



Average Water Analysis Calendar Year 2011 Lake Michigan Filtration Plant

Parameter	Units	Raw Lake	Plant Tap	Distribution System
Alkalinity (Total as CaCO ₃)	mg/L	116 (74 - 136)	103 (94 - 116)	106 (100 - 120)
Aluminum (Total)	mg/L	0.03 (<0.02 - 0.08)	0.04 (<0.02 - 0.08)	-
Calcium	mg/L	35 (28 - 38)	36 (34 - 38)	-
Carbon Dioxide	mg/L	1.7 (0.7 - 2.6)	12.4 (9.6 - 16.3)	-
Chloride (Cl)	mg/L	14.8 (12.0 - 23.7)	16.7 (9.31 - 24.6)	-
Chlorine, Free Available (as Cl ₂)	mg/L	-	1.51 (1.38 - 1.79)	0.96 (0.04 - 1.69)
Coliforms (Total)	CFU/ 100mls	2 (<1 - 464)	<1	<1
Color (True)	Color units	6 (<5 - 23)	<5	-
Conductivity (@ 25° C)	µmhos/cm	315 (297 - 343)	323 (305 - 349)	-
Fluoride (as F) before July 10th*	mg/L	0.10 (0.06 - 0.18)	0.96 (0.41 - 1.19)	0.83 (0.11 - 0.99)
Fluoride (as F) after July 10th*	mg/L	0.10 (0.07 - 0.13)	0.73 (0.43 - 0.92)	0.63 (0.34 - 0.75)
Hardness (Total, as CaCO ₃)	mg/L	142 (126 - 174)	142 (132 - 164)	-
Hardness (Total, as CaCO ₃)	grains per gallon	8.3 (7 - 10)	8.3 (8 - 10)	-
Heterotrophic Plate Count	CFU/ml	26 (<1 - 600)	<1 (<1 - 1)	91% **
Iron (Total, as Fe)	mg/L	0.05 (<0.02 - 0.31)	<0.02	-
Magnesium	mg/L	12.2 (7.3 - 17.0)	12.0 (8.7 - 14.1)	-
Nitrate (as N)	mg/L	-	0.5	-
Odor (T.O.N.)	T.O.N.	2 (1 - 6)	2 (1 - 6)	-
pH (Ambient)	pH units	8.08 (7.50 - 8.52)	7.38 (7.04 - 7.65)	7.44 (7.19 - 7.72)
Phosphorus (Total, as PO ₄)	mg/L	<0.06 (<0.06 - 0.11)	1.75 (1.10 - 2.38)	1.65 (1.39 - 1.91)
Silica (as SiO ₂)	mg/L	2.21 (1.25 - 3.53)	2.42 (1.62 - 2.96)	-
Sodium	mg/L	-	8	-
Sulfate (as SO ₄)	mg/L	-	27	-
Total Solids	mg/L	190 (162 - 234)	191 (164 - 229)	-
Turbidity	NTUs	2.6 (0.30 - 31)	<0.05 (<0.05 - 0.10)	0.10 (0.05 - 1.00)

* Fluoride dosing changed from 1.00 mg/L to 0.70 mg/L on July 10, 2012.

** Percent of days when all distribution HPC test results were <1 cfu/1mL.