

**2014 Annual Water Quality Report
Public Water Supply ID OK1021220**

Water Utilities
723 S. Lewis Street/P.O. Box 1449
Stillwater, Oklahoma 74076-1449

Office: (405) 742-8325
Fax: (405) 742-8324
Web: stillwater.org

The 2014 Annual Water Quality Report provides information about the quality of your drinking water; the efforts being made to improve the water treatment process; and how we protect our water resources. Our goal is to make sure you have a safe and dependable supply of drinking water. This report is also known as the *Consumer Confidence Report (CCR)*.

Stillwater's water source is Kaw Lake, which is located approximately 10 miles east of Ponca City in Kay County. Kaw Lake surface water is transported to the City's treatment facility located at 1022 West Yost Road. In 2014, the facility supplied more than 2.4 billion gallons of clean drinking water to the Stillwater citizens, five rural water districts, and several mobile home communities in Payne and Noble Counties.

The City of Stillwater routinely monitors your drinking water for constituents according to federal (EPA) and state (ODEQ) rules and regulations. The tables in this report show the results for Jan. 1, 2014 to Dec. 31, 2014. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. These constituents may be microbes, organic chemicals, radioactive or other materials. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

If you have any questions about this report or concerns about your water utility, please contact Water Utilities Department Director, William Millis at (405) 742-8325 or Water Treatment Plant Superintendent Scott Taylor at (405) 743-4580. You may also contact your mayor and city councilors.

To view this report or the *2014 Rural Water Corp #3 Service Area, Annual Water Quality Report*, go online to stillwater.org or contact the Water Distribution and Collection Service Center at (405) 533-8048 or by email at bdarbe@stillwater.org. Follow us on Twitter @SUAWater, for updates and news about water and sewer service.

DEFINITIONS:

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level (MCL) – 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 treatment technology.

Maximum Contaminant Level Goal (MCLG) – 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.

MRL – Minimum Reporting Level.

MPN/100 ml – Most Probable Number of colonies per 100 ml of sample.

Nephelometric Turbidity Unit (NTU) – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per billion (ppb) or Micrograms per liter (ug/L) – One part of contaminant per billion parts of water.

Parts per million (ppm) or Milligrams per liter (mg/L) – One part of contaminant per million parts of water.

Picocuries per liter (pCi/L) – Picocuries per liter is a measure of the radioactivity in water.

Treatment Technique (TT) – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

No Detection (ND) – No organisms detected in the sample.

WATER QUALITY DATA

Microbiological Contaminants

| Parameter | MCL | Maximum Level Detected | Lowest Monthly Percentage | Violations | Sources of Contaminant |
|----------------------------|--|-----------------------------|--|------------|------------------------|
| Turbidity in treated water | 0.3 NTU in 95% of all samples taken within one month | 0.25 NTU in a single sample | < 0.3 NTU in 100 % of all samples taken within one month | None | Soil Runoff |

Radionuclides

| Parameter | MCL | Level Detected | Range of Detections | Violations | Sources of Contaminant |
|------------------|-------------|----------------|-------------------------|------------|-----------------------------|
| Gross Alpha | 15 pCi/L | 1.05 pCi/L | 1.05 – 1.05 pCi/L | None | Erosion of natural deposits |
| Gross Beta | 4 mrem/Year | 5.0 pCi/L | 5.0 – 5.0 pCi/L | None | Erosion of natural deposits |
| Radium 226 + 228 | 5 pCi/L | 0.079 pCi/L | 0.079 – 0.079 pCi/L | None | Erosion of natural deposits |
| Uranium | 30.0 ug/L | BPQL ug/L | < 1.0 ug/L – < 1.0 ug/L | None | Erosion of natural deposits |

Disinfection By-products Rule Stage 2

| Parameter | MCL | Maximum Level Detected | Range of Detections | Violations | Sources of Contaminant |
|-----------------------|---------------------------------|------------------------|-----------------------|------------|---|
| Total Trihalomethanes | 80 ppb | 23.60 ppb | 8.89 ppb – 23.60 ppb | None | By-product of drinking water chlorination |
| HAA5 | 60 ppb | 22.80 ppb | 1.0 ppb – 22.80 ppb | None | By-product of drinking water chlorination |
| BROMATE | 10 ppb (running annual average) | < 5.0 ppb | < 5.0 ppb – < 5.0 ppb | None | By-product of drinking water ozonation |

Lead and Copper (Regulated at Customer's Tap)

| Parameter | Action Level * | 90% Sample Detected | Violations | Sources of Contaminant |
|-----------|----------------|---------------------|------------|---|
| Lead | 15 ppb | < BPQL ppb | None | Corrosion of household plumbing systems |
| Copper | 1.3 ppm | 0.018 ppm | None | Corrosion of household plumbing systems |

* Action Level – 90 % of samples must be below this level.

Organic Carbon

| Parameter | MCL | MCLG | Date Sampled | 2014 Removal Avg. | Removal Range (Low – High) | Violations | Sources of Contaminant |
|----------------------|----------------------------------|------|----------------------------|-------------------|----------------------------|------------|--------------------------------------|
| Total Organic Carbon | TT removal < 1.0% (running avg.) | N/A | Jan. – Dec. 2014 (monthly) | 1.36% | 0.74% – 2.33% | None | Naturally present in the environment |

Bacteriological Contaminants

| Parameter | MCL | Maximum Level Detected | Number of Positive E. Coliforms | MCLG | Violations | Likely Source of Contaminant |
|----------------|------------------------------------|------------------------|---------------------------------|------|------------|--------------------------------------|
| Coliform (TCR) | 5% of monthly samples are positive | 2.5% | 0 | 0 | None | Naturally present in the environment |

Inorganic Contaminants

| Parameter | MCL | Maximum Level Detected | Range of Detections | Date Sampled | MCLG | Violations | Sources of Contaminant |
|-------------------|----------|------------------------|---------------------|--------------|-----------|------------|---|
| Antimony | 6 ppb | BPQL | < 0.005 ppm | 12/5/14 | 6 ppb | None | Discharge from Petroleum refineries; Fire retardants; Ceramics; Electronics; Solder |
| Arsenic | 10 ppb | BPQL | < 0.005 ppm | 12/5/14 | N/A | None | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| Barium | 2 ppm | 0.052 ppm | 0.052 ppm | 12/5/14 | 2 ppm | None | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Fluoride | 4 ppm | 0.83 ppm | 0.58 – 0.83 ppm | Monthly | 4 ppm | None | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Nitrate + Nitrite | 10 ppm | 0.94 ppm | 0.94 ppm | 12/5/14 | 10 ppm | None | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Selenium | .05 ppm | BPQL | < 0.005 ppm | 12/5/14 | .05 ppm | None | Discharge from petroleum refineries; Erosion of natural deposits; Discharge from mines |
| Beryllium | .004 ppm | BPQL | < 0.004 ppm | 12/5/14 | .004 ppm | None | Discharge from metal refineries and coal burning factories; Discharge from electrical, aerospace, and defense industries |
| Cadmium | .005 ppm | BPQL | < 0.0010 ppm | 12/5/14 | .0010 ppm | None | Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints |
| Chromium | .10 ppm | BPQL | < 0.01 ppm | 12/5/14 | .10 ppm | None | Discharge from steel and pulp mills; Erosion from natural deposits |
| Mercury | .002 ppm | BPQL | < 0.0002 ppm | 12/5/14 | .002 ppm | None | Erosion from natural deposits; Discharge from refineries and factories; Runoff from landfills and crop lands |
| Nickel | N/A | BPQL | < 0.010 ppm | 12/5/14 | N/A | None | Discharge from steel mills and; Erosion from natural deposits |
| Thallium | .002 ppm | BPQL | < 0.0010 ppm | 12/5/14 | .0005 ppm | None | Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories |
| Sodium | N/A | 106 ppm | 106 ppm | 12/5/14 | N/A | None | Erosion from natural deposits |

Unregulated Contaminant Monitoring Rule 3 (Entry Point To Distribution)

| Analyte | Results (1/8/2014) | Results (4/8/2014) | Results (7/8/2014) |
|-----------------------------------|--------------------|--------------------|--------------------|
| Chromium (total) | < 0.2 ppb | < 0.2 ppb | 0.329 ppb |
| Cobalt | < 1.0 ppb | < 1.0 ppb | < 1.0 ppb |
| Molybdenum | 1.59 ppb | 2.75 ppb | 2.31 ppb |
| Strontium | 380 ppb | 518 ppb | 397 ppb |
| Vanadium | 6.02 ppb | 6.88 ppb | 7.0 ppb |
| Chromium-6 | 0.129 ppb | 0.175 ppb | N/A |
| Chlorate | < 20 ppb | < 20.0 ppb | N/A |
| 1,4 Dioxane | < 0.07 ppb | < 0.07 ppb | N/A |
| 1,1 Dichloroethane | < 0.03 ppb | < 0.03 ppb | N/A |
| 1,2,3 Trichloropropane | < 0.03 ppb | < 0.03 ppb | N/A |
| 1,3 Butadiene | < 0.1 ppb | < 0.1 ppb | N/A |
| Bromochloromethane | < 0.06 ppb | < 0.06 ppb | N/A |
| Bromomethane | < 0.2 ppb | < 0.2 ppb | N/A |
| Chlorodifluoromethane | < 0.08 ppb | < 0.08 ppb | N/A |
| Chloromethane | < 0.2 ppb | < 0.2 ppb | N/A |
| Perfluorobutanesulfonic Acid | < 0.09 ppb | < 0.09 ppb | N/A |
| Perfluoroheptanoic Acid | < 0.01 ppb | < 0.01 ppb | N/A |
| Perfluorohexanesulfonic Acid | < 0.03 ppb | < 0.03 ppb | N/A |
| Perfluorononanoic Acid | < 0.02 ppb | < 0.02 ppb | N/A |
| Perfluorooctanoic Acid | < 0.02 ppb | < 0.02 ppb | N/A |
| Perfluorooctanesulfonic Sulfonate | < 0.04 ppb | < 0.04ppb | N/A |

Unregulated Contaminant Monitoring Rule 3 (Maximum Residence Time In Distribution System)

| Analyte | Results (1/8/2014) | Results (4/8/2014) |
|------------------|--------------------|--------------------|
| Chromium (total) | < 0.2 ppb | < 0.2 ppb |
| Cobalt | < 1 ppb | < 1.0 ppb |
| Molybdenum | 1.65 ppb | 2.76 ppb |
| Strontium | 387 ppb | 482 ppb |
| Vanadium | 5.94 ppb | 7.09 ppb |
| Chromium-6 | 0.13 ppb | 0.17 ppb |
| Chlorate | < 20 ppb | < 20 ppb |

In our continuing efforts to maintain a safe and dependable water supply it is necessary to make regular improvements to the water system. We have an ongoing program of replacing and upgrading our water treatment equipment and infrastructure.

Important Health Information

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

Please call the Water Utilities office at (405) 742-8325 if you have any questions.