



**WATER UTILITY**

**KEY TREATED DRINKING WATER PARAMETERS 2020**

**SAMPLE LOCATION: ENTERING THE DISTRIBUTION SYSTEM**

Treated Water Parameter	Units	Drinking Water Annual Average	Limit / Guideline as defined by Alberta Environment & Parks or the Guidelines for Canadian Drinking Water Quality (2019)
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**GENERAL WATER CHEMISTRY**

Colour	TCU	1	≤15
pH		7.97	6.5 – 8.5
Turbidity	NTU	0.05	<5
Chlorine Residual	mg/L	2.20	≥0.1 and ≤ 3.0

**INORGANIC PARAMETERS**

Aluminum	mg/L	0.08	<0.1
Arsenic	mg/L	0.003	0.010
Barium	mg/L	0.10	1.0
Cadmium	mg/L	0.000023	0.005
Calcium	mg/L	57.3	No limit
Chromium	mg/L	0.0006	0.05
Copper	mg/L	0.0009	≤1.0
Iron	mg/L	<0.1	≤0.3
Lead	mg/L	<0.0001	0.005
Magnesium	mg/L	17.3	No limit
Manganese	mg/L	<0.005	≤0.02
Mercury	mg/L	<0.000025	<0.001
Nitrate	mg/L	0.57	45
Nitrite	mg/L	<0.05	3
Potassium	mg/L	1.51	No limit
Sodium	mg/L	16.1	≤200
Sulfate	mg/L	59.4	≤500
Zinc	mg/L	<0.01	≤5.0
Fluoride	mg/L	0.59	(AEP: ≥0.6 and ≤ 0.8) (CDWQ MAC : 1.5mg/L)
Hardness (as CaCO <sub>3</sub> )	mg/L	215.1	No limit
Total Dissolved Solids	mg/L	251.7	≤500
Total (5) Haloacetic Acids	mg/L	0.025	0.08 (yearly running average)
Chlorate	mg/L	<0.1	1
Chlorite	mg/L	<0.1	1
Total Trihalomethanes	mg/L	0.020	0.1

**SAMPLE LOCATION: VARIOUS LOCATIONS WITHIN THE DISTRIBUTION SYSTEM**

Treated Water Parameter	Units	Drinking Water Annual Average	Limit as defined by AEP
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**INORGANIC PARAMETERS**

Turbidity	NTU	0.34	<5
Chlorine Residual	mg/L	1.75	≥0.1 and ≤ 3.0

**MICROBIOLOGICAL**

Parameter	Samples Collected	Samples Tested	Neg	Pos	% Pos
Total Coliform	1377	1361	1356	5	0.37

NOTE: A positive is thoroughly investigated and corrective actions employed where possible; typically this indicates an issue with the sample rather than contamination within the Distribution System.

**SAMPLE LOCATION: SAMPLED WITH-IN DISTRIBUTION SYSTEM (AT LONGEST DETENTION TIME)**

Treated Water Parameter	Units	Ave	Guideline Guidelines for Canadian Drinking Water Quality (2017)
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**DISINFECTION BY PRODUCTS**

Total Trihalomethanes	mg/L	0.023	0.1
Total (5) Haloacetic Acids	mg/L	0.033	0.08 (yearly running average)

NOTE: the parameters given in the above tables are specific to the testing sample location. These parameters may vary at different locations throughout the distribution system.