

SOMERS WATER UTILITY

2017 DRINKING WATER QUALITY REPORT

Substance (Units)	MCL or {MRDL}	MCLG or {MRDLG}	Level Found	Range/ Comments	Year Test	Violation	Typical Source of Contaminant
Microbiological Results †							
Total Coliform Bacteria (% positive)	< 5% of monthly samples	0	0%	0%	2017	No	Naturally present in the environment; E.coli is a type of coliform that is present in human and animal waste.
Cryptosporidium	TT	0	0	0	2015-17	No	microbial parasite found in surface water, present in human and animal waste.
Disinfection Results †							
Total Chlorine* (ppm)	{ 4 }	{ 4 }	1.25	1.12 - 1.35	2017	No	Drinking water disinfectant
Free Chlorine* (ppm)	{ 4 }	{ 4 }	1.09	0.93 - 1.31	2017	No	Drinking water disinfectant
Haloacetic Acids (ppb)	60	0	15.6	9.3 - 23.6	2017	No	By-product of drinking water chlorination
Total Trihalomethanes (ppb)	80	0	33.9(avg)	17.2 - 60.6	2017	No	By-product of drinking water chlorination
Bromodichloromethane (ppb)	80	0	11.3(avg)	6.3 - 17.0	2017	No	By-product of drinking water chlorination
Bromoform (ppb)	80	0	0.39(avg)	N.D. - 0.58	2017	No	By-product of drinking water chlorination
Chloroform (ppb)	80	0	17.5(avg)	7.7 - 38.0	2017	No	By-product of drinking water chlorination
Dibromochloromethane (ppb)	80	0	4.90(avg)	3.1 - 7.1	2017	No	By-product 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.							
* - On September 8, 2017, KWU began testing for free chlorine. Total chlorine is no longer being reported.							
Regulated Inorganic Results							
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)	0.63 - 0.85	2017	No	Erosion of natural deposits; water additive that promotes strong teeth;
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	0.45	0.45	2017	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	13	13	2017	No	N/A
Thallium (ppb)	2	0.5	ND	ND	2017	No	Erosion of natural deposits; Leaching from ore processing sites
Radioactive result							
Radium (226+228) (pCi/L)	5	0	1.5	1.5	2014	No	Erosion of natural deposits
Unregulated Contaminant Monitoring Program							
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. 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
Other Monitored Parameters							
Sulfate (ppm)	N/A	N/A	28	28	2017	N/A	N/A
Ortho-phosphate (ppm)	N/A	N/A	0.18	0.13 - 0.26	2017	N/A	Water additive to reduce corrosion of household plumbing systems
Total Organic Carbon (ppm)	TT	N/A	1.21	0.80 - 1.9	2017	N/A	N/A
Turbidity (NTU)	< 0.30	N/A	0.029 (avg)	0.023 - 0.058	2017	No	Erosion of natural deposits
Alkalinity (ppm)	N/A	N/A	103 (avg)	96 - 116	2017	N/A	N/A
Conductivity (µS/cm)	N/A	N/A	299	283 - 331	2017	N/A	N/A
Total Hardness (ppm)	N/A	N/A	140	130 - 150	2017	N/A	N/A
Temperature (°F)	N/A	N/A	48.7	33.8 - 71.6	2017	N/A	N/A
pH (pH Units)	N/A	N/A	7.59 (avg)	7.22 - 7.84	2017	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