

2016 Annual Drinking Water Quality Report
Cherokee County Rural Water District #2

We're very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our primary water source is surface water from Lake Tenkiller. We are pleased to report that our drinking water is safe and meets Federal and State requirements. Oklahoma DEQ Source Water Assessment and Protection report the qualitative susceptibility rating as moderate. If you have any questions about this report or concerning your water utility, please contact our office at 918-772-2915. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 6:00 p.m. on the first Tuesday after the first Thursday of each month at the Keys Community Center, Park Hill, OK.

Rural Water District #2 routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2016. (Some of our data may be more than one year old because the state allows us to monitor for some constituents less often than once per year.) All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

WATER QUALITY DATA TABLE

The table below lists all of the drinking water contaminants we detected for the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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.

Maximum residual disinfectant level goal or (MRDLG) - 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.

Maximum residual disinfectant level or (MRDL) - 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.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part of contaminant per million parts of water.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part of contaminant per billion parts of water.

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

NA: - Not applicable.

Avg: - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a significant increased risk of having the described health effect.

| TEST RESULTS | | | | | | |
|--|---------------|------------------------|----------------|---------------------------|------|--------------------------------------|
| Contaminant | Violation Y/N | Highest Level Detected | Range Detected | MCL | MCLG | Likely Source of Contamination |
| Microbiological Contaminants | | | | | | |
| Total Coliform Bacteria System takes <40 monthly samples | None | None | None | 5% positive 1 positive | 0 | Naturally present in the environment |
| Turbidity (NTU) <i>(highest single measurement)</i> | None | 0.28 NTU | | TT = 1 NTU | N/A | Soil runoff |
| Turbidity (NTU) <i>(lowest monthly % meeting limit measurement)</i> | None | Lowest .03 NTU | 100% | TT = 1 NTU | N/A | Soil runoff |

| Contaminant | Violation Y/N | Highest Level Detected | MB/L Range Detected | MCL | MCLG | Likely Source of Contamination |
|--|---------------|------------------------|---------------------|-----|-----------------------|---|
| <u>Inorganic Contaminants</u> | None | 0.037 UG/L | 0.037 – 0.037 UG/L | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Barium (ppm) 01-2011 | | | | | | |
| Nitrate - NO ₃ (ppm) (as Nitrogen) 2016 | None | 1 ppm | 1.48 – 1.48 ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| <u>Radioactive Contaminants</u> | None | 3.01 mrem/yr | 3.01 - 3.01 mrem/yr | 4 | 0 | Decay of natural and man-made deposits |
| Beta/phonon emitters 2014 | | | | | | |
| Combined Radium 226/228 2014 | None | 0.842 pCi/L | 0.842-0.842 pCi/L | 5 | 0 | Erosion of natural deposits. |
| Gross alpha excluding radon and uranium 2014 | None | 0.095 pCi/L | 0.095-0.095 pCi/L | 15 | 0 | Erosion of natural deposits. |
| <u>Lead and Copper</u> | None | 0.084 | 0.084 | 1.3 | 1.3 | Erosion of natural deposits; leaching from wood preservatives |
| Cooper (ppm) 2013 | | | | | | |
| <u>Regulated Contaminants</u> | None | 40 ppb | 20.1 – 42.7 ppb | 60 | no goal for the total | By-product of drinking water chlorination |
| Haloacetic Acids (HAA5) (ppb) 2016 | | | | | | |
| Total Trihalomethanes (TThm) (ppb) 2016 | None | 56 ppb | 27.2 – 68.9 Ppb | 80 | No goal for total | By-product of drinking water chlorination |
| Chlorine 2016 | None | 2 ppm | 1-2 | 4 | 4 | Water additive used to control microbes |

| Violations Table | | | |
|---------------------------------------|-----------------|---------------|---|
| Violation Type | Violation Begin | Violation End | Violation Explanation |
| Consumer Confidence Rule | | | |
| CCR Report | 7-1-2016 | 1-12-2017 | ConsumerWe failed to provide to you, our drinking water customers, 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 |
| Monitoring Routine (IESWTR/LT1) Major | 1-1-2016 | 1-31-16 | We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. |

Not all sample results for HAA5 & TThm may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

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

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.

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 public water systems. FDA 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 presence of contaminants does not necessarily indicate that water poses a

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

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/CDC 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).

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. We at Rural Water District #2 work around the clock to provide top quality water to every tap. Please call our office at 918-772-2915 if you have any questions.