

# City of Lawton Water Treatment Plant

Medicine Park Water Plant P.O. Box 247 Medicine Park, OK 73557 Telephone: (580) 529-2703

rone: (580) 529-2703 Telephone: (580) 581-3532 Fax: (580) 529-2551 Fax: (580) 581-3579

Southeast Water Plant

4596 SE 15<sup>TH</sup>

Lawton, OK 73501

Dear water system owner/operator:

The following results are from analytical testing conducted on the finished water for the Lawton Water Treatment Plants at both the Medicine Park and the Southeast locations. These results are contaminants detected for the 2017 calender year. This information should be used to publish your annual Consumer Confidence or Water Quality Report (if required) to comply with EPA 40 CFR 141 and 142. If you have any questions please call (580) 529-2703.

#### Medicine Park

Medicine Park					
	1	Microbiological Contam	1		
Analysis	Date	Concentration	Max. Contaminant Level (MCL)	Information source	
Total Organic Carbon (TOC)	Analyzed Monthly (Running Average)	2.53 mg/L 39% Avg. Removal	-	Accurate Environmental Laboratories	
Turbidity (highest single measurement)	1/10/2017	0.15 NTU	TT = 1.0 NTU	City of Lawton MP Laboratory	
		Inorganic Contamina	nts		
Analysis	Date	Concentration	Max. Contaminant Level (MCL)	Information source	
Antimony	5/21/2012	< 2.0 μg/L	6.0 μg/L	State Environmental Lab - ODEQ	
Arsenic	5/21/2012	<2.0 μg/L	10.0 μg/L	State Environmental Lab - ODEQ	
Barium	5/21/2012	111 μg/L	2000 μg/L	State Environmental Lab - ODEQ	
Beryllium	5/21/2012	< 2.0 μg/L	4.0 μg/L	State Environmental Lab - ODEQ	
Bromate	Monthly (Running Average)	2.81 μg/L	10 μg/L	Accurate Environmental Laboratories	
Cadmium	5/21/2012	< 2.0 μg/L	5.0 μg/L	State Environmental Lab - ODEQ	
Chromium	5/21/2012	< 10 μg/L	100 μg/L	State Environmental Lab - ODEQ	
Fluoride	1/9/2017	0.70 mg/L	4.0 mg/L	State Environmental Lab - ODEQ	
Mercury	5/21/2012	< 0.05 μg/L	2 μg/L	State Environmental Lab - ODEQ	
Nitrate/Nitrite as Nitrogen	2/7/2017	0.34 mg/L	10 mg/L	State Environmental Lab - ODEQ	
Selenium	5/21/2012	< 10 μg/L	50 μg/L	State Environmental Lab - ODEQ	
Sodium	5/21/2012	49.9 mg/L	No Limit	State Environmental Lab - ODEQ	
Thallium	5/21/2012	< 1.0 μg/L	2 μg/L	State Environmental Lab - ODEQ	
		Radiochemical Contam	inants		
Analysis	Date	Concentration	Max. Contaminant Level (MCL)	Information source	
Gross Alpha	2015	< 0.518 pCi/L	15 pCi/L	Accurate Environmental Laboratories	
Gross Beta	2010	3.54 pCi/L	50 pCi/L	Accurate Environmental Laboratories	
Combined Radium 226 & 228	2015	0.027 pCi/L	5 pCi/L	Accurate Environmental Laboratories	
Uranium		< 1.0 μg/L	30 μg/L	Accurate Environmental Laboratories	
Volatile Organic Contaminants					
Analysis	Date	Concentration	Max. Contaminant Level (MCL)	Information source	
Benzene		< 0.5 μg/L	5 μg/L	Accurate Environmental Laboratories	
Carbon Tetrachloride	] [	< 0.5 μg/L	5 μg/L	Accurate Environmental Laboratories	
Chlorobenzene		< 0.5 μg/L	100 μg/L	Accurate Environmental Laboratories	

1,2-Dichloroethane		< 0.5 μg/L	5 μg/L	Accurate Environmental Laboratories
1,2-Dichloropropane		< 0.5 μg/L	5 μg/L	Accurate Environmental Laboratories
Ethylbenzene		< 0.5 μg/L	700 μg/L	Accurate Environmental Laboratories
Styrene	3/15/17	< 0.5 μg/L	100 μg/L	Accurate Environmental Laboratories
Toluene		< 0.5 μg/L	1000 μg/L	Accurate Environmental Laboratories
1,1,1-Trichloroethane		< 0.5 μg/L	200 μg/L	Accurate Environmental Laboratories
1,1,2-Trichloroethane		< 0.5 μg/L	5 μg/L	Accurate Environmental Laboratories
1,2,4-Trichlorobenzene		< 0.5 μg/L	70 μg/L	Accurate Environmental Laboratories
Vinyl Chloride		< 0.5 μg/L	2 μg/L	Accurate Environmental Laboratories
Xylenes		< 0.5 μg/L	10000 μg/L	Accurate Environmental Laboratories

## LT 2 - Lake Lawtonka (Raw Water) (Long Term 2 - Enhanced Surface Water Treatment Rule)

\*Sampling completed September 2017

Analysis	Date	Concentration	Minimun Detection	Information source
Cryptosporidium	None	0 oocysts/L	0 oocysts/L	Accurate Environmental Laboratories
E. Coli	3/10/2017	5.41 MPN/100mL	1.0 MPN/100mL	Accurate Environmental Laboratories
Giardia	None	0 cysts/L	0 cysts/L	Accurate Environmental Laboratories
Turbidity (highest single measurement)	3/10/2017	7.97 NTU	0.10 NTU	Accurate Environmental Laboratories

### Southeast Water Treatment Plant

Microbiological contaminants					
Analysis	Date	Concentration	Max. Contaminant	Information source	
Total Organic Carbon (TOC)	Analyzed Monthly (Running Average)	3.07 mg/L 37% Avg. Removal	-	Accurate Environmental Laboratories	
Turbidity (highest single measurement)	12/20/2017	0.14 NTU	TT = 1.0 NTU	City of Lawton SE Laboratory	
		Inorganic Contamina	ants		
Analysis	Date	Concentration	Max. Contaminant	Information source	
Antimony	6/24/2015	< 2.0 μg/L	6.0 μg/L	State Environmental Lab - ODEQ	
Arsenic	6/24/2015	< 2.0 μg/L	10.0 μg/L	State Environmental Lab - ODEQ	
Barium	6/24/2015	142 μg/L	2000 μg/L	State Environmental Lab - ODEQ	
Beryllium	6/24/2015	< 2.0 μg/L	4.0 μg/L	State Environmental Lab - ODEQ	
Bromate	Monthly (Running Average)	0.00 μg/L	10 μg/L	Accurate Environmental Laboratories	
Cadmium	6/24/2015	< 2.0 μg/L	5.0 μg/L	State Environmental Lab - ODEQ	
Chromium	6/24/2015	< 5.0 μg/L	100 μg/L	State Environmental Lab - ODEQ	
Fluoride	6/24/2015	< 0.20 mg/L	4.0 mg/L	State Environmental Lab - ODEQ	
Mercury	6/24/2015	< 0.05 μg/L	2 μg/L	State Environmental Lab - ODEQ	
Nitrate/Nitrite as Nitrogen	2/7/2017	0.24 mg/L	10 mg/L	State Environmental Lab - ODEQ	
Sodium	6/24/2015	71.6 mg/L	No limit	State Environmental Lab - ODEQ	
Thallium	6/24/2015	< 1.0 μg/L	2 μg/L	State Environmental Lab - ODEQ	
		Radiochemical Contam	inants	•	
Analysis	Date	Concentration	Max. Contaminant	Information source	
Gross Alpha		1.70 pCi/L	15 pCi/L	Accurate Environmental Laboratories	
Gross Beta		1.59 pCi/L	50 pCi/L	Accurate Environmental Laboratories	
Combined Radium 226 & 228	2015	0.097 pCi/L	5 pCi/L	Accurate Environmental Laboratories	
Uranium	•	< 1.0 μg/L	30 μg/L	Accurate Environmental Laboratories	
Volatile Organic Contaminants					
Analysis	Date	Concentration	Max. Contaminant	Information source	
Benzene		< 0.5 μg/L	5 μg/L	State Environmental Lab - ODEQ	
Carbon Tetrachloride		< 0.5 μg/L	5 μg/L	State Environmental Lab - ODEQ	
Chlorobenzene		< 0.5 μg/L	100 μg/L	State Environmental Lab - ODEQ	

				•
1,2-Dichloroethane		< 0.5 μg/L	5 μg/L	State Environmental Lab - ODEQ
1,2-Dichloropropane		< 0.5 μg/L	5 μg/L	State Environmental Lab - ODEQ
Ethylbenzene		< 0.5 μg/L	700 μg/L	State Environmental Lab - ODEQ
Styrene	3/15/17	< 0.5 μg/L	100 μg/L	State Environmental Lab - ODEQ
Toluene		< 0.5 μg/L	1000 μg/L	State Environmental Lab - ODEQ
1,1,1-Trichloroethane		< 0.5 μg/L	200 μg/L	State Environmental Lab - ODEQ
1,1,2-Trichloroethane		< 0.5 μg/L	5 μg/L	State Environmental Lab - ODEQ
1,2,4-Trichlorobenzene		< 0.5 μg/L	70 μg/L	State Environmental Lab - ODEQ
Vinyl Chloride		< 0.5 μg/L	2 μg/L	State Environmental Lab - ODEQ
Xylenes		< 0.5 μg/L	10000 μg/L	State Environmental Lab - ODEQ

## LT 2 - Lake Ellsworth & Waurika (Raw Water) (Long Term 2 - Enhanced Surface Water Treatment Rule)

\*Sampling completed September2017

Analysis	Date	Concentration	Minimun Detection	Information source
Cryptosporidium	None	0 oocysts/L	0 oocysts/L	Accurate Environmental Laboratories
E. Coli	None	0.00 MPN/100mL None Detected	1.0 MPN/100mL	Accurate Environmental Laboratories
Giardia	None	0 cysts/L	0 cysts/L	Accurate Environmental Laboratories
Turbidity (highest single measurement)	5/7/17 *Lake Waurika	34.7 NTU	0.10 NTU	Accurate Environmental Laboratories

## **Distribution Testing**

Analysis	Date	Concentration	Max. Contaminant	Information source
Total Coliform Bacteria (highest # of samples in a single month)	September 104 Samples	0 positive 0.00%	5% positive	City of Lawton WTP Laboratory
Fecal coliform Bacteria	N/A	0 positive	N/A	City of Lawton WTP Laboratory
Chlorite (highest monthly average)	9/13/2017	<0.040 mg/L Range (ND to 0.083)	1000 μg/L	Accurate Environmental Laboratories
Copper	2015	0.0109 mg/L	1.3 mg/L	Accurate Environmental Laboratories
Lead	2015	0.357 μg/L	15 μg/L	Accurate Environmental Laboratories
TTHMs	LRAA 9/5/17	14.18 μg/L Range (8.72 μg/L to 25.3 μg/L)	80 μg/L	Accurate Environmental Laboratories
HAA5	LRAA 9/5/17	7.47 μg/L Range (4.74 μg/L to 15.5 μg/L)	60 μg/L	Accurate Environmental Laboratories

<sup>\*</sup>LRAA - Locational Running Annual Averages

Courtney Breshears Chief Chemist City of Lawton Water Treatment Plant Laboratory