Elgin Water Department

Water Quality Report
January 1, 2019 - August 31, 2019

Microbiological Contaminants		
Analyte	Detection	No. of samples
Total Coliform	none detected	162
E. coli	none detected	162

Optimal Corrosion Control Treatment Technique Parameters						
Analyte	Average	Maximum	Minimum	OCCT Level[11]	units	No. of samples
pH	8.82	9.43	7.91	>8.5	units	2,909
Alkalinity, Total	85	110	58	>30	mg/Liter[3]	728

Hardness						
Analyte	Average	Maximum	Minimum	MCL[1]	units	No. of samples
Hardness, Total	128	154	102		mg/Liter	728
Hardness, Total	7.5	9.0	6.0		gpg[9]	calculated
Hardness, Calcium	88	110	68		mg/Liter	728
Hardness, Magnesium	40	64	14		mg/Liter	calculated
Hardness, Non-carbonate	43	65	20		mg/Liter	calculated

Particulates						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Turbidity	0.11	0.2	0.02	<0.3	NTU[4]	728
Suspended Solids	<1	1	<1		mg/Liter	31
Total Dissolved Solids	291	386	234		mg/Liter	31

Physical Parameters						
Analyte	Average	Maximum	Minimum	SMCL[12]	units[5]	No. of samples
Temperature	60.2	79.7	43.3		^{0}F	calculated
Temperature	15.6	26.5	6.3		^{0}C	170
Color	1	1	1	15	units	168
Conductivity	583	789	477		µOhms/cm[2]	170
Odor	1.83	5.33	<1	3	units	145

Disinfectants						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Chlorine, Total	3.02	3.9	2.20		mg/Liter	2,909

Inorganic Contaminants						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Chloride	116.38	154.15	95.37	250[SMCL]	mg/Liter	30
Nitrate as N	1.87	3.4	0.724	10	mg/Liter	39
Sulfate	76.4	76.4	76.4	250[SMCL]	mg/Liter	1
Fluoride	0.71	0.87	0.61	4	mg/Liter	241
Dissolved Oxygen	9.95	13.14	6.16		mg/Liter	30
Cyanide, Total	ND[7]	ND	ND	0.2	mg/Liter	1

Organic Carbon						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Total Organic Carbon	1.72	2.34	1.31	TT[10]	mg/Liter	8

Metal Contaminants			
Analyte	Result	MCL	units
Iron	ND	0.3[SMCL]	mg/Liter
Sodium	50.6		mg/Liter
Antimony	ND	0.006	mg/Liter
Arsenic	0.0005	0.0100	mg/Liter
Barium	0.073	2	mg/Liter
Beryllium	ND	0.004	mg/Liter
Cadmium	ND	0.005	mg/Liter
Chromium	ND	0.1	mg/Liter
Manganese	ND	0.05[SMCL]	mg/Liter
Mercury	ND	0.002	mg/Liter
Nickel	ND		mg/Liter
Selenium	ND	0.05	mg/Liter
Thallium	ND	0.002	mg/Liter
Zinc	ND	5[SMCL]	mg/Liter

Synthetic Organic Contaminants			
Analyte	Result	MCL	units
Ethylene Dibromide (EDB)	ND	0.05	µg/L[8]
1,2-Dibromo-3-Chloropropane (DBCP)	ND	0.2	µg/L
Dalapon	ND	200	µg/L
2,4-D	ND	10	µg/L
Pentachlorophenol	ND	1	µg/L
2,4,5-TP (Silvex)	ND	50	µg/L
Dinoseb	ND	7	µg/L
Picloram	ND	500	µg/L
Hexachlorocyclopentadiene	ND	50	µg/L
Aldicarb	ND	2	µg/L
Aldicarb Sulfone	ND	2	µg/L
Aldicarb Sulfoxide	ND	4	µg/L
Hexachlorobenzene	ND	1	µg/L
Simazine	ND	4	µg/L
Atrazine	ND	3	µg/L
Gamma-BHC (lindane)	ND	0.2	µg/L
Lasso (Alachlor)	ND	2	µg/L
Heptachlor	ND	0.4	µg/L
Aldrin	ND		µg/L
Heptachlor epoxide	ND	0.2	µg/L
Dieldrin	ND		µg/L
Endrin	ND	2	µg/L
DI(2-ethylhexyl)adipate	ND	400	µg/L
Methoxychlor	ND	40	µg/L
DI(2-ethylhexyl)phthalate	ND	6	µg/L
Benzo(a)pyrene	ND	0.2	µg/L
Toxaphene	ND	3	µg/L
Chlordane	ND	0.20	µg/L
4,4'-DDT	ND[7]	0.05	µg/L
Total Polychlorinated Biphenyls (PCB)	ND	0.50	µg/L
Methomyl	ND		µg/L
Oxamyl	ND	200	µg/L
Carbofuran	ND	40	µg/L
Endothall	ND	9	µg/L
Diquat	ND	<0.40	µg/L

NOTES

[*]Except where noted

[1]MCL=Maximum Contaminant Level

[2]cfu= colony forming unit

[3]mg/Liter= milligrams per liter = parts per million (ppm)

[4]NTU=Nephleometric Turbidity Unit

[5]µOhms/cm^2= micro ohms / square centimeter

[6]cfu / 100 mls = colony forming units per 100 milliliters

[7]ND = Not Detected

[8]µg/L = micrograms per liter = parts per billion (ppb)

[9]gpg = Grains per Gallon

[10]TT = Treatment Technique

[11]OCCT Level = Optimal Corrosion Control Level Specified in Special Exemption Permit

[12]SMCL = Secondary Maximum Contaminant Level

[13]pCi/L = Picocuries Per Liter