liter).
TT (Treatment Technique):	A required processes intended to reduce the level of a contaminant in drinking water.

LEAD IN DRINKING WATER

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 Lawton 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>.

NATURALLY OCCURRING BACTERIA

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil, and water. Some are harmful to us and some are not. Coliform bacteria are found common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we tested more than 1,174 samples (more than 90 samples every month) for coliform bacteria.

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 infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

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Bromate (ppb)	0	10	ND	NA	2016	No	By-product of drinking water disinfection
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