

CITY OF TULSA 2020 WATER QUALITY DATA

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). Terms and Abbreviations used in the table below are located on the next page.

Regulated Contaminants	Level Found	Minimum	Maximum	Maximum Contaminant Level (MCL*)	MCLG*	Violation	Likely Source of Contaminants
Turbidity Level found			0.21	TT*=less than 0.3 NTU 95 percent of the time	N/A	No	Soil runoff.
Lowest monthly % meeting regs	100.0%						
Arsenic	0.19	0.00	1.52	10 parts per billion	0	No	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes.
Barium	0.042	0.031	0.054	2 parts per million	2	No	Naturally present in the environment, drilling waste, metal refineries.
Total Chlorine	2.4	1.5	3.0	MRDL*=4.0 parts per million annual avg.	4	No	Water additive to control microbes.
Chlorite	0.42	0.28	0.67	1 part per million	0.8	No	By-product of drinking water disinfection.
Copper	0.346 parts per million (ppm) at the 90th percentile; 0 sites above AL*			AL* = 1.3 parts per million (ppm) at 90th percentile	1.3	No	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
Fluoride	0.69	0.32	0.85	4 parts per million	4	No	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories.
Lead	3.97 parts per billion (ppb) at the 90th percentile; 2 sites above AL*			AL* = 15 parts per billion (ppb) at 90th percentile	0	No	Corrosion of household plumbing systems, erosion of natural deposits.
Nitrate/Nitrite Total	0.69	0	2.2	Nitrate = 10 parts per million Nitrite = 1 parts per million	10/1	No	Naturally occurring, fertilizers, sewage treatment plants, erosion of natural deposits, leaching from septic tanks.
				Total =11 parts per million			
Total Organic Carbon	1.9	0.8	3.3	Results are parts per million. MCL is TT*=percent removal	N/A	No	Naturally found in the environment.
Haloacetic Acids	28	5	38	60 parts per billion LRAA*. Level found is highest LRAA; Minimum and Maximum are from individual readings.	N/A	No	By-product of drinking water disinfection.
Total Trihalomethanes	40	24	50	80 parts per billion LRAA*. Level found is highest LRAA; Minimum and Maximum are from individual readings.	N/A	No	By-product of drinking water disinfection.
Atrazine	0.2	0	0.3	3 parts per billion	3	No	Runoff from herbicide used on row crops.

Secondary Contaminants	Average	Minimum	Maximum	Recommended Level (Non-Health Based Standards)	Likely Source of Contaminants
pH	N/A	7.6	8.8	Aesthetic level 6.5-8.5 s.u.*	Measure of acidity. Naturally present, adjusted in drinking water treatment.
Chloride	12	9	17	Aesthetic level 250 parts per million	Naturally present, brine from oilfield operations.
Sulfate	21	4.5	51	Aesthetic level 250 parts per million	Naturally present in the environment.

Other Required Monitoring	Average	Minimum	Maximum	Recommended Level	Likely Source of Contaminants
Sodium	10	7.3	14	Results are parts per million. Standard has not been established.	Naturally occurring, urban stormwater runoff or discharge from sewage treatment plants.

Cryptosporidium
 Second round of monitoring (over 48 month duration) was completed in 2017. Detections were found in source water only and were not detected at levels of concern; Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

ADDITIONAL MONITORING: Tulsa was required to participate in Unregulated Contaminant Monitoring (UCMR4) in 2018. 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. The following are those contaminants that were detected during UCMR4 monitoring.

**Some contaminants below have established standards, but were collected in conjunction with UCMR4 sampling requirements. Regular routine monitoring results for these contaminants are listed in the table above.

Unregulated Contaminants	Average (parts per billion)	Minimum (parts per billion)	Maximum (parts per billion)
Manganese	0.216	0	0.444
Monobromoacetic Acid	0.199	0	0.514
Bromochloroacetic Acid	4.23	1.43	8.57
Bromodichloroacetic Acid	4.50	1.22	8.93
Chlorodibromoacetic Acid	1.63	0.554	3.15
Dichloroacetic Acid**	8.01	3.61	13.0
Trichloroacetic Acid**	5.74	2.09	8.72
Dibromoacetic Acid**	1.31	0.396	2.81

Unregulated Contaminants	Average (parts per million)	Minimum (parts per million)	Maximum (parts per million)
Bromide	45.8	24.8	71.8
TOC**	3.08	2.11	4.32