

Water Treatment Plant

March Report 2025

Water Quality Summary

Acronyms

MAC = Maximum acceptable concentration established by Health Canada
AO = Aesthetic objective (no health based limit) suggested by Health Canada
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per litre or one part per million

Health Related

Parameter	Units	Result	MAC
Turbidity	NTU	0.061	0.3
Chloramines	mg/L	1.92	n/a ¹
Nitrate-N	mg/L	0.10	10
Fluoride	mg/L	0.78	1.5
Trihalomethanes	mg/L	0.007	0.1
Aluminum	mg/L	0.0480	2.9
Chromium	mg/L	< 0.0005	0.05
Lead	mg/L	< 0.0001	0.005
Manganese	mg/L	< 0.005	0.12

Non Health Related

Parameter	Units	Result	AO
pH		7.49	7.0 - 10.5
Hardness	mg/L	160	n/a ²
TDS - total dissolved solids	mg/L	210	≤ 500
Sulfate	mg/L	47.9	≤ 500
Sodium	mg/L	14.1	≤ 200
Iron	mg/L	0.03	≤ 0.3
Manganese	mg/L	< 0.005	≤ 0.02

¹ Guideline value not necessary due to low toxicity at concentrations found in drinking water. Chloramine residuals in most Canadian drinking water distribution systems are typically below 4 mg/L.

² Although hardness may have significant aesthetic effects, a guideline has not been established because public acceptance of hardness may vary considerably according to the local conditions; major contributor to hardness (calcium & magnesium) are not of direct public health concern

Treated Water - Distribution System

BACTERIOLOGICAL / SECONDARY DISINFECTION

	Mar 3/2025		Mar 10/2025		Mar 17/2025		Mar 24/2025		Mar 31/2025	
	Sample Results		Sample Results		Sample Results		Sample Results		Sample Results	
	Cl ₂	Bac T	Cl ₂	Bac T	Cl ₂	Bac T	Cl ₂	Bac T	Cl ₂	Bac T
Sample 1 North Lethbridge	1.79	N	2.04	N			1.78	N	1.97	N
Sample 2 North Lethbridge	1.95	N					1.76	N	1.91	N
Sample 3 North Lethbridge	1.83	N	2.06	N	1.68	N	1.79	N	2.00	N
Sample 4 North Lethbridge										
Sample 5 North Lethbridge	1.54	N	1.86	N			1.53	N		
Sample 6 North Lethbridge										
Sample 7 North Lethbridge	1.83	N	2.13	N	1.74	N	1.74	N	1.94	N
Sample 8 North Lethbridge										
Sample 9 North Lethbridge									1.50	N
Sample 10 North Lethbridge			2.08	N	1.73	N				
Sample 11 North Lethbridge	1.85	N	2.14	N	1.69	N	1.80	N	1.75	N
Sample 12 North Lethbridge	1.65	N	2.04	N			1.81	N		
Sample 13 North Lethbridge	1.83	N	2.09	N	1.74	N			1.81	N
Sample 14 North Lethbridge			1.80	N	1.41	N	1.50	N		
Sample 15 North Lethbridge							1.72	N	1.68	N
Sample 16 North Lethbridge	1.85	N							2.00	N
Sample 17 North Lethbridge			2.12	N	1.71	N				
Sample 18 South Lethbridge					1.67	N	1.19	N	1.36	N
Sample 19 South Lethbridge	1.86	N	2.12	N	1.84	N				
Sample 20 South Lethbridge	1.91	N	2.20	N	1.81	N	1.65	N	2.04	N
Sample 21 South Lethbridge	1.83	N			1.72	N			2.01	N
Sample 22 South Lethbridge										
Sample 23 South Lethbridge	2.03	N	2.08	N	1.87	N	1.83	N	1.97	N

	Mar 4/2025		Mar 11/2025		Mar 18/2025		Mar 25/2025	
	Sample Results		Sample Results		Sample Results		Sample Results	
	Cl ₂	Bac T	Cl ₂	Bac T	Cl ₂	Bac T	Cl ₂	Bac T
Sample 23 West Lethbridge					1.61	N		
Sample 24 West Lethbridge					1.54	N		
Sample 25 West Lethbridge	1.85	N	1.86	N				
Sample 26 West Lethbridge			1.85	N	1.65	N	1.70	N
Sample 27 West Lethbridge			1.85	N			1.76	N
Sample 28 West Lethbridge			1.86	N			1.73	N
Sample 29 West Lethbridge	1.66	N	2.02	N	1.66	N	1.70	N
Sample 30 West Lethbridge	1.83	N	2.06	N	1.76	N	1.76	N
Sample 31 West Lethbridge								
Sample 32 West Lethbridge	1.67	N	1.73	N				
Sample 33 West Lethbridge	1.81	N	1.93	N	1.75	N	1.76	N
Sample 34 West Lethbridge	1.70	N	1.88	N			1.81	N
Sample 35 West Lethbridge								
Sample 36 South Lethbridge	1.91	N	2.13	N				
Sample 37 South Lethbridge	1.81	N			1.72	N	1.65	N
Sample 38 South Lethbridge	1.91	N			1.63	N	1.67	N
Sample 39 South Lethbridge	1.93	N			1.97	N	1.79	N
Sample 40 South Lethbridge	1.89	N	2.17	N	1.77	N	1.77	N
Sample 41 South Lethbridge							1.69	N
Sample 42 South Lethbridge			2.24	N			1.73	N
Sample 43 South Lethbridge			1.94	N				
Sample 44 South Lethbridge	1.65	N			1.50	N		
Sample 45 South Lethbridge	2.01	N			1.85	N		

Total Negative (N) = 114
Total Positive (P) = 0
Total Re-Samples = 0

Chlorine Residual Minimum = 1.19 mg/L
 Chlorine Residual Maximum = 2.24 mg/L
 Chlorine Residual Average = 1.81 mg/L