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## WATER UTILITY

# KEY TREATED DRINKING WATER PARAMETERS 2024

### 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 (2022)
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#### GENERAL WATER CHEMISTRY

Colour	TCU	1	≤15
pH		8.09	6.5 – 8.5
Turbidity	NTU	0.060	<5
Chlorine Residual	mg/L	2.16	≥0.1 and ≤ 3.0

#### INORGANIC PARAMETERS

Aluminum	mg/L	0.090	2.9
Arsenic	mg/L	<0.001	0.010
Barium	mg/L	0.093	2.0
Cadmium	mg/L	<0.000016	0.007
Calcium	mg/L	53.9	No limit
Chromium	mg/L	0.0008	0.05
Copper	mg/L	0.002	2.0
Iron	mg/L	0.017	≤0.3
Lead	mg/L	<0.0001	0.005
Magnesium	mg/L	18.0	No limit
Manganese	mg/L	0.003	0.12
Mercury	mg/L	0.00002	<0.001
Nitrate	mg/L	<0.5	45
Nitrite	mg/L	<0.05	3
Potassium	mg/L	1.43	No limit
Sodium	mg/L	14.9	≤200
Sulfate	mg/L	71.2	≤500
Zinc	mg/L	<0.004	≤5.0
Fluoride	mg/L	0.059	(AEP: ≥0.6 and ≤ 0.8) (CDWQ MAC : 1.5mg/L)
Hardness (as CaCO <sub>3</sub> )	mg/L	208.7	No limit
Total Dissolved Solids	mg/L	293.9	≤500
Total (5) Haloacetic Acids	mg/L	0.026	0.08 (yearly running average)
Chlorate	mg/L	0.10	1
Chlorite	mg/L	<0.1	1
Total Trihalomethanes	mg/L	0.022	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	0.36	<5
Chlorine Residual	mg/L	1.75	≥0.1 and ≤ 3.0

#### MICROBIOLOGICAL

Parameter	Samples Collected	Samples Tested	Neg	Pos	% Pos
Total Coliform	1351	1350	1350	0	0.00

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	Drinking Water Annual Average	Guideline Guidelines for Canadian Drinking Water Quality (2022)
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#### DISINFECTION BY PRODUCTS

Total Trihalomethanes	mg/L	0.024	0.1
Total (5) Haloacetic Acids	mg/L	0.035	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.