



## WATER UTILITY

# KEY TREATED DRINKING WATER PARAMETERS 2023

### 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		8.08	6.5 – 8.5
Turbidity	NTU	0.06	<5
Chlorine Residual	mg/L	2.19	≥0.1 and ≤ 3.0

#### INORGANIC PARAMETERS

Aluminum	mg/L	0.079	2.9
Arsenic	mg/L	<0.001	0.010
Barium	mg/L	0.103	2.0
Cadmium	mg/L	<0.000016	0.007
Calcium	mg/L	52.1	No limit
Chromium	mg/L	<0.0005	0.05
Copper	mg/L	0.001	2.0
Iron	mg/L	0.01	≤0.3
Lead	mg/L	<0.0001	0.005
Magnesium	mg/L	16.8	No limit
Manganese	mg/L	0.001	0.12
Mercury	mg/L	<0.00001	<0.001
Nitrate	mg/L	<0.5	45
Nitrite	mg/L	<0.05	3
Potassium	mg/L	1.24	No limit
Sodium	mg/L	12.6	≤200
Sulfate	mg/L	65.3	≤500
Zinc	mg/L	<0.004	≤5.0
Fluoride	mg/L	0.66	(AEP: ≥0.6 and ≤ 0.8) (CDWQ MAC : 1.5mg/L)
Hardness (as CaCO <sub>3</sub> )	mg/L	199.2	No limit
Total Dissolved Solids	mg/L	335.5	≤500
Total (5) Haloacetic Acids	mg/L	0.022	0.08 (yearly running average)
Chlorate	mg/L	0.10	1
Chlorite	mg/L	<0.10	1
Total Trihalomethanes	mg/L	0.017	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	0.37	<5
Chlorine Residual	mg/L	1.81	≥0.1 and ≤ 3.0

#### MICROBIOLOGICAL

Parameter	Samples Collected	Samples Tested	Neg	Pos	% Pos
Total Coliform	1350	1345	1340	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	0.017	0.1
Total (5) Haloacetic Acids	mg/L	0.022	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.