



CITY OF FORT ST. JOHN
TREATED WATER ANALYSIS
2023



SAMPLED FROM WATER TREATMENT PLANT

PARAMETER	UNITS	R.D.L.	GUIDELINE	ANALYSIS RESULTS		AVERAGE
				8-May	28-Sep	
Calculated Parameters						
Hardness (CaCO3)	mg/L	0.5	<500	196	167	182
Dissolved Nitrate (N)	mg/L	0.01	MAC 10	0.041	0.05	0.046
Dissolved Nitrite (N)	mg/L	0.033	MAC 1	<0.005	<0.005	<0.005
Misc. Inorganics						
Conductivity	uS/cm	2	N/A	390	340	365
pH	pH	N/A	7.0-10.5	7.63	8.02	8
Total Dissolved Solids	mg/L	10	AO ≤500	400	190	295
Anions						
Alkalinity (PP as CaCO3)	mg/L	1	N/A	<1.0	<1.0	<1.0
Alkalinity (Total as CaCO3)	mg/L	1	N/A	150	140	145
Bicarbonate (HCO3)	mg/L	1	N/A	190	180	185
Carbonate (CO3)	mg/L	1	N/A	<1.0	<1.0	<1.0
Hydroxide (OH)	mg/L	1	N/A	<1.0	<1.0	<1.0
Dissolved Chloride (Cl)	mg/L	1	AO ≤250	1.5	0.05	0.78
Dissolved Fluoride (F)	mg/L	0.05	MAC 1.5	0.76	0.58	0.67
Dissolved Sulphate (SO4)	mg/L	1	N/A	45	29	37
Microbiological Param.						
E.Coli DST	MPN/100mL	1	<1	0	0	0
Total Coliforms DST	MPN/100mL	1	<1	0	0	0
Nutrients						
Dissolved Nitrate plus Nitrite (N)	mg/L	0.02		0.041	0.050	0.046
Physical Properties						
True Colour	Col. units	2	AO≤15	3	4	3.35
Turbidity	NTU	0.1	≤0.3	0.05	0.027	0.039
Elements						
Total Mercury (Hg)	ug/L	0.0019		<0.0019	<0.0019	<0.0019
Total Aluminum (Al)	ug/L	3.0	MAC 2900	<3.0	<3.0	<3.0
Total Antimony (Sb)	ug/L	0.50	MAC 6	<0.50	<0.50	<0.50
Total Arsenic (As)	ug/L	0.10	MAC 10	0.12	0.12	0.12
Total Barium (Ba)	ug/L	1.0	MAC 2000	91.4	87.4	89.4
Total Boron (B)	ug/L	50.0	MAC 5000	<50	<50	<50
Total Cadmium (Cd)	ug/L	0.010	MAC 7	<0.010	<0.010	<0.010
Total Chromium (Cr)	ug/L	1.0	MAC 50	<1.0	<1.0	<1.0
Total Cobalt (Co)	ug/L	<0.20		<0.20	<0.20	<0.20
Total Copper (Cu)	ug/L	5.11	MAC 2000	49.3	46.9	48.1
Total Iron (Fe)	ug/L	5.0	AO ≤300	<5.0	<5.0	<5.0
Total Lead (Pb)	ug/L	0.20	MAC 5	0.32	0.27	0.30
Total Manganese (Mn)	ug/L	1.0	MAC 120	<1.0	<1.0	<1.0
Total Molybdenum (Mo)	ug/L	1.0		0.5	1.1	0.80
Total Nickel (Ni)	ug/L	1.0		<1.0	<1.0	<1.0
Total Selenium (Se)	ug/L	0.10	MAC 50	0.39	0.29	0.34
Total Silicon (Si)	ug/L	100.0		2990	2920	2955
Total Silver (Ag)	ug/L	0.020		<0.020	<0.020	<0.020
Total Strontium (Sr)	ug/L	1.0	MAC 7000	172	166.0	169
Total Sulphur (S)	ug/L	3.0		14.4	9.7	12.1
Total Uranium (U)	ug/L	0.10	MAC 20	0.68	0.60	0.64
Total Vanadium (V)	ug/L	5.0		<5.0	<5.0	5.0
Total Zinc (Zn)	ug/L	5.0	AO≤5000	<5.0	<5.0	<5.0
Total Calcium (Ca)	mg/L	0.05		58.8	49.6	54.2
Total Magnesium (Mg)	mg/L	0.050		11.9	10.10	11.0
Total Potassium (K)	mg/L	0.050		0.741	0.804	0.773
Total Sodium (Na)	mg/L	0.050	AO≤200	4.84	3.82	4.33

MAC = Maximum Allowable Concentration
RDL = Reportable Detection Limit
AO = Aesthetic Objective
OG = Operational Guidance Value
ALARA = As low as reasonably achievable