



Elgin Water Department

2019 Water Quality Report (January 1, 2019 thru December 31, 2019 Data)

Microbiological Contaminants		
Analyte	Detection	No. of samples
Total Coliform	none detected	240
E. coli	none detected	240

Optimal Corrosion Control Treatment Technique Parameters						
Analyte	Average	Maximum	Minimum	OCCT Level ¹¹	units	No. of samples
pH	8.83	9.43	7.91	>8.5	units	4,373
Alkalinity, Total	85	110	58	>30	mg/Liter ³	1,094

Hardness						
Analyte	Average	Maximum	Minimum	MCL ¹	units	No. of samples
Hardness, Total	124	154	90		mg/Liter	1,094
Hardness, Total	7.3	9.0	5.3		gpg ⁹	calculated
Hardness, Calcium	86	110	59		mg/Liter	1,094
Hardness, Magnesium	38.6	64	14		mg/Liter	calculated
Hardness, Non-carbonate	39.6	68	8		mg/Liter	calculated

Particulates						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Turbidity	0.104	0.207	0.02	<0.3	NTU ⁴	1,094
Suspended Solids	<1	<1	<1		mg/Liter	48
Total Dissolved Solids	279	386	220		mg/Liter	48

Physical Parameters						
Analyte	Average	Maximum	Minimum	SMCL ¹²	units ⁵	No. of samples
Temperature	58.9	79.7	42.6		⁰ F	calculated
Temperature	15	26.5	5.9		⁰ C	249
Color	1	1	1	15	units	245
Conductivity	557	789	403		μOhms/cm ²	247
Odor	1.77	5.33	<1	3	units	203

Disinfectants						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Chlorine, Total	3.05	3.9	2.20		mg/Liter	4,373

Inorganic Contaminants						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Chloride	107.2	154.15	70.88	250 ^{SMCL}	mg/Liter	50
Nitrate as N	1.86	3.4	1.1	10	mg/L	57
Sulfate	76.4	76.4	76.4	250 ^{SMCL}	mg/Liter	1
Fluoride	0.716	0.87	0.608	4.0	mg/L	362
Dissolved Oxygen	10.03	13.14	5.77		mg/Liter	50
Cyanide, Total	ND	ND	ND	0.20	mg/Liter	1

Organic Carbon						
Analyte	Average	Maximum	Minimum	MCL	units	No. of samples
Total Organic Carbon	1.74	2.34	1.31	TT ¹⁰	mg/Liter	12

Metal Contaminants				
Analyte	Result	MCL	units	
Iron	ND	1,000	µg/L ⁸	
Sodium	50,600		µg/L	
Antimony	ND	6.00	µg/L	
Arsenic	0.525	10.0	µg/L	
Barium	73.1	2,000	µg/L	
Beryllium	ND	4.00	µg/L	
Cadmium	ND	5.00	µg/L	
Chromium	ND	100	µg/L	
Lead	ND	15.0	µg/L	
Manganese	ND	150	µg/L	
Mercury	ND	2.00	µg/L	
Nickel	ND	100	µg/L	
Selenium	ND	50.0	µg/L	
Thallium	ND	2.00	µg/L	
Zinc	ND	5,000	µg/L	

Synthetic Organic Contaminants				
Analyte	Result	MCL	units	
Ethylene Dibromide (EDB)	ND ⁷	0.05	µg/L ⁸	
1,2-Dibromo-3-Chloropropane (DBCP)	ND	0.2	µg/L	
Dalapon	228**	200	µg/L	
2,4-D	ND	70	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	3	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	1	µg/L	
Heptachlor epoxide	ND	0.2	µg/L	
Dieldrin	ND	1	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	2	µg/L	
4,4'-DDT	ND	50	µg/L	
Total Polychlorinated Biphenyls (PCB)	ND	0.50	µg/L	
Oxamyl (Vydate)	ND	200	µg/L	
Endothall	ND	100	µg/L	
Diquat	ND	20	µg/L	

Per- and Polyfluoroalkyl Substances (PFAS)			
Analyte	Result	MCL	units
Perfluorooctanoic Acid (PFOA)	<2.0	2.0	ng/L ¹⁴
Perfluorooctanesulfonic Acid (PFOS)	<2.0	2.0	ng/L
Perfluorobutanesulfoic Acid (PFBS)	<2.0	2.0	ng/L
Perfluoroheptanoic Acid (PFHpA)	<2.0	2.0	ng/L
Perfluorohexanesulfonic Acid (PFHxS)	<2.0	2.0	ng/L
Perfluorononanoic Acid (PFNA)	<2.0	2.0	ng/L
Perfluorodecanoic Acid (PFDA)	<2.0	2.0	ng/L
Perfluorohexanoic Acid (PFHxA)	2.8	2.0	ng/L
Perfluorododecanoic Acid (PFDoA)	<2.0	2.0	ng/L
Perfluorotridecanoic Acid (PFTrDA)	<2.0	2.0	ng/L
Perfluoroundecanoic Acid (PFUnA)	<2.0	2.0	ng/L
N-ethyl Perfluorooctanesulfonamidoacetic Acid	<2.0	2.0	ng/L
N-methyl Perfluorooctanesulfonamidoacetic Acid	<2.0	2.0	ng/L
HFPO-DA/GenX	<2.0	2.0	ng/L
ADONA	<2.0	2.0	ng/L
9Cl-PF3ONS/F-53B Major	<2.0	2.0	ng/L
11Cl-PF3OUdS/F-53B Minor	<2.0	2.0	ng/L
Perfluorotetradecanoic Acid (PFTeDA)	<2.0	2.0	ng/L

NOTES

* Except where noted

** Average from three samples

¹MCL=Maximum Contaminant Level

²cfu= colony forming unit

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

⁴NTU=Nephelometric Turbidity Unit

⁵μOhms/cm²= micro ohms / square centimeter

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

⁷ND = Not Detected

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

⁹gpg = Grains per Gallon

¹⁰TT = Treatment Technique

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

¹²SMCL = Secondary Maximum Contaminant Level

¹³pCi/L = Picocuries Per Liter

¹⁴ng/L = nanograms per liter = parts per trillion (ppt)