

PWS ID# 3003303

**301 N 1st Street
Altus AFB, OK 73521**

28 Sep 2018

Re: 2017 Annual Water Quality Report
(Consumer Confidence Report)

Dear Water Customer:

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed 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 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?

Altus Air Force Base purchases water from the City of Altus, and provides safe drinking water to your homes. The table below and Attachment 1, *City of Altus Annual Water Quality Report*, from the City of Altus show the quality of your water. Bioenvironmental Engineering (BE) is required to collect and test bacteria, disinfection by-products (DBPs), lead, and copper samples in addition to samples already taken by the City of Altus. No bacteria was detected in samples collected in 2017. Lead and copper sampling is conducted on a 3 year rotation and was last accomplished in 2015; therefore, samples will be taken again in 2018 and results will be available in next year's CCR.

Water Quality Data Table:

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. 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, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Altus AFB Monitoring period of January 1 st thru December 31 st , 2017						
Microbiological Monitoring Results						
Contaminant	Violation Y/N	Range Detected	Highest Level Reported/Highest Average	MCL	MCLG	Likely Source of Contamination
Total Coliform Bacteria (5 per month)	N	NA	ND	5%	0	Naturally present in the environment
Disinfection Byproducts (DBPs)						
Contaminant	Violation Y/N	Range Detected	Highest Level Reported/ Highest Average	MCL	MCLG	Likely Source of Contamination
Total Trihalomethanes (TTHMs)	N	23.6 – 135.5 ppb	62 ppb Highest Quarterly Avg ¹	80 ppb	N/A	By-product of drinking water chlorination
Halo Acetic Acids	N	6.1 – 18.9 ppb	11 ppb Highest Quarterly Avg ¹	60 ppb	N/A	By-product of drinking water chlorination
Lead and Copper (September 2015)						
Lead (ug/L) (September 2015)	N	< 5.0 ug/L	< 5.0 ug/L	15.0 ug/L	0	Corrosion of household plumbing systems
Copper (ug/L) (September 2015)		18.3 – 995 ug/L	995 ug/L	1300 ug/L	0	

1- DBPs are regulated based on a running 4 quarter average. To be in compliance, the 4-quarter running average must be maintained below the appropriate MCL.

Important Drinking Water Definitions	
Term	Definition
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: none detected
MCLG	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	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 treatment technology.

There were no noted violations during 2017. If violations occur and pose an immediate risk, BE is required to notify you immediately.

TTHM violation closure:

Altus AFB was notified in April 2017 that we are no longer in violation of the Disinfection Byproduct Rule (DBPR). Altus AFB had been in violation status since the second quarter of 2013. Due in part to the drought that began in 2011, the city's water source, Tom Steed Reservoir dropped to dangerously low levels. This caused an increase in organic matter, silt, leaves, animals, etc. To ensure the water was safe to drink, the city had to add more chlorine to the water. When the chlorine reacts with this organic matter it creates byproducts called Trihalomethanes (TTHMs) which must be kept under the EPA MCL.

As of now, we are excited to report that Altus AFB is now in full compliance with the DBPR. A few measures in particular have led to a significant increase in the water quality. One of which includes the use of the reverse osmosis (RO) treatment facility and the addition of seven wells located on the Round Timber Ranch in Texas as an additional water source.

Due to changes in how the Tom Steed Reservoir is managed along with the use of the additional water sources, the Altus water supply is much more resilient to the effects of a droughts like the ones we seen in the near past. Changes in management included bringing the Bretch Canal Dam, which was not previously in service, back online. The dam allows the reservoir managers the ability to store more water and to divert water into Tom Steed which reduces the effects of water loss from evaporation, and raises the water level which mitigates the amount of organic matter contamination.

The blending of unfiltered Tom Steed water, RO filtered Tom Steed water, and well water, in addition to the changes in Tom Steed Reservoir management, have allowed the City of Altus to reduce the amount of disinfectant (chlorine) added to the water, which has led to the reduction of both chlorine and THM levels below the MCL.

Fluoride Summary:

The City of Altus Water Treatment Plant's fluoride feeder went offline in March 2013; as of now, there are no plans to bring the feeder back online. To supplement your fluoride intake, the American Dental Association (ADA) recommends using fluoride containing toothpaste; preferably one displaying the ADA Seal of Acceptance. The ADA also recommends the use of fluoride mouth rinses but not for children under six years of age because they may swallow the rinse. Please consult your dentist to assess whether you are receiving adequate levels of fluoride for all family members.

For additional information regarding our local water supply, see Attachment 1 for summary sample results for the City of Altus 2017 Consumer Confidence Report. Should you have any questions or concerns regarding your water, please contact me in the Bioenvironmental Engineering office at (580) 481-5494.

Sincerely,

HOWARD R. GIVENS, Col, USAF, MC, CFS
Commander, 97th Medical Group

Attachment:
City of Altus Annual Water Quality Report

City of Altus
Public Water System I.D. 1011501
Annual Water Quality Report
2017

We're pleased to present this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we provide. We want you to be aware of our continuing efforts to improve the water treatment process and protect our water resources. Our goal is to provide a safe, high quality and dependable supply of drinking water. We are committed to insuring the quality of your water. Our primary water source is The Mountain Park Conservancy District, which provides untreated water from Tom Steed Reservoir. The reservoir is located in southern Kiowa County approximately six miles north of Snyder, Oklahoma. This reservoir is classified by the Environmental Protection Agency as a "surface water source". The Mountain Park Conservancy District has a source water protection plan with a copy available at our office that shows the vulnerability of our surface source water as HIGH. Additional information such as potential sources of contamination is listed. This plan is available for public view upon written request submitted to the office of Public Works at 509 S. Main, Altus OK 73521. Our secondary source of water is the Altus Well Field in Wilbarger County Texas which draws groundwater from the Seymour Aquifer. This source of water is classified as a "ground water source".

This report indicates the quality of our water and what it means to you.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

If you have any questions about this report or your water utility, please contact Gene Leister, Water Treatment Supervisor at 481-2270 or Johnny Barron, Public Works Director at 481-3518. We want all our customers to be informed about their water utility. The water utility is managed by the Altus Municipal Authority (AMA). AMA meetings are open to the public and are held on the first Tuesday of each month at 6:30 p.m. in the city council chambers at City Hall, 509 S. Main Street.

Altus Water Treatment personnel routinely monitor the drinking water for constituents according to Federal and State laws. The table below shows results of our monitoring for the period of January 1st to December 31st, 2017. 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.

In the 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 MCL is 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 MCLG is 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.

Nephelometric Turbidity Unit (NTU) - a nephelometric turbidity unit is a measure of the clarity of water. Turbidity less than 5 NTU is not typically noticeable to the average person.

Parts per million (ppm) or Milligrams per liter (mg/l) – ppm is a measure of the concentration of a substance in water where one unit of substance is diluted into one million units of water.

Parts per billion (ppb) or Micrograms per liter (ug/l) - ppb is a measure of the concentration of a substance in water where one unit of substance is diluted into one billion units of water.

Total Trihalomethanes (TTHM) - TTHMs are a range of chlorinated, carbon-based chemicals that form when chlorine reacts with certain organic compounds that are naturally found in surface water.

City of Altus Public Water Supply 2017 Lab Results I.D. # OK1011501

Contaminant	Violation Yes/No	Highest Level Detected	Range Detected	MCL	MCLG	Likely Source of Contamination
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Microbiological Contaminants

Total Coliform Bacteria	No	0	None	5 %	0	Naturally present in the environment
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Turbidity (NTU)	No	0.81 NTU Less than 0.3 NTU's in 95.7 % of monthly samples.	0.04-0.81	5 NTU Less than 0.3 NTU's in 95% of monthly samples	N/A	Soil runoff
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Volatile Organic Contaminants

Total trihalomethanes (TTHM)	No	57 ppb Highest quarterly avg.	15-79	80 ppb	0	By-product of drinking water chlorination
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Total haloacetic acids (THAA5)	No	13 ppb Highest quarterly avg.	4-17	60 ppb	0	By-product of drinking water chlorination
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Inorganic Contaminants

Chlorites	No	.67 ppm	.09-.67	1.0 ppm	0.8 ppm	Additive used to control microbes
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Fluoride	No	0.24 ppm	0.10-0.24	4.0 ppm	4.0 ppm	Erosion of natural deposits, discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth.
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Nitrate (as Nitrogen)	No	2.14 ppm	2.14-2.14	10 ppm	10 ppm	Runoff from fertilizer use, erosion of natural deposits.
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Total Organic Carbon (avg. removal ratio for the year)	No	2.71	2.71-3.22	Minimum removal ratio 1.0	N/A	Naturally present in the environment
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What does this mean?

This table shows our system had no violations during the year.

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).

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.

Contaminants that may be present in source water prior to treatment include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from agricultural, livestock operations, wildlife, sewage treatment plants and septic systems.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater 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 and residential uses.
- **Radioactive contaminants**, which are naturally occurring.
- **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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer and 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).

Thank you for allowing us to continue providing your family with clean, quality water. In order to maintain a safe and dependable water supply we continually make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. We appreciate your support and understanding. For more information, please contact Johnny Barron, City Engineer/Public Works Director, at 481-3518 or Gene Leister, Water Treatment Plant Supervisor, at 481-2270. Written inquiries should be addressed to City of Altus, Attn: Johnny Barron 509 S. Main, Altus, Oklahoma 73521

Please share this information with all the 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 the **City of Altus** PWSID#: **OK1011501**

Date distributed: 9-6 18 Signed: Gene Leister, Water Treatment Supervisor