

COMANCHE COUNTY RURAL WATER DISTRICT NO. 3 2015 Annual Drinking Water Quality Report

We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is and has always been, to provide you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve our water supply and protect our water resources. We are committed to insuring the quality of your water. We have two sources of water: 1) Groundwater: Our groundwater is drawn from the Cache Creek alluvium by five wells, located west of Walters. 2) Surface water: purchased from the City of Lawton, which is treated water from Lake Lawtonka.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Karen Bishop at (580) 355-1343. We want our customers to be informed about their water. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of every month, 7:00 pm, at the district's office located at 5845 SE 90th Street, Lawton, Oklahoma.

Comanche County Rural Water District No. 3 routinely monitors for constituents in your drinking water according to Federal and State laws. The following tables show the monitoring results of our groundwater source for the period of January 1st to December 31, 2015 (some of our data may be more than one year old because the state allows us to monitor for some contaminants less often than once a year.) and a copy of the monitoring results from the City of Lawton on the water we purchased during the time period above. 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. We have a source water protection plan available from our office that shows the vulnerability to be high in our well area. Additionally more information such as potential sources of contamination is listed.

In the tables below 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:

ND (*Non-Detects*) – laboratory analysis indicates that the constituent is not present.

PPM (*parts per million*), **mpl** (*milligrams per liter*), **ppb** (*parts per billion*), **ug/l** (*micrograms per liter*) and **pCi/L** (*picocuries per liter*) - is a measure of the radioactivity in water.

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

TT (*Treatment Technique*) - is a required process intended to reduce the level of a contaminant in drinking water.

MCL (*Maximum Contaminant Level*) - 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.

MCLG (*Maximum Contaminant Level Goal*) - 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.

MCL's are 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 one-in-a-million chance of having the described health effect.

MRDL (*Maximum Residential Disinfectant Level*) is 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.

MRDLG (*Maximum Residential Disinfectant Level Goal*) -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.

There are seventy-six regulated contaminants that community water systems are required to test for including microbiological, radioactive, inorganic, synthetic organic including pesticides, and herbicides, and volatile organic contaminants. The tables below show only those contaminants that are detected. The first table is for our groundwater source. The second table is for the water purchased from the City of Lawton.

Test Results: Groundwater Source – Cache Creek Allivum

Microbiological Contaminants

Contaminant	MCL	MCLG	Level Detected	Range Detected	Sample Date	Violation	Typical Source
Total Coliform Bacteria	MRDL 4	MRDL=4	ND	ND	2015	No	Naturally present in the environment
Chlorine	MRDL 4	MRDL=4	ND	ND	2015	No	Additive used to control microbes
Fecal Coliform & E Coli			0	0	2015	No	Human, animal fecal waste

Radioactive Contaminants

Beta/Photon Emitters (pCi/L)	50		3.752 ug/l	2.752 - 3.752 ug/l	2011	No	Decay of natural and man-made deposits
Alpha Emitters (pCi/L)	15		1.137 ug/l	0.81-1.716 ug/l	2011	No	Erosion of natural deposits
Gross Alpha, Excl Radon & Uranium (pCi/l)	15		0.938 pCi/l	0 – 0.938 pCi/L	2011	No	Erosion of natural deposits
Combined Radium 226/228 (pCi/l)	5		0.681	0 – 0.681	2011	No	Erosion of natural deposits
Combined Uranium (pCi/l)	5		2.9 ug/l	1.4 – 2.9 ug/l	2011	No	Erosion of natural deposits

Inorganic Contaminants

Barium (ppb)	2	2	0.429 ug/l	0.429 ug/l	2014	No	Discharge of drilling waste; metal refineries; erosion of natural deposits
Copper (ppm) 10 sites sampled	AL=1.3	1.3	0 sites exceeded AL	0-189 mg/l	2014	No	Corrosion of household plumbing, erosion of natural deposits; leaching from wood preservatives
Fluoride (ppm)	4	4	0.27 mg/l	0.27-0.27 mg/l	2014	No	Erosion of natural deposits, water additive, discharge from fertilizer factories
Lead (ppb) 10 sites sampled	AL=15	15	0 sites exceeded AL	< 5	2014	No	Corrosion of household plumbing systems erosion of natural deposits
* Nitrate (ppm)	10	10	7 mg/l	6.55-7.31	2015	No	Runoff from fertilizer use, leaching from septic tank, erosion of natural deposits
Arsenic	10	0	< 2 ug/l	< 2 ug/l	2014	No	Erosion of natural deposits

Disinfection By-Products

Total Trihalomethanes (HTHM)	80	80	19 ug/l	19.3-19.3 ug/l	2015	No	By-product of drinking water Chlorination
Total Haloacetic Acids (Haa5) (ppb)	60	60	< 6 ppb	< 1 – 1.0 ug/l	2015	No	By-product of drinking water Chlorination

Synthetic Organic Chemicals

Glyphosate	700	700	<5.0 ug/l	<5.0 ug/l	2014	No	Runoff from herbicide use
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Volatile Organic Compounds

Total results			<5.0 ug/l	<5.0 ug/l	2015	No	Discharge from industrial chemical factory leaching from gas storage tank and landfill

* Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age.

High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short period time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from you health provider.

The tables below reflect the analytical testing conducted on the finished water from the **Lawton Water Treatment Plants** at both the Medicine Park and the Southeast locations. The table lists all of the drinking water contaminants that were detected during the 2015 calendar year. Although many more contaminants were tested, only those substances listed below were found in the water. If you have any questions concerning the test results from the City of Lawton please call (580) 529-2703.

MEDICINE PARK FACILITY

Microbiological Contaminants

Contaminant	MCLG or MRDL	MCL,TT or MRDL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Total Organic Carbon (% Removal)	NA	TT	39	NA	2015	No	Naturally present in the environment
Turbidity (NTU) (highest occurrence)	NA	1	0.15	NA	1/02/2015	No	Soil runoff

Radiochemical Contaminants

Gross Alpha (pCi/L)	0	15	0.518	NA	2015	No	Erosion of natural deposits
Gross Beta (pCi/L)	0	50	3.54	NA	2015	No	Decay of natural and man-made deposits
Combined Radium 226/228 (pCi/L)	0	5	0.027	NA	2015	No	Decay of natural and man-made deposits
Uranium (ppb)	0	30	1.0	NA	2015	No	Erosion of natural deposits

Inorganic Contaminants

Arsenic (ppb)	0	10	ND	NA	2012	No	Erosion of natural deposits
Barium (ppm)	2	2	0.111	NA	2012	No	Discharge of drilling waste, metal refineries
Bromate (ppb)	0	10	6.33	ND - 76.0	2015	No	By-product of drinking water treatment
Fluoride	4	4	0.64	ND - 0.64	2015	No	Erosion of natural deposits, water additive
Mercury (ppb)	2	2	<0.05	NA	2012	No	Erosion of natural deposits
Nitrate - Nitrite (ppm) (measured as Nitrogen)	10	10	ND	NA	2015	No	Runoff from fertilizer use, leaching from septic tanks, sewage erosion of natural deposits.
Sodium (ppm) (optional)	-	MPL	49.9	NA	2012	No	Naturally present in the environment

SOUTHEAST FACILITY

Microbiological Contaminants

Contaminant	MCLG or MRDL	MCL,TT or MRDL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Total Organic Carbon (% Removal)	NA	TT	36	NA	2015	No	Naturally present in the environment
Turbidity (NTU) (highest occurrence)	NA	1	0.15	NA	3/28/2015	No	Soil Runoff

Radiochemical Contaminants

Gross Alpha (pCi/L)	0	15	1.7	NA	2015	No	Erosion of natural deposits
Gross Beta (pCi/L)	0	50	1.59	NA	2015	No	Decay of natural and man-made deposits
Combined Radium 226/228 (pCi/L)	0	5	0.097	NA	2015	No	Decay of natural and man-made deposits
Uranium (ppb)	0	30	1.0	NA	2015	No	Erosion of natural deposits

SOUTHEAST FACILITY

Inorganic Contaminants – The Southeast facility is no longer feeding fluoride.

Contaminant	MCLG or MRDL	MCL, TT or MRDL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Arsenic	0	10	ND	NA	2015	No	Erosion of natural deposits, runoff from orchards
Barium (ppm)	2	2	0.142	NA	2015	No	Discharge of drilling waste, metal refineries
Bromate (ppb)	0	10	ND	NA	2015	No	By-product of drinking water treatment
Chlorine Dioxide (ppb)	800	800	20	NA	2015	No	Water additive used to control microbes
Chlorite (ppm)	0.8	1.0	0.028	ND – 0.0332	2015	No	Water additive used to control microbes
Fluoride (ppb)	4	4	ND	NA	2015	No	Erosion of natural deposits
Nitrate – Nitrite (ppm) (measured as Nitrogen)	10	10	ND	NA	2015	No	Runoff from fertilizer use, Leaching from septic tanks, sewage, Erosion of natural deposits
Sodium (ppm) (optional)		MPL	71.6	NA	2015	No	Naturally present in the environment

DISTRIBUTION TESTING

Disinfectants & Disinfectant By-Products

Contaminant	MCLG	MCL, 11 or MRDL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Haloacetic Acids (HAA5) (ppb)	NA	60	5.16	2.87 – 9.95	2015	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	NA	80	17.0	6.43 – 24.1	2015	No	By-product of drinking water disinfection

Inorganic Contaminants

Copper (ppm)	1.3	1.3	0.357	ND – 1.01	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	0	0.015	0.0109	ND – 0.0311	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unregulated Contaminants (UCMR.3): Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Contaminant	MRL	Your Water	Range Low - High	Sample Date	Violation	Typical Source
Chlorate (ppb)	20	416	159 - 995	2015	No	Agricultural defoliant or dessicant
Chromium -6 (ppb)	0.03	0.0114	ND – 0.0477	2015	No	Naturally present in the environment, waste from making steel and other alloys.
Chromium (ppb)	0.02	0.134	ND – 0.329	2015	No	See Chromium -6
Molybdenum (ppb)	1.00	1.9	1.33 – 2.50	2015	No	Naturally present in the environment
Strontium (ppb)	0.3	639	315 – 1070	2015	No	Naturally present in the environment
Vanadium	0.2	3.21	1.08 – 5.79	2015	No	Naturally present in the environment
Bromochloromethane	0.06	0.014	ND – 0.115	2015	No	Fire extinguishing fluid, an explosive suppressant

*Other unregulated contaminants that were analyzed, but not detected are: Cobalt, 1,3-Butadiene, 1,1-Dichloroethane, 1,2,3-Trichloropropane, Bromomethane (Methyl Bromide), Chlorodifluoromethane (Methyl Chloride), 1,4-Dioxane, Perfluorooctanic Acid (PFOA), Perfluorooctanesulfonic Sulfonate (PFOS), Perfluorononanoic Acid (PFNA), Perfluorohexanesulfonic Acid (PFHx5), Perfluoroheptanic Acid (PFHpA), Perfluorobutanesulfonic Acid

What does this mean? As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All 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 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 be polluted by animals or human activity.

Contaminants that may be present in untreated water include: Microbial contaminants, such as virus and bacteria; Inorganic contaminants, such as salts and metals; pesticides and herbicides; Organic chemicals from industrial or petroleum use, and Radioactive contaminants, which are naturally occurring.

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).

This report has been published in its entirety, along with a copy of the water quality report for the water that we purchase from the City of Lawton. This report will not be mailed to each member, but is available at the district office upon request, as is the Source Water Assessment Program Report. Should you have any questions concerning this Consumer Confidence Report, please do not hesitate to contact our office at (580) 355-1343.

Sincerely,

Dee Davis

Chairman

Rural Water District No. 3, Com. Co.

Public Notice Certification of Delivery

PWS Name: Comanche Co. RWD #3

PWSID#: OK 2001602

County: Comanche

2016 Annual Public Notice

Check all that apply.

Primary Delivery Methods (must use at least one):

- Hand or direct delivery on _____ date(s)
- Mail, as a separate notice or included with the bill or CCR, on _____ date(s)
- Electronic delivery, via email and/or posting on your website, on _____ date(s)

Primary Delivery Method (may also use any of these):

- Posted in public locations on _____ date(s)
- Notice distributed by _____ radio station, _____ television station, and/or Cotton Electric Herald newspaper on June 13, 2016 date(s)
- Notice distributed by other means _____ on _____ date(s)

The public water system indicated above hereby affirms that public notice has been provided to consumers in accordance with the delivery, content, and format requirements and deadlines in 40 C.F.R. § 141.203

Signature of owner or operator

Date

Complete form and return to: Mail to:
PWS Compliance
DEQ WQD
P.O. Box 1677
OKC, OK 73101-1677

Fax to:
405-702-8101
Attn: PWS Compliance

*** Be sure to include a copy of the actual public notice along with this certificate form ***