## 2016 Annual Water Quality Report City of Choctaw PWS ID# OK2005510

We are pleased to present to you 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 you 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?

We provide safe drinking water to your home. Our source water is groundwater drawn from five wells, and distributed to each home. We are required to test for bacteriological, inorganics, lead and copper, and other possible contaminants to ensure that your drinking water is safe for consumption.

### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunecompromised 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up contaminants resulting from animals or 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 byproducts 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.

| Abbreviations Key: |   |  |  |  |  |  |
|--------------------|---|--|--|--|--|--|
| ppm                | parts per million, or milligrams per Liter (mg/L)   |  |  |  |  |  |
| ppb                | parts per billion, or micrograms per Liter ( $\mu g/L$ )  |  |  |  |  |  |
| 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:**

If you have any questions about this report or concerning your water utility, please contact Randy Jacox at (405) 390-8198. We want our valued customers to be informed about their drinking water. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

# 2016 Monitoring Results for Choctaw, OK All test results are for the year 2016 unless otherwise noted

| Contaminants    | Sample<br>Date | 90 <sup>th</sup><br>percentile | # sites<br>over<br>AL | MCLG | Action<br>Level<br>(AL) | Units | Violation | Likely Sources of<br>Contamination  |
|-----------------|----------------|--------------------------------|-----------------------|------|-------------------------|-------|-----------|---|
| Lead and Copper |                |                                |                       |      |                         |       |           |   |
| Copper          | 2016           | 0.0663                         | 0                     | 1.3  | 1.3                     | ppm   | No        | Erosion of natural deposits;<br>leaching from wood<br>preservatives; corrosion of<br>household plumbing |
| Lead            | 2016           | < 5                            | 0                     | 0    | 15                      | ppb   | No        | Ccorrosion of household plumbing  |

| Contaminants                                     | Sample<br>Date                             | Highest<br>Level<br>Detected | Range        | MCLG        | MCL        | Units | Violati<br>on | Likely Sources of<br>Contamination   |  |
|--|--|------------------------------|--------------|-------------|------------|-------|---------------|--|--|
| Inorganic Contai                                 | Inorganic Contaminants                     |                              |              |             |            |       |               |  |  |
| Arsenic  | 2015                                       | 2.9                          | 0.0- 2.9     | 0           | 10         | ppb   | No            | Erosion of natural deposits;<br>Runoff from orchards, glass and<br>electronics production wastes.                          |  |
| Barium   | 2015                                       | 0.499                        | 0.185- 0.499 | 2           | 2          | ppm   | No            | Discharge of drilling wastes;<br>Discharge from metal refineries;<br>Erosion of natural deposits.                          |  |
| Chromium   | 2015                                       | 19.9                         | 6.2- 19.9    | 100         | 100        | ppb   | No            | Discharge from steel and pulp<br>mills; Erosion of natural<br>deposits.  |  |
| Fluoride   | 2015                                       | 0.24                         | 0.0- 0.24    | 4           | 4          | ppm   | No            | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |  |
| Nitrate<br>[measured as<br>Nitrogen]             | 2016                                       | 0.32                         | 0.0- 0.32    | 10          | 10         | ppm   | No            | Runoff from fertilizer use;<br>leaching from septic tanks,<br>sewage; Erosion of natural<br>deposits.                      |  |
| Radioactive Con                                  | taminants                                  |                              |              |             |            |       |               |  |  |
| Beta/photon emitters                             | 2016                                       | < 4                          | < 4 - < 4    | 0           | 50         | pCi/L | No            | Decay of natural and man-made deposits.  |  |
| Gross alpha<br>excluding<br>radon and<br>uranium | 2016                                       | 17                           | 12.6- 17.0   | 0           | 15         | pCi/L | No            | Erosion of natural deposits.   |  |
| Uranium  | 2016                                       | 6.52                         | 6.52- 6.52   | 0           | 30         | μg/L  | No            | Erosion of natural deposits.   |  |
| Disinfectants and                                | Disinfectants and Disinfection By-Products |                              |              |             |            |       |               |  |  |
| Chlorine   | 2016                                       | 1.0                          | 1.0- 1.0     | MRDLG<br>=4 | MRDL<br>=4 | ppm   | No            | Water additive used to control microbes.   |  |

| Violations Table   |          |           |   |  |  |  |
|--|----------|-----------|---|--|--|--|
| Consumer Confidence Rule: The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual |          |           |   |  |  |  |
| consumer confidence reports on the quality of water delivered by the systems.  |          |           |   |  |  |  |
| Violation Type   | Begin    | End       | Violation Explanation   |  |  |  |
| CCR Report   | 7/1/2012 | 2/25/2016 | We failed to provide to you, our drinking water customers, or to our regulator, |  |  |  |
| CCR Report   | 7/1/2014 | 2/25/2016 | 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.  |  |  |  |