



CITY OF FORT ST. JOHN
TREATED WATER ANALYSIS
2022



SAMPLED FROM WATER TREATMENT PLANT

PARAMETER	UNITS	R.D.L.	GUIDELINE	ANALYSIS RESULTS		AVERAGE
				21-Apr	14-Sep	
Calculated Parameters						
Hardness (CaCO ₃)	mg/L	0.5	<500	165	166	166
Dissolved Nitrate (N)	mg/L	0.01	MAC 10	0.036	0.041	0.039
Dissolved Nitrite (N)	mg/L	0.033	MAC 1	<0.005	<0.005	<0.005
Calculated Total Dissolved Solids	mg/L	10	AO ≤500	200	230	215.0
Misc. Inorganics						
Conductivity	uS/cm	2	N/A	330	360	345
pH	pH	N/A	7.0-10.5	8.01	8.19	8.10
Total Dissolved Solids	mg/L	10	AO ≤500	200	230	215
Anions						
Alkalinity (PP as CaCO ₃)	mg/L	1	N/A	<1.0	<1.0	<1.0
Alkalinity (Total as CaCO ₃)	mg/L	1	N/A	140	150	145
Bicarbonate (HCO ₃)	mg/L	1	N/A	170	180	175
Carbonate (CO ₃)	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	3.3	1.9	2.6
Dissolved Fluoride (F)	mg/L	0.05	MAC 1.5	0.78	0.64	0.7
Dissolved Sulphate (SO ₄)	mg/L	1	N/A	31	33	32
Microbiological Param.						
E.Coli DST	MPN/100mL	1	<1	0	0	0.00
Total Coliforms DST	MPN/100mL	1	<1	0	0	0.00
Nutrients						
Dissolved Nitrate plus Nitrite (N)	mg/L	0.01		0.036	0.041	0.039
Physical Properties						
True Colour	PtCo units	2	AO≤15	<5.0	<5.0	<5.0
Turbidity	NTU	0.1	≤0.3	<0.10	0.12	0
Elements						
Total Mercury (Hg)	ug/L	0.0019		<0.0019	<0.0019	<0.0019
Total Aluminum (Al)	ug/L	3.0		<3.0	<3.0	<3.0
Total Antimony (Sb)	ug/L	0.50		<0.50	<0.50	<0.50
Total Arsenic (As)	ug/L	0.10		0.13	0.11	0.12
Total Barium (Ba)	ug/L	1.0		77.3	90.4	83.85
Total Boron (B)	ug/L	50.0		<50	<50	<50
Total Cadmium (Cd)	ug/L	0.010		<0.010	<0.010	<0.010
Total Chromium (Cr)	ug/L	1.0		<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		5.11	4.5	4.825
Total Iron (Fe)	ug/L	5.0		<5.0	<5.0	<5.0
Total Lead (Pb)	ug/L	0.20		0.1	0.24	0.170
Total Manganese (Mn)	ug/L	1.0		<1.0	<1.0	<1.0
Total Molybdenum (Mo)	ug/L	1.0		<1.0	<1.0	<1.0
Total Nickel (Ni)	ug/L	1.0		<1.0	<1.0	<1.0
Total Selenium (Se)	ug/L	0.10		0.44	0.22	0.33
Total Silicon (Si)	ug/L	100.0		2580	2970	2775
Total Silver (Ag)	ug/L	0.020		<0.02	<0.02	<0.02
Total Strontium (Sr)	ug/L	1.0		153	170.0	161.5
Total Sulphur (S)	ug/L	3.0		9.1	9.9	9.500
Total Uranium (U)	ug/L	0.10		0.68	0.64	0.66
Total Vanadium (V)	ug/L	5.0		<5.0	<5.0	<5.0
Total Zinc (Zn)	ug/L	5.0		<5.0	<5.0	<5.0
Total Calcium (Ca)	mg/L	0.05		49.8	50.2	50
Total Magnesium (Mg)	mg/L	0.050		9.89	9.97	9.9
Total Potassium (K)	mg/L	0.050		0.633	0.838	0.7
Total Sodium (Na)	mg/L	0.050		3.55	3.91	3.7

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