

SOMERS WATER UTILITY

2019 DRINKING WATER QUALITY REPORT

Substance (Units)	MCL or {MRDL}	MCLG or {MRDLG}	Level Found	Range/ Comments	Year Tested	Violation	Typical Source of Contaminant
<b>Microbiological Results †</b>							
Total Coliform Bacteria (% positive)	< 5% of monthly samples	0	0%	0%	2019	No	Naturally present in the environment; E.coli is a type of coliform that is present in human and animal waste
<b>Disinfection Results †</b>							
Free Chlorine (ppm)	{ 4 }	{ 4 }	1.07 (avg)	0.91 – 1.22	2019	No	Drinking water disinfectant
Haloacetic Acids (ppb)	60	0	15 (avg)	9.4 – 19.2	2019	No	Byproduct of drinking water chlorination
Total Trihalomethanes (ppb)	80	0	27.2 (avg)	15.2 – 46.7	2019	No	Byproduct of drinking water chlorination
Bromodichloromethane (ppb)	80	0	8.8 (avg)	5.8 – 15.0	2019	No	Byproduct of drinking water chlorination
Bromoform (ppb)	80	0	0.26 (avg)	ND - 0.44	2019	No	Byproduct of drinking water chlorination
Chloroform (ppb)	80	0	14.6 (avg)	6.4 – 25.0	2019	No	Byproduct of drinking water chlorination
Dibromochloromethane (ppb)	80	0	3.7 (avg)	2.6 – 6.3	2019	No	Byproduct of drinking water chlorination
† - Microbiological and Disinfection Results are for KWU's distribution system, provided as an informational item. These results are not applicable to other distribution systems.							
Cryptosporidium	TT	0	0	0	2015-17	No	Microbial parasite found in surface water throughout the United States
<b>Regulated Inorganic Results</b>							
Antimony (ppb)	6	6	0.21	0.21	2017	No	Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder
Arsenic (ppb)	10	0	0.66	0.66	2017	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.021	0.021	2017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	4	4	ND	ND	2017	No	Discharge from metal refineries and coal burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	ND	ND	2017	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium (ppb)	100	100	ND	ND	2017	No	Erosion of natural deposits; Discharge from steel and pulp mills
Copper (ppm)	1.3 (AL)	1.3	0.11 (90th percentile)	0.003 - 0.240	2017	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Cyanide (ppb)	200	200	ND	ND	2017	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	4	4	0.73 (avg)	0.62 – 0.83	2019	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	15 (AL)	0	8.90 (90th percentile)	ND - 24.0	2017	No	Corrosion of household plumbing systems; Erosion of natural deposits
Mercury (ppb)	2	2	ND	ND	2017	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and croplands
Nickel (ppb)	100	N/A	0.9	0.9	2017	No	Occurs naturally in soils, ground water, and surface waters and is often used in electroplating, stainless steel, and alloy products

Nitrate as N (ppm)	10	10	0.63	0.63	2019	No	Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits
Selenium (ppb)	50	50	ND	ND	2017	No	Discharge from petroleum refineries; Erosion of natural deposits; Discharge from mines
Sodium (ppm)	N/A	N/A	9.9	9.9	2019	No	N/A
Thallium (ppb)	2	0.5	ND	ND	2017	No	Erosion of natural deposits; Leaching from ore processing sites
<b>Radioactive result</b>							
Radium (226+228) (pCi/L)	5	0	1.5	1.5	2014	No	Erosion of natural deposits
<b>Substance (Units)</b>	<b>MCL or {MRDL}</b>	<b>MCLG or {MRDLG}</b>	<b>Level Found</b>	<b>Range/ Comments</b>	<b>Year Tested</b>	<b>Violation</b>	<b>Typical Source of Contaminant</b>
<b>Unregulated Contaminant Monitoring Program</b>							
Chromium 6 (ppb)	N/A	N/A	0.247	0.190 - 0.247	2013	N/A	Naturally occurring element used in making steel and other alloys
Chromium Total (ppb)	N/A	N/A	1.220	0.241 - 1.220	2013	N/A	Naturally occurring element used in making steel and other alloys
Molybdenum (ppb)	N/A	N/A	1.1873	ND - 1.1873	2013	N/A	Naturally occurring element found in ores and present in plants, animals, and bacteria
Strontium (ppb)	N/A	N/A	127.365	117.625 -127.365	2013	N/A	Naturally occurring element which has been used in the faceplate glass of cathode ray tube televisions to block x-ray emissions
Vanadium (ppb)	N/A	N/A	0.318	0.2407 - 0.318	2013	N/A	Naturally occurring elemental metal
Cyanotoxins (10 total)	N/A	N/A	ND	ND	2018	N/A	Freshwater Cyanobacterial (Blue-Green Algae) Blooms
Germanium (ppb)	N/A	N/A	ND	ND	2019	N/A	Naturally occurring element; Commercially available in combination with other elements and minerals; A byproduct of zinc ore processing; used in infrared optics, fiber optics, electronics and solar applications
Manganese (ppb)	N/A	N/A	0.67	ND - 0.67	2019	N/A	Naturally occurring element; Commercially available in combination with other elements and minerals; Used in steel production, fertilizer, batteries, and fireworks; Drinking water and wastewater treatment chemical
Pesticides (8 total)	N/A	N/A	ND	ND	2019	N/A	Agricultural & residential runoff (includes Insecticides, herbicides and fungicides)
Pesticide Byproduct (ppb)	N/A	N/A	ND	ND	2019	N/A	Agricultural runoff
Alcohols (ppb) (3 Total)	N/A	N/A	ND	ND	2019	N/A	Solvents; Food additives; Production of flavorings; Consumer products such as synthetic cosmetics, perfumes, fragrances, hair preparations, and skin lotions
Semi-Volatile Organic Compounds (ppb) (3 Total)	N/A	N/A	ND	ND	2019	N/A	Food additives (antioxidants); Production of dyes, rubber, pharmaceuticals, and pesticides; Used as pharmaceuticals and flavoring agents; Component of coal; Produced as chemical intermediates
Total Organic Carbon (TOC) (ppb)	N/A	N/A	1850 (avg)	1700 – 2000	2019	N/A	N/A
Bromide (ppb)	N/A	N/A	34.5 (avg)	33 – 36	2019	N/A	Occurs naturally in the environment in low levels; Concentrated sources include wastewater discharges from fossil fuel production and coal fired power plants, mining operations, and pesticides
Dichloroacetic acid (DCAA) (ppb)	N/A	N/A	7.4 (avg)	5.7 – 9.5	2019	N/A	Byproduct of drinking water chlorination
Monochloroacetic acid (MCAA) (ppb)	N/A	N/A	ND	ND	2019	N/A	Byproduct of drinking water chlorination

Trichloroacetic acid (TCAA) (ppb)	N/A	N/A	6.9 (avg)	5.5 – 7.9	2019	N/A	Byproduct of drinking water chlorination
Bromochloroacetic acid (BCAA) (ppb)	N/A	N/A	3.7 (avg)	3.2 – 4.2	2019	N/A	Byproduct of drinking water chlorination
Bromodichloroacetic acid (BDCAA) (ppb)	N/A	N/A	5.3 (avg)	4.4 – 6.4	2019	N/A	Byproduct of drinking water chlorination
Chlorodibromoacetic acid (CDBAA) (ppb)	N/A	N/A	1.3 (avg)	1.1 – 1.6	2019	N/A	Byproduct of drinking water chlorination
Tribromoacetic acid (TBAA) (ppb)	N/A	N/A	ND	ND	2019	N/A	Byproduct of drinking water chlorination
Monobromoacetic acid (MBAA) (ppb)	N/A	N/A	0.54 (avg)	0.42 – 0.65	2019	N/A	Byproduct of drinking water chlorination
Dibromoacetic acid (DBAA) (ppb)	N/A	N/A	0.74 (avg)	0.67 – 0.80	2019	N/A	Byproduct of drinking water chlorination
Substance (Units)	MCL or {MRDL}	MCLG or {MRDLG}	Level Found	Range/ Comments	Year Tested	Violation	Typical Source of Contaminant
Other Monitored Parameters							
Sulfate (ppm)	N/A	N/A	26.3 (avg)	23.0 – 29.0	2019	N/A	N/A
Orthophosphate (ppm)	N/A	N/A	0.89 (avg)	0.60 – 1.00	2019	N/A	Water additive to reduce corrosion of household plumbing systems
Total Organic Carbon (ppm)	TT	N/A	1.6 (avg)	1.4 – 2.0	2019	N/A	N/A
Turbidity (NTU)	< 0.30	N/A	0.027 (avg)	0.019 – 0.043	2019	No	Erosion of natural deposits
Alkalinity (ppm)	N/A	N/A	105 (avg)	99 – 119	2019	N/A	N/A
Conductivity (µS/cm)	N/A	N/A	314 (avg)	276 – 376	2019	N/A	N/A
Total Hardness (ppm)	N/A	N/A	140 (avg)	134 – 154	2019	N/A	N/A
Temperature (°F)	N/A	N/A	46.0 (avg)	33.8 - 71.6	2019	N/A	N/A
pH (pH Units)	N/A	N/A	7.68 (avg)	7.45 – 7.88	2019	N/A	N/A

**AL: Action Level** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Action levels are reported at the 90th percentile from homes at greatest risk.

**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.

**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.

**{MRDL}: Maximum Residual Disinfectant Level** 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 Residual 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 contamination.

**TT: Treatment Technique** A required process intended to reduce the level of a contaminant in drinking water.

**Abbreviations:**

avg: average

N/A: Not Applicable ND: Not Detected

pCi/L: picocuries per liter

NTU: Nephelometric Turbidity Units ppb: parts per billion (µg/L)

ppm: parts per million (mg/L)

µS/cm: microsiemens per centimeter