



## 2014 Water Quality Report Oklahoma State University Water System PWS 1020910

Energy Services (formerly Utilities and Energy Management) is pleased to present the 2014 Annual Water Quality Report (Consumer Confidence Report) to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last calendar year's water quality. We are committed to providing you with information because informed customers are our best allies.

### Where does my water come from?

OSU Stillwater is supplied potable water by the OSU Water Treatment Plant located west of campus at 226 South Pioneer. The plant's raw water source is Lake Carl Blackwell, located approximately 6 miles west of Stillwater. Throughout 2014 the water treatment plant supplied approximately 457 million gallons of drinking water to the campus.

The OSU Water Treatment Plant routinely monitors for numerous constituents in the drinking water according to Federal and State laws. We also participate in USEPA efforts to continually research methods to improve the effectiveness of water treatment and delivery.

For questions about this report or other information about the OSU Water Treatment Plant, call Wade Cleveland, OSU Water Treatment Plant Foreman at (405) 744-4262.

The sources of all 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 human activity.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain constituents in water provided by public water systems. FDA regulations establish limits to contaminants in bottled water. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. The presence of constituents does not necessarily indicate that the water poses a health risk.

Contaminants 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, 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.

**Important Health Information:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 for infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, information about contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's Safe Drinking Water Hotline (800)-426-4791**.

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## LEAD AND COPPER TESTING

SUBSTANCE (UNITS)	YEAR SAMPLED	MCLG	Action Level (AL)	90 <sup>TH</sup> PERCENTILE LEVEL	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE of Contamination
Copper (ppm)	2014	1.3	1.3	0.116	0	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead (ppb)	2014	0	115	0.997	0	N	Corrosion of household plumbing Systems. Erosion of natural Deposits.

## TURBIDITY

Limit (Treatment Technique)	Limit (Treatment Technique)	Level Detected	Violations	Sources of Contamination
Highest Single Measurement	1 NTU	0.33 NTU	N	Soil Runoff
Lowest Monthly % Meeting Limit	0.3 NTU	100%		

## INORGANIC CONTAMINANTS (Regulated Contaminant)

Parameter (units)	COLLECTI ON DATE	MCL	MCL G	Range of Detection	Maximum Level Detection	Violation	Sources of Contamination
Barium (ppm)	11-20-2013	0.165	2	0.165-0.165	0.165	N	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Flouride (ppm)	2014	4	4	0.00-0.83	0.83	N	Erosion of natural deposits. Water additive that promotes strong teeth. Fertilizer & aluminum factory discharge.

## RADIOACTIVE CONTAMINANTS (Regulated Contaminant)

Parameter	COLLECTION DATE	MCLG	MCL	Highest Level Detected	Range	Units	Violation	Sources of Contamination
Beta/Photon Emitters	2014	0	4	5.27	1.94-5.27	mrem/yr	N	Decay of natural and man-made deposits
Combined Radium 226/228	2014	0	5	1	0.026-0.413	pCi/L	N	Erosion of natural deposits
Gross Alpha excluding radon and uranium	2014	0	15	1	0.602-1.03	pCi/L	N	Erosion of natural deposits

## DISINFECTION BY-PRODUCTS (Regulated Contaminant)

Parameter	Test Year	MCL (ppb)	MCLG (ppb)	Maximum Level Detected (ppb)	Detection Range	Violations	Sources of Contamination
Total Trihalomethanes TTHM * (ppb)	2014	80	No goal for total	69	19.02-61.91	Y **	By-product of drinking water chlorination
Haloacetic Acids HAA5* (ppb)	2014	60	No goal for total	27	0-5.66	N	By-product of drinking water chlorination

\* Compliance is based on an average of four sites tested quarterly.

\*\* See last page notice on monitoring requirements.

## TOTAL ORGANIC CARBON (TOC)

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set.

## UNITS OF MEASUREMENT

**ppm:** Milligrams per liter, or parts per million – or one ounce in 7,350 gallons of water

**ppb:** Micrograms per liter, or parts per billion – or one ounce in 7,350,000 gallons of water

**pCi/L:** Picocurie per liter - Measure of radioactivity in water

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**Mrem/yr:** Millirems per year - Measure of radiation absorbed by the body

## Terms Used in This Report

**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:** *Maximum Contaminant Level* – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible, using the best available technology.

**NA:** *Not Applicable*

**NTU:** *Nephelometric Turbidity Unit* A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**BPQL:** *Below Practical Quantitation Level* – The method detection limit (MDL) adjusted for any dilutions or other changes made to the sample to deal with interference/matrix effects.

*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 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>.*

*While no detectable lead levels were found in the University's water, we encourage users that are concerned, or meet the at-risk profile, to use the above guidelines to minimize any possible lead exposure.*

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER  
Monitoring Requirements Not Met For OSU Water Plant**

Our water system violated a drinking water standard in the past year. Even though this was not an emergency, as our customers, you have the right to know what happened and what we did to correct this situation.

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinkingwater meets health standards. During the second quarter of 2015 we did not monitor or test or did not complete all monitoring or testing for **TTHM<sup>1</sup>** & **HAA5<sup>2</sup>** and therefore we cannot be sure of the quality of your drinking water during that time.*

OSU Water Plant has taken the following corrective actions to prevent monitoring violations from occurring in the future:

OSU conducted the required tests for TTHM and HAA5 later than qualified to meet the DEQ timeline. As a result of being late, OSU received a violation and is required to issue this public notice. OSU's Water Treatment Plant has since modified the scheduled sampling date to correspond with DEQ's designated monitoring time window. The required samples taken throughout the year showed we are meeting the drinking water standards.

For more information, please contact: Wade Cleveland @ (405) 744-4262

*Please share this information with all other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by **OSU Water Plant, PWSID#: OK1020910**

Date distributed: July 1, 2015

Signed: *Wade L. Cleveland*

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<sup>1</sup> Total trihalomethanes (TTHM) include chloroform, bromoform, bromodichloromethane, and chlorodibromomethane.

<sup>2</sup> Total haloacetic acids (HAA5) include monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.