



**CITY OF FORT ST. JOHN**  
TREATED WATER ANALYSIS  
2021



SAMPLED FROM WATER TREATMENT PLANT

PARAMETER	UNITS	R.D.L.	GUIDELINE	ANALYSIS RESULTS		AVERAGE
				7-Apr	9-Sep	
<b>Calculated Parameters</b>						
Hardness (CaCO3)	mg/L	0.5	<500	180	230	205
Ion Balance (% Difference)	%	N/A		0.36	4.1	2.230
Dissolved Nitrate (N)	mg/L	0.01	MAC 10	0.031	0.031	0.031
Dissolved Nitrate (NO3)	mg/L	0.044		0.14	0.14	0.14
Dissolved Nitrite (NO2)	mg/L	0.033	MAC 1	<0.033	<0.033	<0.033
Calculated Total Dissolved Solids	mg/L	10	AO ≤500	200	240	220.0
<b>Misc. Inorganics</b>						
Conductivity	uS/cm	2	N/A	370	430	400
pH	pH	N/A	7.0-10.5	7.57	8.06	7.82
Total Dissolved Solids	mg/L	10	AO ≤500	210	250	230
<b>Low Level Elements</b>						
Total Cadmium (Cd)	ug/L	0.02	MAC 5.0	<0.020	<0.020	<0.020
<b>Anions</b>						
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	170	160
Bicarbonate (HCO3)	mg/L	1	N/A	180	210	195
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	2.5	2.6	2.6
Dissolved Fluoride (F)	mg/L	0.05	MAC 1.5	0.78		0.4
Dissolved Sulphate (SO4)	mg/L	1	N/A	40	48	44
<b>Microbiological Param.</b>						
E.Coli DST	MPN/100mL	1	<1	<1.0	<1.0	<1.0
Total Coliforms DST	MPN/100mL	1	<1	<1.0	<1.0	<1.0
<b>Nutrients</b>						
Dissolved Nitrite (N)	mg/L	0.01	MAC 1	<0.010	<0.010	<0.010
Dissolved Nitrate plus Nitrite (N)	mg/L	0.01		0.031	0.031	0.031
<b>Physical Properties</b>						
True Colour	PtCo units	2	AO≤15	<2.0	<2.0	<2.0
<b>Physical Properties</b>						
Turbidity	NTU	0.1	≤0.3	<0.10	<0.10	<0.10
<b>Elements</b>						
Total Mercury (Hg)	ug/L	0.0019	MAC 1	<0.0019	<0.0019	<0.0019
Total Aluminum (Al)	mg/L	0.0030	OG <0.1	<0.0030	<0.0030	<0.0030
Total Antimony (Sb)	mg/L	0.00060	MAC 0.006	<0.00060	<0.00060	<0.00060
Total Arsenic (As)	mg/L	0.00020	0.01 ALARA	<0.00020	<0.00020	<0.00020
Total Barium (Ba)	mg/L	0.010	MAC 2	0.082	0.10	0.091
Total Beryllium (Be)	mg/L	0.0010		<0.0010	<0.0010	<0.0010
Total Boron (B)	mg/L	0.020	MAC 5	0.01	0.056	0.033
Total Calcium (Ca)	mg/L	0.30	N/A	52	59	55.5
Total Chromium (Cr)	mg/L	0.0010	MAC 0.05	<0.0010	<0.0010	<0.0010
Total Cobalt (Co)	mg/L	0.00030	N/A	<0.00030	<0.00030	<0.00030
Total Copper (Cu)	mg/L	0.00020	MAC 2	0.0053	0.047	0.02615
Total Iron (Fe)	mg/L	0.060	AO ≤ 0.3	<0.060	<0.060	<0.060
Total Lead (Pb)	mg/L	0.00020	0.005 ALARA	<0.00020	0.00028	<0.00024
Total Lithium (Li)	mg/L	0.020		<0.020	<0.020	<0.020
Total Magnesium (Mg)	mg/L	0.20	N/A	10	12	11
Total Manganese (Mn)	mg/L	0.0040	AO ≤ 0.02	<0.0040	<0.0040	<0.0040
Total Molybdenum (Mo)	mg/L	0.00020	MAC .088	0.00095	0.00098	0.00097
Total Nickel (Ni)	mg/L	0.00050	N/A	<0.00050	<0.00050	<0.00050
Total Phosphorus (P)	mg/L	0.10		<0.10	<0.10	<0.10
Total Potassium (K)	mg/L	0.30	N/A	0.66	0.86	0.76
Total Selenium (Se)	mg/L	0.00020	MAC 0.05	0.00047	0.0001	0.000285
Total Silicon (Si)	mg/L	0.10		2.6	3.1	2.85
Total Silver (Ag)	mg/L	0.00010	N/A	<0.00010	<0.00010	<0.00010
Total Sodium (Na)	mg/L	0.50	AO ≤ 200	3.7	5.3	4.5
Total Strontium (Sr)	mg/L	0.020	MAC 7	0.15	0.17	0.2
Total Sulphur (S)	mg/L	0.20	N/A	11	16	13.500
Total Thallium (Tl)	mg/L	0.0002		<0.00020	<0.00020	<0.00020
Total Tin (Sn)	mg/L	0.0010		<0.0010	<0.0010	<0.0010
Total Titanium (Ti)	mg/L	0.0010		<0.0010	<0.0010	<0.0010
Total Uranium (U)	mg/L	0.0001	MAC 0.02	0.00071	0.00081	0.00076
Total Vanadium (V)	mg/L	0.0010		<0.0010	<0.0010	<0.0010
Total Zinc (Zn)	mg/L	0.0030	AO ≤ 5.0	<0.0030	<0.0030	<0.0030
<b>Lab Filtered Elements</b>						
Dissolved Calcium (Ca)	mg/L	0.30	N/A	56	68	62
Dissolved Iron (Fe)	mg/L	0.060	AO ≤ 0.3	<0.060	<0.060	<0.060
Dissolved Magnesium (Mg)	mg/L	0.20	N/A	11	14	12.5
Dissolved Manganese (Mn)	mg/L	0.0040	AO ≤ 0.02	<0.0040	<0.0040	<0.0040
Dissolved Potassium (K)	mg/L	0.30		0.76	0.95	0.9
Dissolved Sodium (Na)	mg/L	0.50	AO ≤ 200	4.1	6.0	5.1

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