

O. Fred Nelson Water Production Plant

Results of Regulated and Unregulated Characteristics of Kenosha Water Quality

(The results meet or surpass all state and federal drinking water standards)

Parameter	Units	Highest Level Detected	Range/Comments	MCL	MCLG	Possible Sources in Water
Arsenic	ppb	1.1	1.1	10	0	erosion of natural deposits
Bromodichloromethane	ppb	13	8.1 to 13	100	0	by-product of disinfection process
Bromoform	ppb	0.6	<0.5 to 0.6	100	0	by-product of disinfection process
Barium	ppm	0.02	0.02	2	2	erosion of natural deposits
Carbon tetrachloride	ppb	ND	ND	5	0	industrial activities
Cadmium	ppb	1.1	1.1	5	5	erosion of natural deposits
Chloroform	ppb	23	11 to 23	100		by-product of disinfection process
Chromium	ppb	1.1	1.1	100	100	erosion of natural deposits
Copper	ppm	.11 (AL)	0 of 30 sites > AL	1.3 (AL)	1.3	corrosion of household plumbing materials
Dibromochloromethane	ppb	6.4	4.0 to 6.4	100	60	by-product of disinfection process
Fluoride	ppm	1.19	.92 to 1.19	4	4	additive to reduce tooth decay
Gross Alpha	pCi/l	0.2 +/-1.0	0.2*	15	0	erosion of natural deposits
Haloacetic acids	ppb	15.5	7.5 to 15.5	60		by-product of disinfection process
Lead	ppb	4.5 (AL)	0 of 30 sites > AL	15 (AL)	0	corrosion of household plumbing materials
Nickel	ppb	1.3	1.3	100		naturally present in the environment
Nitrate and Nitrite	ppm	0.57	0.057	10	10	runoff from fertilizers
Sulfate	ppm	27	27			naturally present in the environment
Total Organic Carbon	mg/l	1.9	0.9 to 1.9	TT		naturally present in the environment
Total Chlorine	ppm	1.54	1.18 to 1.54	4	4	water additive to control microbials
Total Coliform Bacteria	0% positive samples	0	0	presence of coliform bacteria in less than 5% of monthly samples	0	naturally present in the environment
Total Hardness	ppm	144	132 to 144	500		
Total Trihalomethanes	ppb	43.0	23.1 to 43.0	80	0	by-product of disinfection process
Turbidity	NTU	0.035	.015 to .035	less than 0.30		soil runoff
Alkalinity	ppm	108	97 to 108			Abbreviations
Conductivity	uS/cm	310	238 to 310			NTU - Nephelometric Turbidity Units
Ortho-phosphate	ppm	0.28	0.09 to 0.28			pCi/l picocuries per liter
pH	pH units	7.67	7.18 to 7.67			ppb - parts per billion (ug/l)
Sodium	ppm	9.4	9.4			ppm - parts per million (mg/l)
Temperature	Fahrenheit	72	36 to 72			uS/cm - microsiemens/centimeter
						N.D. - not detected
						* tested per DNR monitoring requirements

Definitions:

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) - 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 for homes at greatest risk.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.