Consumer Confidence Report
City of El Reno Water Works-PWS-ID:OK2000902
Annual Drinking Water Quality Report

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the Water Treatment Process and protect our resources. We are committed to insuring the quality of your water. Our underground water source is from shallow wells (50-feet), located one mile from the North Canadian Alluvium. The source water assessment and protection plan has been completed and is available at City Hall for review. We also purchase a supplemental source of water from the City of Oklahoma City.

El Reno Water Treatment consists of lime softening, multi-media filtration and chloramines disinfection. I'm pleased to report that the City of El Reno treats and filters all the water from our wells to remove any possible harmful contaminants according to Federal and State standards.

The City of El Reno Water Works routinely monitors for constituents in your drinking water according to Federal and State laws. This report shows our water quality and what it means to you and the results of our monitoring for the period of January 1st to December 31st, 2016. All 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 following table you will find terms that you may not be familiar with. To help you better understand these terms we've provided the following definitions of Water Quality Test Results.

***Maximum contaminant level goal or MCGL*-** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCGLs allow for a margin of safety.
***Maximum contaminant level or MCL*-** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCGLs as feasible using the best available treatment technology.
***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. MRDLs 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.
Definitions- The following tables contain scientific terms and measures, some of which may require explanation.
Parts per billion (ppb) micrograms per liter or parts per billion – or one ounce in 7,350,000 gallon of water.
Na – not applicable
Average – Regulatory compliance with some MCLs are based on running annual average of monthly samples
Parts per million (ppm) – milligrams per liter or parts per million – or one ounce in 7,350 gallons of water
Nephelometric turbidity unit (ntu) is a measure of the clarity of water. Turbidity in excess of 5 ntu is just noticeable to the average person.
Date of test (DOT) Date when test was taken.
Total Coliform (Microbiological Contaminants) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially- harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Tests Results

TURBIDITY

PARAMETER	DATE	HIGHEST AVERAGE MONTHLY VALUE
TURBIDITY	2016	0.0 % > 0.3 NTU

PARAMETER	DATE	HIGHEST SINGLY MEASUREMENT
TURBIDITY	2016	1.000 NTU

TOTAL ORGANIC CARBON

PARAMETER	DATE	AVERAGE OF REQUIRED % REMOVAL	RANGE OF ACTUAL % REMOVAL
TOTAL ORGANIC CARBON	2016	24.63%	16.29% - 31.98%

Microbial Contaminants
Total Coliform Bacteria

WATER QUALITY DATA

Contaminant	Violation Yes/No	Highest Level Detected	Range Detected	MCL	MCLG	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria (System takes <40 monthly samples)	No	0	0	5% positive 0 positive	0	Naturally present in the environment

Escherichia Coliform Bacteria

None of the samples collected during the year contained Escherichia coliform bacteria.

Total Trihalomethanes* & HAA-5s

Parameter	Range of Detection	Highest Detection Level	MCL Maximum Containment Level	MCLG Maximum Containment Level Goal
TOTAL THM	62.5 – 83.2 UG/L	70.0 UG/L	80 UG/L	0 UG/L
TOTAL HAA-5	10.1 – 19.5 UG/L	15.0 UG/L	60 UG/L	0 UG/L

Inorganic Contaminants

Parameter	Range of Detection		Current Detection Level		MCL Maximum Contaminant Level	MCLG Maximum Contaminant Level Goal
NITRATE - NITRATE AS N	0.37 - 0.37	MG/L	2016	0.37 MG/L	10 MG/L	10 MG/L
BARIUM	.0144-.0144	UG/L	2015	0.0144 UG/L	2000 UG/L	2000 UG/L
FLUORIDE	0.4 – 0.4	MG/L	2015	0.4 MG/L	4 MG/L	4 MG/L

Other Inorganic Contaminants**

Parameter	DATE	LEVEL DETECTED
COPPER 90TH PERCENTILE	3Y2016	0.243UG/L

Violations

PARAMETER	COMPLIANCE PERIOD	VIOLATION TYPE

Radiochemical Contaminants**

Parameter	Range of Detection	Date	Current Detection Level	MCL Maximum Contaminant Level	MCLG Maximum Contaminant Level Goal
Beta Photon emitters	0 – 6.49 PCI/L	2016	6.49 PCI/L	4 mrem/yr	0 PCI/L
Uranium	0 – 1.27 UG/L	2016	1 UG/L	30 UG/L	0 UG/L

*****Monitoring Frequency Note:*** **The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, may be more than one year old.**

Cryptosporidium Monitoring Results – The EPA has reported that our Treatment Plant has a Bin 1 classification. We took 24 samples from April 2008 to March 2010. Our calculated Bin concentration is:0.000 oocyst/L – which is a Bin Level 1. This bin concentration is based on the highest rolling12-month average. The total number of field samples submitted and accepted was 24. This concentration does NOT exceed 0.075 oocysts/L which means additional treatment for the removal/inactivation of *Cryptosporidium* is NOT required for this source.

Per State and Federal standards In October of 2016 The Oklahoma Department of Environmental Quality State Lab started pulling a new monthly Cryptosporidium and E-Coli sample set from our raw water.
(Raw Water: Untreated water that is coming into the plant for treatment.)
As of June of 2017 our raw water coming into the plant has shown absent for Cryptosporidium and E-coli and the State Lab will continue to these monthly samples for a duration of 21 months to monitor our incoming water to see if our water will need additional treatment.

The maximum contaminate levels are set at a very stringent level. To understand the possible health effect described for many regulated constitutes, a person would have to drink 2 liters everyday at the (MCL) for a lifetime (70) years, to have a one-in-a-million chance of having the described health effect.

The City of El Reno and the El Reno Municipal Authority are the policy making bodies for the water plant and water system and strives to ensure customers receive outstanding water. These bodies meet at 7:00 p.m. on the second Tuesday of each month in the Council Chambers at City Hall, 101 North Choctaw, El Reno, Oklahoma. Additionally, the connection to the Oklahoma City water system, as a supplemental water source, was also completed in 2003. A copy of the City of Oklahoma City Water Utilities Water Quality Summary 2016 is attached for your information.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain safe and dependable water supply, we will continue to make improvements in the water treatment as necessary. If you have questions about this report, please contact Josh Neaves Water Plant Supervisor at 405-262-3620.

Oklahoma City Utilities - Water Quality Summary 2016

DETECTED CONTAMINANTS	UNITS	IDEAL GOAL (EPA'S MCLG)	HIGHEST LEVEL ALLOWED (EPA'S MCL)	HEFNER WTP PWS ID 1020902	DRAPER WTP PWS ID 1020902B	OVERHOLSER WTP PWS ID 1020902C	COMPLIANCE	MAJOR SOURCES IN DRINKING WATER
Inorganic Compounds								
Fluoride[1]	ppm	4	4	Average level detected in most recent testing - 2016: 0.61	0.69	0.67	YES	Added during treatment for dental health or dissolved from natural deposits
Lead	ppb	0	AL = 15	Most recent systemwide distribution testing: June/July 2015 - 90th Percentile = <5.0			All Sites < AL YES	Corrosion of household plumbing; erosion of natural deposits
Barium	ppm	2	2	Highest level, most recent testing - 2013: 0.052	0.057	0.032	YES	Discharge of Drilling Wastes; discharge from metal refineries; erosion of natural deposits
Copper	ppm	0	AL = 1.3	Most recent systemwide distribution testing: June/July 2015 - 90th Percentile = 0.079			All Sites < AL YES	Corrosion of household plumbing; erosion of natural deposits
Arsenic	ppb	0	10	Highest level, most recent testing - 2013: <2	<2	<2	YES	Erosion of natural deposits; runoff from orchards; runoff from electronics and glass production wastes
Nitrate-Nitrite[2]	ppm	10	10	Highest level, most recent testing - 2016: 0.366	0.109	0.231	YES	Runoff from fertilizer; leaching from septic tanks, sewage or erosion of natural deposits
Radiological								
				Range detected in most recent testing - 2012				
Gross Alpha	pCi/L	0	15	<2.229	<0.4744	<2.373	YES	Decay of natural and man-made deposits
Gross Beta	pCi/L	0	50	6.784	2.611	6.824		
Radium 226 + 228	pCi/L	0	5	<0.545	<0.495	0.980		
Uranium	ppb	0	30	<1	<1	<1		
Disinfection By-Products Stage 2 Rule Monitoring[3]								
Total Trihalomethanes[4]	ppb	0	80 (LRAA)	Most recent systemwide distribution testing 2015/2016 Highest Locational Running Annual Average (LRAA) 2840 SW 59th St (Draper) - 71.50 Range Detected: 4.17 - 78.01 Highest quarterly average (LRAA): 17.96	71.50	64.66	YES	By-product of drinking water disinfection
				Range detected: 4.17 - 19.43	5.29 - 77.07	21.58 - 78.01		
Haloacetic Acids[4]	ppb	0	60 (LRAA)	Most recent systemwide distribution testing 2015/2016 Highest Locational Running Annual Average (LRAA) 12716 NE 36th St (Draper) - 43.15 Range Detected: 1.67 - 48.10 Highest quarterly average (LRAA): 8.49	43.15	33.05	YES	By-product of drinking water disinfection
				Range detected: 1.67 - 5.89	2.09 - 48.10	14.10 - 41.70		
Bromate[5]	ppb	0	10 (RAA)	Highest quarterly average (RAA) - 2.89 Range detected - <8.75 - 40.5			YES	By-product of disinfection by ozone **Only Hefner Plant uses Ozone**
Precursor Removal								
Total Organic Carbon[6] (TOC)			TT = Ratio must be greater than or equal to 1.00 for compliance	Average of monthly ratios: 1.89	0.406	1.62	YES	Naturally occurring
				Monthly Ratio = (% TOC removed) divided by (% TOC removal required)				
Disinfection Residual								
Chloramines as Chlorine[7]	ppm	NA	MRDL 4.0	Average readings			YES	Water additive used to control microbes
			Range detected	2.10 - 5.00	1.20 - 3.80	1.07 - 4.40		
Microbiological								
Coliform Bacteria	CFUs % positive	0	Presence of Coliform bacteria in <5% of samples	2016 System-wide distribution testing Month having the highest % positive - October (2 positive in 262 samples - 0.763 %) Two positive Coliform results in 3286 samples (0.061 % occurrence)			YES	**Naturally present in the environment - No Fecal Coliforms or E. Coli in 3286 tests in 2016.**
Clarity								
Turbidity[8]	NTU % > 0.3	NA	TT = > 0.3 NTU in not more than 5% of samples	Lowest monthly % of samples with < 0.3 NTU: 100.0%	99.5%	98.9%	YES	Lime and/or calcium carbonate particles from softening efforts; soil runoff
				Highest single reading: 0.25	0.74	1.06		
Long Term 2 Enhanced Surface Water Treatment Rule								
Cryptosporidium[9]	cysts/L	0	NA	All source waters tested were non-detect.			YES	Storm runoff, agricultural runoff and leaking sewage systems
Detected UCMR3 Analytes (2013)[10]								
				Average	Range	More Info		
Chlorate	ppb	NA	NA	36.4	<20.0 - 36.4	1 of 12 samples >20.0	NA	By-product of drinking water disinfection, making of dyes, explosives, matches, printing fabrics, herbicides, antiseptics, toothpastes and in paper pulp processing.
Hexavalent Chromium	ppb	NA	NA	0.141	<0.030 - 0.391	11 of 12 samples >0.030	NA	Naturally occurring. By-product of making steel and other alloys, plating, dyes and pigments, leather and wood preservation.
Total Chromium	ppb	100 (0.100 mg/L)	100 (0.100 mg/L)	0.428	<0.200 - 0.471	2 of 12 samples >0.200	YES	Naturally occurring. By-product of making steel and other alloys, plating, dyes and pigments, leather and wood preservation.
Molybdenum	ppb	NA	NA	2.76	<1.00 - 3.24	6 of 12 samples >1.00	NA	Naturally occurring. By-product of making steel and other alloys, lubricants, dyes and pigments, fertilizers.
Strontium	ppb	NA	NA	295	42.9 - 763	12 of 12 samples >3.00	NA	Naturally occurring. By-product of making electronics and fireworks.
Vanadium	ppb	NA	NA	2.78	<0.200 - 7.50	11 of 12 samples >0.200	NA	Naturally occurring. By-product of making steel alloys, chemical manufacturing, ceramics and batteries.

Certificate of Completion
2016 Annual Drinking Water Quality Report

PWS Name : City Of El Reno Water Works

PWS ID: 2000902

The community water system indicated above hereby confirms that the Consumer Confidence Report has been distributed to customers (and appropriate notices of availability have been given) in accordance with 40 CFR 141.155. Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency.

Certified by:

Name: Joshua Neaves

Title: Water Plant Supervisor

Phone: (405) 262-3620

I.O.C. (Inorganic Chemicals) Violations Table.

Violations Table

Antimony

Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Barium

Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Beryllium

Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Cadmium

Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Violations Table

Chromium

Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Fluoride

Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of childrens teeth, usually in children less than nine years old. Mottling, also known

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Mercury

Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Selenium

Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

Violations Table

Thallium			
Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.			
Violation Type	**Violation Begin**	**Violation End**	**Violation Explanation**
MONITORING, ROUTINE MAJOR	01/01/2016	12/31/2016	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.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for EL RENO

Our water system violated a drinking water standard. Even though this was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the following monitoring periods, we did not complete all monitoring or testing for the following contaminants, and therefore cannot be sure of the quality of your drinking water during that time.

Contaminant	Begin Date	End Date	# of Samples Required	# of Samples Missing
Inorganic Chemicals	1/1/2016	12/31/2016	1	1

What should I do? There is nothing you need to do at this time.

What happened? What is being done? We did sample for what we thought was our yearly I.O.C. sample. Unfortunately our sample was only partially tested for I.O.C's due to a lab error. Therefore since the testing was not completed we are shown to not have performed our I.O.C sampling during the 2016 calendar year.

We have since sampled for the year of 2017 and are back in compliance.

We anticipate resolving the problem by this date: 06/2017

For more information, please contact _____Joshua Neaves____ at

Name Phone Number

101 N. Choctaw El Reno, OK 73036 405-262-3620

Address

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.

Monitoring Public Notice OK2000902 Date Distributed: ___06/30/2017_____